The Castles of Mallorca:
A diachronic perspective of the dynamics of territorial control on an Islamic island

Submitted by Martin Sebastian Goffriller to the University of Exeter

as a thesis for the degree of

Doctor of Philosophy in Archaeology

In February 2011

This thesis is available for Library use on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Signature: …………………………………………………………………………..
ABSTRACT

This thesis pioneers a study in the dynamics of territorial control of the island of Mallorca from ca. 902-1300 AD, with the aim of providing the first holistic and systematic study of the known Islamic fortresses of this island, and determining the reasons which account for the lack of the so-called hisn/qarya complex there. The scientific focus of this project explores the effects that island contexts may have on the identity-forming processes of their population and how these in turn affect the socio-political makeup of these ‘bounded’ polities. More specifically, in the case of Mallorca the core of this study is devoted to the relation between the hinterland fortifications of the Islamic period and the island’s capital city Maḏīna Mayūrqa, concluding that due to the relative isolation of Mallorca’s segmentary communities from their mainland analogues they evolved a distinctive meta-identity which gradually supplanted their traditional tribal allegiances and redefined their relation with the state and political authority in general. Other areas of interest explored here are the use of rammed earth and masonry in Andalusi Architecture, and the mechanisms of integration of the Islamic territorial setup of Mallorca into the Christian kingdom of Aragon from 1229 onwards.

The data here presented results from a broad variety of sources such as extensive archival research, architectural and spatial analysis of the 17+ sites surveyed, aerial photography, hydro-archaeology and in particular viewsheid analysis, which was able to provide highly relevant results regarding the interconnectivity of the various sites and therefore give important evidence on their operational context. The creation of the viewsheids relied heavily on GIS software (Global Mapper 10-12) as well as architectural design software (AutoCAD, Illustrator, Sketchup) in order to carry out partial reconstructions of some of the main structures on the island.
AKNOWLEDGMENTS

Research without indebtedness is always a suspect affair; I am therefore most grateful to the fact that in this case the list of supporters is a long one. I must start, of course, with thanking my parents, Christine and Erich, without whose encouragement this project would never have gotten off the ground in the first place. Helping me to see the process through was my girlfriend, Julia Nouard, thanks to whom frustrations appeared less frustrating, impasses less impassable and successes that little bit more successful.

I must also extend my most sincere thanks to those individuals who, along the way, have helped me in my research. First and foremost I must mention my supervisor Oliver Creighton who not only read draft after dreary draft of this thesis but whose references opened doors in the unlikeliest of places. Guillermo Rosselló Bordoy was forced to listen to my incessant ramblings, and yet always provided useful pointers. Julio Navarro Palazón not only gave some fundamental insights into the field and gave me access to the archives of the Escuela de Estudios Arabes in Granada, but also helped me out of a most distressing car-related mess in Granada. Express thanks must go also to the Fundació March, who gave me unrestricted access to the Castell del Rei, and whose staff (again) helped me pull my car out of a ravine after yet another vehicular mishap.

I am also deeply indebted to Rupert Spillmann and Lutz Ilisch for their interest and help, and the great amounts of information on the fortress of Santueri and Mallorcan archaeology in general. The same must be said of Lorenc Vila from Elements Archaeology and his insightful pointers and materials on the Almudaina of the Gumāra.

The Marie Curie committee of the Eurodoc programme deserve a distinctive mention here, as it was through the funding of the European Union that a large parts of the research here exposed only became possible.

Last, but most certainly not least, It is a real pleasure to mention the support received from my friends, staff and fellow PhD researchers at the University of Exeter, Bruce Bradley, Alan Outram, Caroline Jeffra, Zoë Adams, Landon Karr, Nada Kreisheh and Amy Radford, among many others, none of whom ever flinched to provide a pint, stimulating conversation and advice when needed.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>3</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS</td>
<td>8</td>
</tr>
<tr>
<td>FIGURES</td>
<td>8</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>8</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>8</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>9</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>10</td>
</tr>
<tr>
<td>PLATES. Tables, Photographs &amp; Documents</td>
<td>11</td>
</tr>
<tr>
<td>Tables</td>
<td>11</td>
</tr>
<tr>
<td>Photographs</td>
<td>11</td>
</tr>
<tr>
<td>Archival documents</td>
<td>15</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>17</td>
</tr>
<tr>
<td>1. Introduction to the study of Muslim Spain, its fortification &amp; settlement</td>
<td>18</td>
</tr>
<tr>
<td>A. Researching Islamic Spain: problems and challenges</td>
<td>19</td>
</tr>
<tr>
<td>The Medieval Spains of Claudio Sánchez-Albornoz and Américo Castro</td>
<td>20</td>
</tr>
<tr>
<td>Pierre Guichard on Islamic tribalism and Spanish identity</td>
<td>21</td>
</tr>
<tr>
<td>Critiques of structural-functionalist anthropology: Chelhod, Manzano and Epalza</td>
<td>22</td>
</tr>
<tr>
<td>Other debates on the socio-political realities of Medieval Iberia: conversion and settlement</td>
<td>23</td>
</tr>
<tr>
<td>The emergence of landscape archaeology in the study of medieval Spain</td>
<td>26</td>
</tr>
<tr>
<td>B. Fortress and village: the <em>hisn/qarya complex</em> and its existence in Mallorca</td>
<td>29</td>
</tr>
<tr>
<td>2. Aims of study and Methodology</td>
<td>32</td>
</tr>
<tr>
<td>A. Aims of the study</td>
<td>32</td>
</tr>
<tr>
<td>B. Methodology</td>
<td>34</td>
</tr>
<tr>
<td>The historical sources</td>
<td>35</td>
</tr>
<tr>
<td>The use of viewshed analysis</td>
<td>37</td>
</tr>
<tr>
<td>3. Fortification and Urbanism in al-Andalus</td>
<td>39</td>
</tr>
<tr>
<td>A. The physical fortress: the morphology of the <em>hisn</em></td>
<td>39</td>
</tr>
<tr>
<td>B. The conceptual fortress: function and location of the Islamic fortress</td>
<td>41</td>
</tr>
<tr>
<td>C. Other types of fortification in al-Andalus</td>
<td>45</td>
</tr>
</tbody>
</table>
6. The Minor Fortifications of Mallorca

A. Introduction

B. Puig de Sa Bastida

Architectural analysis

D. Urban Islam: Madīna Mayūrqa and its role within Mallorca’s territory. ........................................... 49

The ‘Islamic’ city: research history and state of the question ................................................................. 50

4. MAYŪRQA: Island and History .................................................................................................................. 54

A. Geography and climate of Mallorca ........................................................................................................... 54

B. A political history of Mallorca .................................................................................................................... 56

The Classical period and Late Antiquity ........................................................................................................ 57

The Islamic Period ........................................................................................................................................ 58

5. Madīna Mayūrqa and the fortresses of Alaró, Castell del Rei and Santueri ................................................ 69

A. Madīna Mayūrqa, Palma de Mallorca ........................................................................................................ 72

Almudaina of Palma ...................................................................................................................................... 78

Almudaina of the Gumāra ............................................................................................................................ 80

B. Castell d’Alaró, Hisn al-Rum .................................................................................................................... 83

History .......................................................................................................................................................... 84

Architectural analysis .................................................................................................................................. 87

Viewshed analysis ...................................................................................................................................... 100

Conclusion ................................................................................................................................................ 101

C. Castell del Rei, Hisn Bulānsa .................................................................................................................. 102

History ........................................................................................................................................................ 103

Architectural Analysis ............................................................................................................................... 105

Viewshed analysis ....................................................................................................................................... 116

Conclusion ................................................................................................................................................ 117

D. Castell de Santueri, Hisn Falanis ............................................................................................................ 119

History ........................................................................................................................................................ 119

Archaeological finds ................................................................................................................................... 120

Historical documentation ........................................................................................................................... 124

Architectural analysis .................................................................................................................................. 125

Viewshed analysis ....................................................................................................................................... 139

6. The Minor Fortifications of Mallorca ......................................................................................................... 140

A. Introduction ............................................................................................................................................. 140

B. Puig de Sa Bastida .................................................................................................................................. 141

Architectural analysis .................................................................................................................................. 144
Other architectural remains ................................................................. 150
Viewshed analysis ............................................................................ 150
Conclusion .......................................................................................... 151
C. The Tower of Canyamel/Montsó .................................................... 153
History and documentation ............................................................... 154
Architectural analysis ....................................................................... 155
Viewshed analysis ............................................................................ 157
Conclusion .......................................................................................... 158
D. Castell de Moros/Castell d’es Moro, Deià ...................................... 159
Viewshed analysis ............................................................................ 162
E. Palau dels Reis de Mallorca, Sineu .............................................. 163
Architectural analysis ....................................................................... 164
Conclusion .......................................................................................... 166
F. Almudaina d’Artà ........................................................................... 167
Architectural analysis ....................................................................... 168
Viewshed analysis ............................................................................ 170
G. Torre d’en Nunís ........................................................................... 172
Architectural analysis ....................................................................... 174
Viewshed analysis ............................................................................ 175
H. Puig de n’Escuder, Caimari ............................................................ 177
Architectural analysis ....................................................................... 178
Ceramic remains ................................................................................ 179
Viewshed analysis ............................................................................ 180
I. Torre de Son Más, Andratx ............................................................... 182
Viewshed analysis ............................................................................ 184
J. Puig de Randa ................................................................................ 185
Viewshed Analysis ............................................................................. 186
K. Castellet d’Esporles ...................................................................... 187
L. Unsubstantiated place names and other sites ................................ 188

7. Synthesis and Discussion ................................................................ 190
A. The changing roles of the fortresses within their socio-political environment ............................................................. 190
B. Interconnectivity: Viewsheds and their interpretation .................. 195
C. Geography and identity .................................................................. 198

Factors leading to Mallorca’s administrational divergence from the Mainland ......................................................... 199
LIST OF ILLUSTRATIONS

FIGURES

Chapter 4

4.1 3D elevation and topography of Mallorca ................................................................. 54
4.2 Geology of Mallorca ................................................................................................. 55
4.3 Spatial distribution of the fortifications of Mallorca .................................................. 56

Chapter 5

5.1 Distribution of Alaró, Santueri and Castell del Rei .................................................. 69
5.2 Palma de Mallorca, traces of Roman street plan ...................................................... 73
5.3 Palma de Mallorca ca. 1300 ...................................................................................... 75
5.4 Almudaina palace, plan ............................................................................................. 78
5.5 Almudaina palace, artists’ conception ...................................................................... 79
5.6 Almudaina of the Gumāra, hypothetical reconstruction .......................................... 80
5.7 Almudaina of the Gumāra, 3D reconstruction of phases I & II ................................. 81
5.8 Almudaina of the Gumāra, plan 1799 ....................................................................... 82
5.9 Topography and location of Alaró ............................................................................ 83
5.10 Topography or Alaró and sectors of study .............................................................. 86
5.11 Alaró, sector 1 ........................................................................................................... 87
5.12 Alaró, sector 1, plan of gate tower ........................................................................... 88
5.13 Alaró, cistern W1, plan ........................................................................................... 89
5.14 Alaró, cistern W1, section ....................................................................................... 89
5.15 Alaró, tower T2, plan ............................................................................................... 91
5.16 Alaró, Sector 2, plan ............................................................................................... 91
5.17 Alaró, Sector 4, plan ............................................................................................... 93
5.18 Alaró, Cistern W2 elevation ..................................................................................... 95
5.19 Alaró, Cistern W3, elevation & plan ....................................................................... 95
5.20 Alaró, Cistern W4, elevation & plan ....................................................................... 96
5.21 Alaró, well F5, elevation .......................................................................................... 97
Chapter 6

6.1 Distribution of minor fortresses, map ................................................................. 140
6.2 Sa Bastida, topography ......................................................................................... 141
6.3 Sa Bastida, plan .................................................................................................... 142
6.4 Sa Bastida, cistern W1, plan ................................................................................ 147
6.5 Sa Bastida, cistern W1, elevation .......................................................................... 147
6.6 Sa Bastida, cistern W1, section ............................................................................ 147
6.7 Sa Bastida, cistern W2, plan ................................................................................ 148
6.8 Sa Bastida, cistern W2, elevation & section .......................................................... 148
6.9 Sa Bastida, isometric perspective of cistern W4 .................................................. 149
6.10 Sa Bastida, viewshed analysis ............................................................................ 151
PLATES. Tables, Photographs & Documents

Tables
4.1 Timeline of the Islamic leaders of Mallorca .......................................................... 214
4.2 Coinage finds of Santueri ..................................................................................... 215

Photographs
5.1 Almudaina of Palma................................................................................................. 217
5.2 Almudaina of the Gumāra...................................................................................... 217
5.3 Almudaina of the Gumāra...................................................................................... 217
5.4 Alaró, as seen from Sa Bastida ............................................................................. 218
5.5 Alaró, outworks as seen from Tower T2 ............................................................... 218
5.6 Alaró, gate tower T1 .............................................................................................. 219
5.7 Alaró, upper floor of gate tower T1 ...................................................................... 219
5.8 Alaró, interior of tower T1 ..................................................................................... 220
5.9 Alaró, Cistern W1 ................................................................................................. 220
5.10 Alaró, cistern W1, N wall .................................................................................... 221
5.11 Alaró, cistern W1 opus signinum plaster ............................................................ 221
5.12 Alaró, sector 2, bulwark and postern F3 ............................................................. 222
5.13 Alaró, postern F3 as seen from N ........................................................................ 222
5.14 Alaró, wall F2 ..................................................................................................... 223
5.15 Alaró, sector 2 as seen from tower T4 ................................................................. 223
5.16 Alaró, cistern W2, interior .................................................................................. 224
5.17 Alaró, cistern W2, exterior .................................................................................. 224
5.18 Alaró, cistern W3, interior .................................................................................. 225
5.19 Alaró, cistern W3 exterior ................................................................................... 225
5.20 Alaró, cistern W4, interior ................................................................................... 226
5.21 Alaró, well F5 as seen from N ............................................................................ 226
5.22 Alaró, well F4 ..................................................................................................... 227
5.23 Alaró, cistern W5 ............................................................................................... 227
5.24 Alaró, Ermita de Sant Antoni ............................................................................ 228
5.25 Alaró, Ermita de Sant Antoni ........................................................................................................228
5.26 Castell del Rei as seen from valley of Ternelles ........................................................................229
5.27 Castell del Rei as seen from SE ..................................................................................................229
5.28 Castell del Rei, area A1 ..............................................................................................................230
5.29 Castell del Rei, entrance gate ....................................................................................................230
5.30 Castell del Rei, entrance gate ....................................................................................................230
5.31 Castell del Rei, area A3 ..............................................................................................................231
5.32 Castell del Rei, stone ammunitions ............................................................................................231
5.33 Castell del Rei, kitchen R2 & bread oven ....................................................................................232
5.34 Castell del Rei, passage between A2 & A3 ................................................................................232
5.35 Castell del Rei, chambers R3 & R4 .............................................................................................233
5.36 Castell del Rei, chambers R3 & R4 .............................................................................................233
5.37 Castell del Rei, ‘Latrine’ tower R5 ..............................................................................................234
5.38 Castell del Rei, hall R1 .................................................................................................................234
5.39 Castell del Rei, postcard of hall R1 .............................................................................................235
5.40 Castell del Rei, cistern W1 interior .............................................................................................235
5.41 Castell del Rei, cistern W2 ..........................................................................................................236
5.42 Castell del Rei, cistern W2 ..........................................................................................................236
5.43 Castell del Rei, channel F4 .........................................................................................................237
5.44 Castell del Rei, tower R5 & channel F3 .......................................................................................237
5.45 Castell del Rei, view of tower T1 & postern F2 .........................................................................238
5.46 Castell del Rei, postern F2 .........................................................................................................238
5.47 Castell del Rei, view of Alcudia/Pollentia from the castle ...............................................................239
5.48 Castell del Rei, view of valley of Ternelles ..................................................................................239
5.49 Santueri, aerial view .....................................................................................................................240
5.50 Santueri, tower T1 and walls C1 & C2 .........................................................................................240
5.51 Santueri, area A1 .........................................................................................................................241
5.52 Santueri, interior of entrance passage ...........................................................................................241
5.53 Santueri, interior of entrance passage ...........................................................................................242
5.54 Santueri, area A3 .........................................................................................................................242
6.15 Canyamel, doorway between chambers ................................................................. 258
6.16 Canyamel, supporting arches ................................................................................. 258
6.17 Canyamel, roof tower and battlements ................................................................. 259
6.18 Castell de Moros as seen from West ......................................................................... 259
6.19 Castell del Moros, view of Deià .............................................................................. 260
6.20 Castell de Moros, interior ......................................................................................... 260
6.21 Castell de Moros, interior ......................................................................................... 261
6.22 Palau dels Reis, tower T1 .......................................................................................... 261
6.23 Perpignan, Palace of the Kings of Mallorca ........................................................... 262
6.24 Palau dels Reis, courtyard C1, North wall ............................................................... 262
6.25 Palau dels Reis, gate to courtyard C3 ....................................................................... 263
6.26 Palau dels Reis, tower T1, interior ........................................................................... 263
6.27 Palau dels Reis, Tower T1, wall paintings ............................................................... 264
6.28 Palau dels Reis, wall E1 ........................................................................................... 264
6.29 Palau dels Reis, wall E1 ........................................................................................... 265
6.30 Palau dels Reis, rock-cut ditch/street on NW side of the complex ......................... 265
6.31 Almudaina of Artá, aerial view ................................................................................ 266
6.32 Almudaina of Artá as seen from E ......................................................................... 266
6.33 Almudaina of Artá, areas A1 & A2 ......................................................................... 267
6.34 Almudaina of Artá, towers T4 & T3 ........................................................................ 267
6.35 Almudaina of Artá, area A2 & tower T1 ................................................................... 268
6.36 Torre d’en Nunís ...................................................................................................... 268
6.37. Castle of Capdepera and Torre d’en Nunís as seen from S .................................. 269
6.38 Puig de n’Escuder ..................................................................................................... 269
6.39 Puig de n’Escuder, path .......................................................................................... 270
6.40 Puig de n’Escuder, access ....................................................................................... 270
6.41 Puig de n’Escuder, wall C1 ..................................................................................... 271
6.42 Puig de n’Escuder, structure F1 ............................................................................. 271
6.43 Puig de n’Escuder, fragment of Alfabia style stamped pottery ............................... 272
6.44 Puig de n’Escuder, fragment of type ‘A’ pottery .................................................... 272
6.45 Puig de n’Escuder, fragment of serving dish ................................................................. 273
6.46 Castle of Son Mas as seen from N ................................................................................. 273
6.47 Tower of Son Mas as drawn by Ludwig Salvator, 1910 ............................................. 274
6.48 Castelet d’Esporles as seen from N .............................................................................. 274
6.49 Castelet d’Esporles, steps ......................................................................................... 275
6.50 Castelet d’Esporles, view from Summit ....................................................................... 275

Archival documents
5.71 ARM Prot. ECR 432, f. 140 ......................................................................................... 277
5.72 ARM Prot. ECR 343, f. 223 ......................................................................................... 278
5.73 ARM Prot. ECR 351, f. 16 ......................................................................................... 279
5.74 ARM Prot. ECR 644 f. 15v ......................................................................................... 280
5.75 ARM Prot. ECR, 644, f. 23v ................................................................................... 281
5.76 ARM Prot. ECR 644, f. 24v ....................................................................................... 282
5.77 ARM RP 3.394 f. 35 ................................................................................................. 283
5.78 ARM RP 3.394 f. 60 ................................................................................................. 284
5.79 ARM RP 3.397, f. 140 ............................................................................................. 285
5.80 ARM Baratillo vol. 1, part 2, 122 .............................................................................. 286
5.81 ARM LC AH 69, f. 266 ............................................................................................ 287
5.82 ARM LC AH 69, f. 266v. ......................................................................................... 288
5.83 ARM LC AH 9, f. 23v .............................................................................................. 289
5.84 ARM Prot. P-145, f. 3v ............................................................................................ 290
5.85 ARM Prot. P-145, f. 4v ............................................................................................ 291
5.86 ARM Prot. P-145, f. 5 ............................................................................................... 292
5.87 ARM Prot. P-145, f. 5v ............................................................................................ 293
5.89 ARM Prot. P-145, f.6 ............................................................................................... 294
5.90 ARM Prot. P-145 f.6v .............................................................................................. 295
5.91 ARM Prot. P-145, f. 7 .............................................................................................. 296
5.92 ARM Prot. P-145 f.10 ............................................................................................. 297
5.93 ARM Baratillo, vol 1, part 2, 213 .............................................................................. 298
5.94 ARM Baratillo vol. 2, f. 183 ...................................................................................... 299
LIST OF ABBREVIATIONS

ARM.: Arxiu del Regne de Mallorca

ASTER: Advanced Space-borne Thermal Emission and Reflection Radiometer

ECR: Escribanía de Cartas Reales

LC: Letres Curtes

Prot.: Notarial Protocols

RP: Real Patrimonio

SITIBSA: Serveis d'Informació Territorial de les Illes Balears (Sociedad Anónima)
1. Introduction to the study of Muslim Spain, its fortification & settlement

Following the death of General Franco in 1975, Spain underwent a dramatic transformation which saw the rise of regional and provincial aspirations replace the centralist ideals of the fascist system. From the 1980s onwards the ideologically conditioned precepts of cultural uniformity and ‘Gleichschaltung’ that the country and her people had been subjected to for 40 years, rapidly gave way to a gradual yet profound process of decentralisation, which in turn gave rise to new questions being asked about the nature of Spain as a cultural entity. As part of this process, some of Spain’s autonomous communities embarked on a search for interpretations of the past which allowed the formation of distinct identities, whereas others conducted the study of their history with a more centripetal outcome in mind. In particular the 800 year-long Islamic presence on the Iberian Peninsula has had, and still has, a great deal of influence on the self-perception of many Spaniards and the study of this highly relevant period, and in particular archaeology, has at times been instrumentalised to serve political aims rather than scientific ones.

The notion of Spain as a cumulus of various distinct cultural entities that require cohesion can be traced back as far as the days of the Visigothic king Liuvigild (525-589), and efforts to unify and centralize the Iberian Peninsula appear to have been one of the great ever-recurring themes of Spanish political history. Even as late as the 1950s, at the height of the Franco period, the eminent Spanish philosopher Jose Ortega y Gasset had remarked that ‘Spain is a series of watertight compartments rather than a nation’ (Dobson 1989, 86). Part of the reinvention process which Spain has been undergoing over the last 30 years or so, and the consequent re-examination of the Iberian Peninsula’s historiography, has been the emphasis being placed on the Islamic era, the age of al-Andalus, which lasted from AD711-1492. Today, the great questions are: what influence, if any, could Islam have had on the creation of the nation we call Spain? Or, put rather more directly, how much of ‘Hispanidad’ is in fact ‘Moorishness’? The answers to these questions have often reflected the political alignment of a given scholar, and this has in turn led to highly differentiated attitudes in the various regions of the Iberian Peninsula. Mallorca, for example, has tended to fall into the more conservative camp, leading to an academic focus concentrating on Classical and Christian archaeology and characterised by a comparative disinterest in the three hundred years of Moorish presence there.

The main debates that have lead to our current understanding of Andalusian society, its political structure and the functions of one of its only physical remains, its fortresses, have dominated the discourse on medieval Spain for the best part of the 20th century. It is therefore not surprising that
the state of the question regarding Andalusian archaeology has, at times, been so heavily politicised that it has become difficult to determine how much of what we think we know is, in fact, opinion. Consequently it will be necessary to provide a brief introductory summary of these debates to clarify the epistemological background to the questions which this thesis aims to answer.

A. Researching Islamic Spain: problems and challenges

Among the earliest holistic studies on al-Andalus was that carried out by Jose Antonio Conde in 1844. In his book *Historia de la dominación de los árabes en España* he presents the creation of al-Andalus as a beacon of civilisation and enlightenment in the midst of the cultural wasteland that was medieval Europe (Conde 1844). This romantic view of Moorish Spain as the primer for Europe’s great cultural achievements in later centuries was not disliked in Spain for most of the 19th century. In the last decade of the 19th century, however, the national sentiment on the peninsula changed fundamentally. The influential Arabist and historian Francisco Simonet, for instance, saw in Islam a corrupting influence, and in his 1897 publication on the history of the mozarabs he praises at great length those Spaniards (i.e. Christians) who endured Islamic rule and preserved the ‘national spirit and the culture of the Spain of Antiquity’ (Simonet 1897, 7). Simonet, while highly critical of Conde’s romantic ideas of al-Andalus, was a great supporter of the famous Dutch Arabist Reinhard Dozy, who himself had argued for a reverse influence of Spanish culture on Islam, rather than the other way around. He argues, at great length, that the great poets, historians, geographers, *etc.* of Cordoba and Toledo were mostly of Spanish ‘race’, who only spoke Arabic for reasons of convenience (Dozy, cited in Simonet 2005, 87).

Francisco J. Simonet was a defender of the wide-spread view that ‘Arabic civilisation was not proprietary, but borrowed’ and that even the great civilization of the Arabs of the East was that of the Christian peoples they had subdued. Simonet, along with other writers such as Renan, Lassen, Neve argued that the Arabs could not have introduced any significant culture in the regions they conquered, as their culture was simply not developed or complex enough to have survived those of the cultures they dominated. Their view was, in a nutshell, that the Arabs dominated militarily, but never culturally -a view which to many, such as Rosa Maria Rodriguez Magda, has still not completely lost its appeal (Rodríguez Magda 2008).

Rodríguez Magda’s recent, and highly praised, study on the historiography of al-Andalus has highlighted some of the main concerns of many modern writers on the subject. Both in Spain and abroad there has in recent years been a revival of the ‘pro’ al-Andalus stance, concentrating in particular on the Caliphate of Cordoba, as one of the greatest periods in human history (Menocal 2002). Rodríguez Magda argues that many of these writers, apart from utterly misconstruing an
otherwise well documented historical period, have other, ‘darker’, motifs often linked to either the re-Islamization of Andalusia, or, indeed, the complete secession of the autonomous community from Spain as a whole. Andalusian socialists such as Blas Infante (1885-1936) had since the early 20th century used Spain’s Islamic period as an identifier of a distinct national sentiment that aims at independence from Madrid (Rodríguez Magda 2008, 78). Infante’s forays into Andalusian independence have more recently been taken up by neo-Islamist groups who, over the last 30 years, sought to reclaim Andalusia’s Islamic identity, some of whom have recently coalesced into political parties on either side of the ideological spectrum such as the Partido Socialista Unificado de Andalucía (PSUA) and the Izquierda Nacionalista de Andalucía (INA). For the vast majority of modern Spaniards, however, al-Andalus remains a foreign country; a localised parenthesis in the Christian history of the Iberian Peninsula which left some impressive architecture, but had only a minor impact on the culture.

**The Medieval Spains of Claudio Sánchez-Albornoz and Américo Castro**

Clearly, then, al-Andalus is still a loaded subject to many modern Spanish scholars and politicians. Simonet’s notion that the Arabs lacked a substantial culture of their own and were instead forced to absorb that of the peoples they conquered still prevails to some extent in the present discourse on the nature of Moorish settlement of Iberia. Certain factions of Spanish scholarship see in the territorial organisation of al-Andalus the influence of the Christian polities of Europe, arguing that the Emirs of al-Andalus emulated the feudal lords and their systems of territorial exploitation and constructed their castles and fortifications for the same reasons as their northern counterparts. While this view is being refuted by most foreign (and many Spanish) scholars, it will be necessary to briefly examine this debate in greater depth as it is the varying degrees of impact attributed to the Moors in Spain that have defined the study of Iberian history, and identity, as a whole. It makes sense, therefore, to begin with the long lasting dispute between Américo Castro and Claudio Sánchez Albornoz - a debate which more aptly than any other represents the recurrent anxiety to make sense of Spain’s complicated past.

The debate began during the mid 20th century with the view propounded, and largely accepted by the Spanish scholarly community, of Sánchez Albornoz’s theories and his claim that only a very small minority of Spaniards converted to Islam during the eight centuries of Muslim rule in Spain and that most Muslims were instead assimilated into “Spanish” culture (Sánchez Albornoz 1947). The following year, however, Américo Castro published a differing view (1948). In his opinion, it was not so much that Hispano-Romans and Jews had refused to convert to Islam, but rather that it was the amalgamation of all three religions and cultures which lead to the creation of ‘Spaniards’ as a cultural concept in the first place. In 1949 Sánchez Albornoz countered yet again with *Spain, A historic Enigma* (Sánchez Albornoz 1956). In it Sánchez Albornoz exposed his view that Spanish culture and
identity were traceable continuously as far back as the pre-Roman days of the Celt-Iberians and the city-state of Numantia. For him, the peoples of the Iberian Peninsula were ‘heirs to a common tradition and at any given period of medieval history shared a common historical experience’ (Sánchez Albornoz 2000). Around the same time Menéndez Pidal in reference to the Christian “re-conquest” talks about how the ‘…pure and unfettered religious spirit gave impetus and national aims to the re-conquest, (...) fusing into one ideal the recovery of the Gothic states for the Fatherland’ [my emphasis] (Menéndez Pidal 1966, 143-144). Castro’s view of Spanish culture, however, found supporters not only abroad, but also in Spain among such writers as Ignacio Olagüe, who’s book La Revolución Islamica en Occidente received a wide readership in France under the title Les Arabes n’ont jamais envahi l’Espagne (Olagüe 1969). Olagüe argued that there never was an Islamic invasion per se, but that the Arian population of southern Spain saw in the Muslims across the Straits a natural ally as fellow Unitarians and therefore beckoned them across the Straits to help them in their plight against the Visigoths. This view of Islam as freeing Spaniards of their Germanic overlords has had, and still has, great resonance among converts to Islam and the Andalusian nationalist movement (Rodríguez Magda 2008, 83).

For Américo Castro the Visigoths were not Spaniards and modern Spain owed them little. Instead he sees the roots of Spain and Spanish culture in the theory of Convivencia, which argues that Spain as a cultural entity stems from the peaceful coexistence of Jews, Muslims and Christians and the resulting blend of their cultures (Castro 1971; Mann et al. 1992; Fletcher 1994), while for Sánchez Albornoz and others the Goths represented a link in an unbroken chain of defenders of the Spanish identity on which Islam never left so much as a dent.

**Pierre Guichard on Islamic tribalism and Spanish identity**

In the mid 1970s the French historian and archaeologist Pierre Guichard presented a new hypothesis which clashed substantially with both, the traditionalist view of Sánchez Albornoz and Menéndez Pidal, and that of the defenders of Castro’s Convivencia theory (Guichard 1976a; Guichard 1976b; Guichard 1977).

Being influenced by the structural-functionalist theory of social anthropology, Guichard argued that the Islamic and Christian civilizations were based upon opposing principles of organization at all levels of society and that therefore the Muslims could not have been ‘hispanized’, as hitherto stated by Sánchez Albornoz. He was, however, also opposed to Castro’s view of Spain as a melting pot of cultures, arguing that the differing principles of organisation in systems of descent (patrilineal vs bilineal), the organization of kin groups (corporate descent groups vs bilateral kindreds), and marriage patterns made it impossible for any syncretisation or even fusion to have
happened (Guichard 1976a; Benco et al. 1998). Throughout much of his work Guichard argued that the cultural, social and demographic impact of Islam was much greater than the traditionalists had wanted it to be (Guichard 1976a; Guichard 1990; Guichard 1993; Guichard 2002; Guichard 2008).

The reasons for this, in addition to the ones outlined above, can be summarized as follows: Firstly, Arab and Berber concepts of clan endogamy discouraged intermarriage with indigenous peoples and therefore limited the cultural assimilation that could have taken place. Secondly, Guichard states, the segmentary lineage organisation of Bedouin tribes encouraged the defence, self-sufficiency and growth of these tribes once they arrived on the Iberian Peninsula. And thirdly, basing himself on his archaeological findings in the regions of Valencia and the Sierra Nevada, he argues that the number of immigrating Muslims, especially that of North African Berbers was larger than hitherto expected, somewhere in the hundreds of thousands and not in the few tens of thousands as believed by the traditionalists (Guichard 1976a, 456-457). Therefore, the Muslim community very quickly became a demographic majority on the Peninsula.

The role of the woman in Muslim communities also differed greatly from that of the Hispano-Roman or Visigothic societies. The strength of a tribe was measured by its capacity to defend its honour, which was itself quantified in its ability to retain its women by endogamic methods and by ‘capturing’ women from other groups (A. S. Ahmed et al. 1984, 277; Manzano 2006, 131). By turning the woman into a passive subject of a conception of honour based on the prestige of the clan’s agnate links, the tribe tended to impede women’s movement, contact with outsiders and the compulsory wearing of the veil. It stands to reason, therefore, that social conditions such as these made it very difficult for any meaningful cultural assimilation to have occurred between Christians, Jews and Muslims. If anything, they may in fact have accelerated the process whereby Islam imposed itself as the dominant religion on the Iberian Peninsula as it was forbidden for Muslim women to marry into non-Muslim families, whereas a Muslim man could have as many non-Muslim wives as he was effectively able to maintain.

Critiques of structural-functionalist anthropology: Chelhod, Manzano and Epalza

While there is little doubt that Guichard’s hypothesis has fundamentally rearranged our conception of the society of al-Andalus and its impact on the future creation of a “Spanish” state, it has come under fire from sociologists and anthropologists alike, who consider it to be overly simplistic or even ‘banal’ (Gallissot 1987, 65). Indeed, it calls to attention that since Guichard’s first publication on the matter our understanding of what exactly a ‘tribe’ and a ‘clan’ actually are have not advanced a great deal. Defined by Guichard as the grouping of the descendants by the male line of one specific ancestor there would be a qualitative but no quantitative difference between clan and tribe. Manzano argues that in Guichard’s view tribes evolve in a manner similar to fractals, in that the different segments into
which tribal groups subdivide themselves constantly reproduce on an ever decreasing scale the very patrilineal and endogamic model from which they stem, as though each of them was a smaller link in a chain of consanguinity (Manzano 2006, 133).

Chelhod, in the second edition of the *Encyclopaedia of Islam* (1979) and talking specifically about Yemen, states that the segmentary model is an idealised conception of a primitive Islamic society. He believes that historians have been too trusting of the claims of ancestry of clans and tribes, ignoring the fact that there is a difference between the ideological representations which certain groups make of themselves and the real structures to which their social organisation conforms. More recently Mikel de Epalza has criticised the readiness with which many scholars take the rather hierarchical tribe-clan-family model as paradigmatic and universal, calling it ‘naive and misleading’ (Rubiera Mata *et al.* 1987, 35). Neither de Epalza nor Chelhod fundamentally dispute the tribe-clan-family model, but they do warn from taking it too seriously in stating that the divisions between clans or tribes were much more permeable and less defined than the groups may themselves admit. Indeed, the findings in this study indicate that during the 11th century the hinterland tribal communities of Mallorca appear to have begun evolving a meta-identity which clearly superseded that of the traditional segmentary model expounded by the French school.

More accurate demographic data, resulting among other sources from archaeological excavations has lead to questions regarding the level of conversion by Jews and Christians to Islam (Gutiérrez Lloret 1996; Gutiérrez Lloret 2001; Manzano 2006, 127-128). Outside Spain it was widely assumed that the easy conquest of Iberia had been followed by a rapid Islamisation of the indigenous population, although the evidence for this was wholly inferential (Glick 2005). Indeed, in Spain this question had for long been avoided in the traditionalist camp, until in 1979 Richard Bulliet presented a ‘conversion theory’. The main body of his data was drawn from biographical dictionaries, a series of volumes dating from the 10th century onwards containing biographies of Ulamā (learned individuals who stood out for their in-depth knowledge of the Islamic sciences), which allowed Bulliet to determine that in many families of Christian or Jewish origin Islamic names became increasingly common over time (Bulliet 1979).

**Other debates on the socio-political realities of Medieval Iberia: conversion and settlement**

So far, this section has outlined some of the main discussions and disagreements among scholars which have had a fundamental role in shaping our view of the Iberian Peninsula during the Middle Ages. There are, however, a number of ancillary arguments which have branched off from the main topic of Islamic/Christian integration which shall be briefly presented over the following pages.
On conversion to Islam: Bulliet and Glick

In view of recent discussions it has become clear that Bulliet’s theory of conversion has been widely misunderstood in the scholarly community, most notably by Glick, who may be credited with spreading Bulliet’s idea in the first place but profoundly misinterpreted his results (Glick 1995b). The basis of Bulliet’s hypothesis is based on notions of innovation diffusion and therefore determines that the rate of conversion is logarithmic and transmitted by contagion, graphically represented by a logistic curve. In essence, few adopt Islam at first, but as more do the probability of others following increases, thus growing almost exponentially. From Bulliet’s study it is possible to determine that the rate of conversion is slow until the 10th century, when less than a quarter of the eventual converts were already converted. The ‘explosive’ period coincides with the reign of Abd al-Rahman III and his establishment of the Caliphate of Cordoba in 929. Torres Balbás’ attempt to determine the approximate population of Cordoba during the year 1000 by studying the successive expansions of the great mosque of Cordoba (Torres Balbás 1971), a method considered by Fletcher to be ‘impressionistic’ (Fletcher 2003, 37), may in this light reflect not just the growth of population of the Andalusian capital, but also the rate of conversion to Islam in this period. In terms of the religious distribution of the population of the Peninsula this has lead Glick to make a number of assumptions regarding the spread of Islam: parting from the premise that there were some seven million Hispano-Romans in Spain in 711 and that their numbers remained relatively level throughout the 10th century, by 912 there would have been about 2.8 million indigenous Muslims (Muwalladun), plus Arabs and Berbers. At this point the Christians would have still greatly outnumbered the Muslims. However, by 1100 the number of Muwalladun would have risen to an approximate majority of 5.6 million, leading the Muslim population to becoming the demographic majority of Iberia (Glick 2005, 10). These calculations, however, are faulty when one considers that logistical adoption curves are always based on the total number of eventual adopters and not of the total number of potential adopters (Bulliet 2009). Hence, according to Bulliet by the year 1100 some 80% of those who would eventually convert would had already done so, and not, as Glick suggests, 80% of Iberia’s total population. Glick’s mistake has lead many scholars to believe that the non-Muslim population of al-Andalus was therefore no larger than 20% of the total, -a figure which will have to be reviewed.

It is worth noting at this point that religious conversion was only one aspect of exposure to Islam. Conversion could also be linguistic, cultural and social because it involved the adoption of the Arabic language and Islamic cultural practices (Glick 1995b, 60). This process of cultural conversion to Arabic habits and customs has to some extent been demonstrated by the archaeologist Gutiérrez Lloret who has established that the adoption of Islamic social practices in both urban and rural contexts is signalled by the appearance of distinctive glazed, polychrome food-vessels and serving forms from the late 9th and 10th centuries onwards (Gutiérrez Lloret 1992, 9-22).
On Islamic settlement and Christian re-settlement: Kennedy and Fletcher

Of particular relevance to our understanding of medieval Mallorca is the debate surrounding the nature of settlement and administration of conquered territory in al-Andalus. Among the valuable additions to the bibliography on Islamic Spain of the last decade one must point out Hugh Kennedy’s book on Muslim Spain and Portugal (Kennedy 1996), which partly addresses the important issue concerning the settlement patterns of the earliest Arab and Berber invaders. Relying largely on Pedro Chalmeta (1994, 259-268), Kennedy states that the early territorial organisation of al-Andalus, in which Arabs occupied the fertile river plains and Berbers the comparatively arid mountain ranges, was not politically motivated but a ‘natural’ progression from the habitats they had occupied in their respective homelands (Kennedy 1996, 16-17). This statement has been contended by Richard Fletcher, who sees the Berbers as being treated as second-class citizens in al-Andalus and therefore forced to settle in less fertile lands (Fletcher 1994, 27). This early relation between Arabs and Berbers is of great importance to our understanding of Andalusi political history because it would go far to explain the origins of the successive civil wars or fitan (Sg. fitna), which shook al-Andalus during the following centuries, as well as the apparent rift between the rural and urban spheres of Mallorca. We shall pay close attention to Berber-Arab relations in the course of this study as they also expected to have played an important role in the dynamics of state-formations and the creation of a Mallorcan identity.

In the case of Mallorca it would appear that the hinterland was predominantly settled by Berbers from the outset. While only 19.26% of all known Moorish place names in Islamic Mallorca denote a tribal or clanic name, the majority of these appear to be of Berber rather than Arabian origin (Rosselló 2007a, 85), suggesting a continuation of the ethnically segregated territory found on the mainland. The city, Madīna Mayūrqā, was the home of the elites which, certainly during the 10th century, were almost exclusively Arab in origin. This thesis suggests that rather than being forced to live in the rural areas, the Berber junūd (tribal groups) may have in fact chosen to put as much distance between themselves and the, usually, Arab authorities as possible, in an attempt to evade excessive taxation and intervention. The successive conquests of the island by Almoravids, Almohads and others are likely to have further contributed to this separation between hinterland and city as shall be observed in greater detail in the following chapter.

The topic of resettlement of the land conquered by the Christians, in particular during the 12th and 13th centuries has also been a subject of much discussion. It is clear from numerous medieval sources that the conquerors encountered severe difficulties in finding willing settlers to move to the newly acquired territories. In 1231 James I of Aragon, self-styled crusader and conqueror of the Balearic Islands and the Kingdom of Valencia, went so far as signing generous treaties with the
inhabitants of Muslim Menorca in order to persuade them to re-settle in Mallorca (James I of Aragon 2003). Indeed, one could argue that the long lull in major Christian conquests on the mainland between the early 13th and the late 15th centuries is due to the growing awareness that the conquered lands would only be worth as much as they could produce. With no one willing to resettle to these lands they would ultimately only be a cost.

**The emergence of landscape archaeology in the study of medieval Spain**

Among the few architectural features to have survived the ‘Reconquista’ the castles of al-Andalus are often the best preserved, though relatively few remain in their original form. Apart from a few examples such as Gormá and Baños de la Encina, large fortresses in strategically important locations were often heavily modified to cope with new threats (such as artillery) or adapted to the personal requirements of the lordly class that took ownership after their conquest. Both these factors can be said to have had similar effects on the architectural transformations of the Spanish castle, as war and the lordly need for representation went hand in hand throughout much of medieval Europe. In the case of the more minor fortifications erected by Moorish communities throughout the Iberian hinterland, their small size, remote location and relative strategic irrelevance often made them unattractive to the conquering lords, resulting in their abandonment and eventual collapse. While the bad state of preservation of Islamic Spain’s architectural heritage is most certainly regrettable, the early abandonment of many sites has provided archaeologists with the invaluable advantage of undisturbed contexts, clearly datable material culture and a comparatively clear stratigraphy due to the lack of later disturbance. In this sense the castles of rural al-Andalus are a largely untapped source of information which has only recently begun to be exploited.

Today, in the vast majority of cases, Islamic remains in Spanish castles are limited to foundation works, cisterns and other water-related features such as channels, settling tanks and wells. Only a fraction of the vast number of Moorish fortifications which once dotted the Andalusi countryside still stand to roof height. This marked lack of standing remains can for the most part be attributed to certain material preferences which distinguished the architecture of the Christian and Islamic cultural spheres. It may be argued that certain Christian ideas about permanence and temporality dictated the Spanish preference for construction is stone, whereas their Moorish counterparts generally preferred construction in rammed earth, known in Spain as tapial or tapia from the Arabic tabiyya. Nevertheless, the differences between Moorish fortresses and the castles of the Christians went far beyond the choice of materials employed in their construction, their entire societies being founded on fundamentally differing principles of organisation. As outlined above, the tribal/segmentary social structure prevalent throughout the Arabian Peninsula and North Africa stood in a stark contrast to the more seigniorially organised polities of northern Europe and notions of
identity, honour and power were identified along highly distinct lines. There is no doubt, therefore, that these differences profoundly affected the understanding and definition of community, society and state in either culture, and must hence have permeated into the more material world of architecture. Fortifications, as expressions of power structures and social hierarchies, are consequently reflections of social realities which, when observed in detail and in their political context, can contribute a great deal of information on their builders, and the socio-political milieu within which they functioned.

In European architectural history the term ‘castle’ has come to be associated not only with a certain type of military structure, but also with a ruling class that resided there and that drew its power from the exploitation of the peasantry. ‘Feudalism’ is probably the term most commonly linked to the system of territorial control that gave origin to the castle, and it is inseparably attached to the image of the proprietary lord who resides within it. To some the castle has become the very embodiment of a dark and violent age, an ‘ominous spectacle’ (Bisson 1994, 142), the tool of domination par excellence without which lordship was not possible. While there is still a fair amount of debate on the matter, it can be said with reasonable certainty that the same feudal or seigniorial system one encountered in 10th, 11th and 12th century Catalonia, France or Italy did not have a direct analogue in the Islamic world, and it is therefore prudent to use the term ‘castle’ exclusively for the Christian structures, and calling their Islamic counterparts either by their Arabic names (hisan, qasr, qala’at, etc…) or referring to them simply as ‘fortifications’ when a clearer definition is not possible or inconvenient. This study will, nevertheless, examine in closer detail the potentiality of seigniorial systems having been established within the segmentary societies of al-Andalus.

The emergence and extensive application of landscape archaeology in Spain during the 1980s has done much to further our understanding of the ethnic make-up of rural al-Andalus. The study of Moorish fortifications has been at the centre of this development and for a little over 30 years a number of archaeological studies have been carried out, dedicated not so much to the study and description of isolated fortified settlements, but rather to establishing the general schemes of settlement in al-Andalus as a whole. Particularly longer campaigns such as the excavations carried out at the isle of Saltes in the Guadalquivir delta near Huelva, have yielded some interesting results and have contributed to our understanding of settlement in the periphery of Andalusian polities (Bazzana et al. 1989; Bazzana et al. 1993; Bazzana et al. 2005). The origins of this shift in the approach to castles and their function can be traced to the early 1970s. Indeed, since Toubert’s study of the castle in 10th century Lazio and his resulting Incastellamento thesis, the study of the castle has expanded far beyond that of the traditional military perspective and has become an integral part of the settlement history of medieval Iberia (Toubert 1973). By the late 1970s architectural historians and archaeologists had begun to study the castle as a socio-political institution rather than as monuments or military structures (Guichard 1976a; Bazzana 1983; Bazzana et al. 1988; Malpica Cuello 1996; Malpica Cuello 1998).
Toubert’s *Incastellamento* is based on the observation of two parallel and near simultaneous developments in 10th-century Lazio. On the one hand he discovered evidence for a significant increase in castle building while at the same time observing a complete re-organisation of the rural population, which began clustering around the newly built castles, which, in turn, imposed ‘feudal’ obligations on the villages within their jurisdiction. It should be noted, however, that there are those who have pointed out that the reorganization of the rural population of the Latium towards the high ground into fortified villages, known as *castelli*, did not always require the agency of a lord, or indeed the previous existence of a fortress, and therefore the resettlement may have been of a much more voluntary nature than Toubert had suggested (Francovich *et al.* 2003). Nevertheless, Toubert’s *Incastellamento* has been regarded as the prime physical expression of the establishment of the seigniorial system, and it may therefore be stated that this was the moment when research passed through the stage of investigating castles solely as monuments to the study of the space that they controlled.

Glick has, to some extent, applied Toubert’s model of *Incastellamento* to 11th-century Catalonia (1995b, 108) and some archaeologists also believe to have detected an *Incastellamento*-like process occurring in eastern al-Andalus during the early-mid 10th century (Azuar Ruiz 1982; Glick 2005). The exact dynamics of this process in al-Andalus are not clearly understood, and whether it allows for any connections to the Christian progression towards a seigniorial order has been a topic of much discussion among scholars of medieval Spain (Azuar Ruiz 1982). While Acién Almansa makes rebellious groups inside the Caliphate responsible for the rising number of fortifications built in the period (Acién Almansa 1985, 15), Hugh Kennedy has argued that this increase of castle building, rather than being determined by domestic concerns, is, in fact, the result of the Fatimid exploits in North Africa, which threatened the Andalusi coasts and is, therefore, not an expression of a ‘feudalisation’ of the Islamic hinterland, but rather demonstrates the high degree of political and administrative centralisation established under the Caliphate of Cordoba (Kennedy 1996, 96). The findings presented in this thesis indicate that the increased construction of fortifications in Islamic Spain cannot be attributed to the growth of a landed elite or aristocracy though, on the other hand, it is also not possible to identify the threat of the Fatimids as the sole reason for this castle-building process. Instead, centrifugal forces within the tribal groups of al-Andalus are the most likely authors of these buildings.

From archaeological enquiry and the evaluation of historical sources it has become clear that in al-Andalus the role of fortifications differed fundamentally from those of Central Europe, and that their connection with the rural habitat was much deeper than the simplicity of their architecture had initially lead scholars to believe. The segmentary organisation of Andalusian society into tribes, clans and families determined that the power structures of Islamic Spain differed greatly from those of Christian Europe, and in this sense, the role of fortifications in either cultural sphere was naturally to
differ substantially as well. It is today commonly accepted that the *hisn* was part of a system of hinterland control commonly referred to today as the *hisn/qarya complex* (fortress/village system), as first outlined by Pierre Guichard (1976a). Guichard’s findings indicated that Andalusian rural communities built communal fortifications which were used in times of stress, and which had the parallel function of serving as administrative hubs for the central authority of the state via the *qā‘id*, an appointed individual who usually resided in the fortress. In many cases a given *hisn* could evolve into becoming a settlement in its own right, as at Siyasa (modern Cieza), taking on further administrative and political competences as its demographic weight increased (Navarro & Jiménez 2007b).

The research into the hinterland of al-Andalus has brought forth the first detailed studies into the Islamic fortifications of Islamic Spain and their connection with the surrounding territory, underlining the importance of the *hisn* in the administration of the Andalusian territory and indicating that the successor polities to the Caliphate of Cordoba (the so-called *Taifa* kingdoms from the Arabic *Muluk al-tawaif*) were in fact highly centralised states with a high degree of control over their surrounding territory. Indeed, another author of the French school, Patrice Cressier, determined that more often than not every territorial unit of administration or *juz* had its own *hisn* which oversaw tax-collection and general administration (Cressier 1984). Yet, despite its apparent universality on the mainland, this system of hinterland control, the *hisn/qarya complex*, appears not to have existed in Mallorca or the other Balearic Islands. Despite its high demographic density and relatively large area (3600km²) the Island of Mallorca appears to have had only three *hisn*, and all of these find their origins in Antiquity and were merely reused by the Moors. Instead of large scale fortifications the most common types of fortification in Mallorca appear to have been isolated towers and fortified store houses, usually located within, or close to, a given settlement. The archaeology and the medieval sources, namely the *Repartiment*, the *Kitāb Tarij Mayūrqa* and the *Remembrança*, hint at a hinterland that was fortified not by the communal *hisn* which protected the surrounding territory in a centralising manner, but one where each village took charge of its own defensive requirements and appeared thoroughly detached from the central authority.

### B. Fortress and village: the *hisn/qarya complex* and its existence in Mallorca

During the mid 90s the discussion surrounding the role of the fortress in al-Andalus was renewed with Glick’s book *From Muslim Fortress to Christian Castle* (Glick 1995b) and his findings in the area of Valencia. As a specialist in the hydro-archaeology of Islamic irrigation systems it may be said that he favoured the archaeological methodology of proposing speculative paradigms, and goes as far as stating that ‘nowhere in the world has historical archaeology played a more pivotal role in the
rewriting of a nation’s social and cultural history [than in Spain]’ (Glick 1995b, 12-13). He further describes the Moorish fortresses of al-Andalus as defensive constructions that provided refuge for surrounding villages but more commonly served as hubs of economic and social activity in the countryside and as ‘administrative centres for a tributary polity’ (Glick 1995b, 42). In an attempt to synthesise all previous results and discoveries Glick states that in al-Andalus the qarya constituted the basic unit of fiscal income of the state, and normally, depending on topography and demographics, every hisn controlled between 7 and 10 qūra and their irrigated territories. On average in southern and eastern Spain every hisn controlled an area of approximately 90-120km², within which every qarya controlled an area between 72 and 90Ha (Glick 2007, 39-41). While it is clear that these figures must vary substantially throughout the peninsula the academic community today considers the hisn/qarya complex to be applicable in a greater or lesser degree to the entirety of al-Andalus throughout the Islamic period. By general consensus the exception to this rule appears to have been the island of Mallorca, where indeed the system of territorial administration, if there was one, must have differed substantially from that of the mainland as we find no fortified settlements other than the Madīna (and the possible exception of the Almudaina of Artá, examined in chapter 6), and the rural fortifications we find appear not to be associated directly with any particular settlements or in fact the Madīna (Bazzana et al. 1988, 47-49; Kirchner 1997; Kirchner 1998; Glick 2007, 44)(Kirchner 1998). The political fabric of the Mallorcan hinterland appears disjointed in itself and dislocated from the urban centre, and indeed it would appear that there were no larger or medium sized urban nuclei other than the Madīna but that instead the peasantry lived in discreet tribal communities dispersed over the landscape according to their agricultural or pastoral practices. In a short article from 1996 Helena Kirchner described the demographic organisation of the Mallorcan countryside as ‘networks of qūra without husūn’ (Kirchner 1998, 450), suggesting that the rural population organised itself in small independent groups dispersed around the hinterland with no clear relationship towards each other or any of the fortresses which, she suggests, were exclusively temporary refuges for sporadic use with no permanent occupation. A recently discovered medieval source (al-Mahzūmī 2008), supports this view of a hinterland thoroughly detached from the centre, at least for the decade leading up to the Christian conquest of 1229, and it is likely that in earlier periods such as the time around the Pisano-Catalan raid of 1113-1115 a similar state of affairs existed. However, considering that in some cases, such as Alaró, castles defined the name of the surrounding territory and villages therein, suggest that at least in the early days, during the 10th century, the island was administered radially from the centre out via the fortresses that were already there, namely Alaró, Santueri, Hisn Bulānsa (Castell del Rei) and possibly Qastil al-Uyūn (Randa). It is worth repeating at this point that the Christian Repartiment of the early 13th century (Rosselló 2007b; Soto 1984) mentions a large number of structures of seemingly ‘military’ origin such as towers (Alborratx, Alboraiet), small castles (Castellet de Bunyola, Castellet d’Esporles) and strongholds (Puig d’en Escuder) which, while they are not mentioned expressly in King James I’s chronicle of the island’s conquest (James I of Aragon 2003), it is stated that those
Muslims who resisted the conquest held out in mountain strongholds until their eventual surrender in the summer of 1231. This is in part demonstrated by the archaeological record, as for example at Puig de n’Escuder, where substantial amounts of Almohad pottery dating to the early 13th century have been recovered (Calvo et al. 1997).
2. Aims of study and Methodology

A. Aims of the study

The principal goal of this thesis is to account for the comparative lack of hisn in Mallorca and, in so doing, provide the first holistic examination of all of Mallorca’s known Islamic fortifications, documenting and characterizing them in relation to their changing political context and tracing their architectural evolution well into the Christian period. It is expected that a diachronic perspective of these buildings will reveal them to have been the product, not of a specific social class or system of territorial control, but of the powerfully centrifugal tendencies of Mallorca’s rural population which sought to live outside the sphere of influence of the city-based elites. While this division was initially likely to have grown along ethnic lines (Berber opposition to Arab elitism, interference and exploitation), the nature, density and interconnectivity between Mallorca’s rural fortifications suggests that, from the early 11th century onwards, this antagonism evolved into a general break between the urban and the rural spheres, which in turn impeded the establishment of the hisn/qarya complex as a viable system of hinterland administration.

The most likely reasons for the antagonistic relationship between urban authority and rural populace is likely to be related to Mallorca’s geographical nature as an island, as the comparative isolation from mainland groups as well as the lack of a frontier territory are likely to have encouraged the gradual formation of a new meta-identity for the Mallorcan tribes. This study will therefore examine in detail the identity-forming processes which may have taken place on the island from the 10th to the early 13th century to explain the tangential development of the island’s administrative setup, giving particular attention to settlement patterns and the potential roles of the fortifications within these.

It will also be necessary to re-evaluate certain truisms regarding the relationship between the fortifications themselves, as aspects of the interconnectivity between fortified sites have in the past been interpreted as defensive networks to protect the island from foreign attack and, therefore, arguing for a high degree of central control in Islamic Mallorca. While systematic exploitation of the peasantry and coastal defence cannot, of course, be discounted as potential aims of the political leadership, the clusters and networks of towers which this study has identified on the island bear no visible connection to the city and appear to have been created against the centre rather than by it. Relying on the use of viewshed analysis, the clarification of this question will contribute greatly to the understanding of the basic functions of these buildings, also shedding some much needed light on the
relationships between certain settlements and regions which may not have been much more cohesive in themselves than had been thought in the past.

The characterization of Mallorca’s Islamic fortresses will rely to some extent on a systematic comparison with those of the Iberian mainland. Typologically, the main types of fortifications of Mallorca (hisn, torres de alquería and, to a lesser extent, agadir or fortified granaries) are structurally largely identical to those on the mainland as they appear to have been constructed by similar groups using similar techniques, making them almost indistinguishable in terms of form. Where they did differ, however, is in their function; whereas the fortifications on the mainland tended to have an operational vector directed at the periphery of a given polity, such as frontier defence, the village defences of Mallorca appear oriented towards the interior of the island, towards the Madīna, thus further highlighting the disaffected attitude of these communities. Comparisons will also be carried out with certain regions of North Africa, the area from which most of the types of fortifications common in al-Andalus appear to stem and where the hisn/qarya complex also appears to be absent, though, as shall be seen, for entirely different reasons than in Mallorca.

The diachronic examination of the fortifications of Mallorca will be carried through the Islamic period into the Catalan era, giving particular emphasis to the socio-political context within which they functioned. Due to the re-use of most sites by the Christians the structural remains dating to the Islamic period are often very limited, at times consisting of little more than low-standing walls, cisterns, channels and other water-related features. Nevertheless, there was a substantial amount of continuity in the general layout of the fortifications and the study of the Catalan remains is expected to contribute to the understanding of the transformation of the territory from the pre- to the post-Islamic era, with an examination of their integration of a previously segmentary territorial setup into a seigniorial one.

Finally, one further aim of this thesis is to provide a template and working methodology with which to approach the study of other comparable islands in the Mediterranean. Prime candidates would, of course, be the other two settled islands in the Balearic archipelago, Ibiza and Menorca, though a comparative lack of archaeological enquiry into the Islamic past of these islands, as well as the almost total absence of sources from the Islamic and early Catalan periods, makes them an area difficult to research without substantial means. Further afield places such as Sardinia, Sicily and Djerba, which have also had an important Islamic presence followed by Aragonese conquests in the 13th and 14th centuries, may offer some relevant comparative value for future research projects. In particular studies concerned with the implementation of seigniorial systems of territorial control may draw some important conclusions from their examination, though it should be noted that due to the highly specific approach of this study and considerable historical differences between Mallorca and those other Mediterranean islands they do not fall within the immediate scope of this thesis. Sardinia,
while temporarily under the control of the Mallorcan Emir Mudjähid around the year 1016, did not remain Islamic for long enough even to dismember the originally Byzantine administrative system of Giudicati which remained in place until the Aragonese conquest of 1324. The case of Sicily, while exposed to a much longer Islamic presence than Sardinia, may also be distinguished from Mallorca in a number of relevant ways: firstly, the island was initially conquered by the Aghlabids of Tunisia largely for economic reasons as they sought to exploit its great agricultural wealth as well as its function as one of the Mediterranean’s most productive entrepôts, rather than for predominantly political/defensive reasons as was the case in Mallorca (see chapter 4). Secondly, and perhaps most importantly, the Christian conquest of Sicily at the hands of the Normans in 1061 was not followed, as in Mallorca, by the complete decimation of the island’s Islamic populace, allowing for a continuation of Moorish presence in the countryside and cities for several centuries under Norman and Hohenstaufen rule. The points of comparison between various islands, therefore, are not to be sought in specific historical events or their mere geographical proximity. Instead, the interest may lie in the study of the identity of the Moorish settlers and the manners in which the ‘isolated’ nature of their settlement area affected their notion of self and differentiated their attitude towards mainland groups. Other potential areas of comparative interest may lie in the solutions they found to certain biogeographical challenges such as for example water shortage, salty soils, and temporary isolation from other commercial centres due to the inability to sail over the winter months.

In comparison to specific mainland sites the study of islands offers a number of advantages, prime among which is the clear definition of the study-area, the controllability of the environment and clarity of scope which for mainland regions are significantly more complicated to define as overlaps and grey areas between regions are almost inevitable. Furthermore, in the case of this thesis the understanding of the dynamics whereby geography affected the formation of a Mallorcan state or kingdom is of great importance to developing our knowledge of the establishment and evolution of Islamic polities in the West in general. Indeed, the study of islands as cultural phenomena in their own right has not been applied to the medieval Mediterranean in any meaningful manner in the past, and it is expected that this study will provide a conceptual template for the future study of other islands such as Sicily and Djerba in the Mediterranean, and perhaps even Bahrain, Zanzibar and other Islamic islands further afield.

B. Methodology

Methodologically this study aims at being of a highly interdisciplinary nature, relying greatly not only on the architectural and archaeological analysis of standing remains, but also on field walking, hydro-archaeology, archival research, aerial photography, toponymy and viewshed analysis. The combination of these sources is expected to complete the picture of Islamic Mallorca and contribute to
the understanding and the development of the fortifications and their socio-political environment. The goal, therefore, is to provide a cohesive and comprehensive catalogue of the Islamic fortifications of Mallorca, examining where relevant their occupational histories from Antiquity to the later Middle Ages, and examining their relations with each other and the capital of the island with the intention of clarifying the dynamics of territorial control throughout the island’s Moorish past. In some cases the currently visible architectural remains of the fortifications date almost exclusively to the 14th and 15th centuries, complicating their reconstruction somewhat. Wherever possible, this has been overcome with the study of documents from the Arxiu del Regne de Mallorca (ARM), which often contain the precise date and nature of a modification of a castle’s fabric allowing us to deconstruct the buildings along a diachronic sequence. It is also expected that the results of previous studies into the hydro-archaeology of Mallorca, such as those carried out by Kirchner, Relat and Barceló, will contribute greatly to the contextualisation of the fortresses of Mallorca by providing a stronger link between fortification, landscape and settlement.

The surveys of the buildings were carried out over a period of about 10 months during the summers of 2008 and 2009, at times with prolonged stays of up to several weeks at a given site. The primary method for recording the structures was matching, where available, existing plans of the sites, older descriptions and vertical aerial photographs (taken primarily by the Balearic Autonomous Community’s topographical service SITIBSA) with the author’s own measurements of the sites and structures. The measurements were taken by hand with measuring tapes and grids, recording the precise dimensions, location and materiality of the remains. Where possible, elevations have also been taken allowing for three-dimensional reconstructions of some of the better preserved buildings. The majority of the illustrations in this text were made by the author using Adobe Illustrator CS5, Sketchup and Global Mapper 10. Maps, Plans and drawings are labelled as ‘figures’ and included in the text, while photographs of sites and archival documents are labelled as ‘plates’ and are all visible in the appendix.

The historical sources

One of the great challenges in researching the history of Islamic Spain is that a large part of the available sources are, in fact, Christian as much of the Arabic documentation and literature were lost or destroyed during the re-conquest. Particularly in the case of Mallorca, where little archaeological study on the Islamic presence has been carried out in the past, a reliance on written materials becomes essential. Determined largely by the loss of most Arabic sources, there has been a tendency to rely on the Catalan documentation of the 13th century to understand the Moorish realities of previous centuries, a fact which is likely to have lead to a skewed view of the island’s history in which the conquerors created a ‘clean slate’ upon which they built the Kingdom of Mallorca. Nevertheless, one of the most valuable records of how Mallorca was settled during the Islamic era is to be found in a
Catalan document known as the *Repartiment* (1231), drafted at the bequest of King James I of Aragon in order to aid the sharing-out of the conquered lands amongst the Crown and its supporters. While the *Repartiment* contains only the King’s portion of Mallorca (approximately 50% of the island’s territory plus the capital), it was written both in Latin/Catalan and Arabic and therefore provides us with the original place names that made up the island’s Moorish toponymy (Rosselló 2007b). Nevertheless, reliance on this document to reconstruct Islamic Mallorca’s territorial organisation has a number of drawbacks: for one it presupposes that the Christians had themselves a clear understanding of the island’s Moorish past, which may not necessarily have been the case. This becomes clear from a thorough reading of another Catalan source of great importance, the *Book of Deeds* of James I of Aragon, which, though written late in his life, relates in great detail his conquest of Mallorca in 1229 (James I of Aragon 2003). This account illustrates the extent to which the Catalans had been unaware of Mayūrqa’s domestic troubles and the deep rifts which divided its society on the eve of the conquest, though he was eventually able to ally himself with the island’s peasantry which aided him in besieging and taking Madīna Mayūrqa.

The conquest of Mallorca by the Catalans is also the topic of a recently discovered Arabic source known as the *Kitāb Tarij Mayūrqa*, an eye-witness account written by the poet and jurist Ibn Amīra al-Mahzūmī sometime in the 1230s (al-Mahzūmī 2008). While he supports, in broad terms, the events described by James I, his account concentrates on the political turmoil that shook the island from the years of the Almohad annexation of 1203 onward, blaming social tensions and interior division for the ease with which the Catalans conquered the island. His account provides, in hitherto unseen detail, a precise description of Mallorca’s ethnic tensions, the Emir’s precarious position and his inability to unite his subjects against a common foe.

Regarding the castles themselves this study has relied greatly on archival documentation from the ARM, the vast majority of which is unpublished. The earliest of these documents, pertaining to the Royal Archives of Mallorca, date to the first half of the 13th century and they tend to deal with legal issues concerning the king’s retainers as well as records of gains and expenses within the king’s portion. The castles of Alaró, Castell del Rei and (from 1241 onwards) Santueri were within the royal portion and we therefore have at our disposal a large number of relevant data concerning the restoration, maintenance and expansion of these fortresses over several centuries. This data has aided the analytical de-construction of these buildings in order to determine their ‘original’ Islamic aspect, as well as ascertaining the age and constructive sequence of various features within these sites. It should be noted, however, that due to a recent move of the archives to a provisional location during the construction of the new building, a number of documents initially examined for this study in 2008 have been either destroyed, lost or damaged and are currently undergoing preservation, and are therefore unavailable for reprography. All archival documents consulted and cited in this study are
listed in the bibliography with a short description of their date and contents, and, where possible, a copy or photograph has been added to the appendix under its original signature.

As mentioned above, most of the archival documents cited in this study are related to expenses incurred in construction works at the fortresses. The currencies employed in these transactions raise a number of questions regarding the coinage in circulation in Mallorca during the 13th and 14th centuries as there was no unified system of currency in the Balearic kingdom. According to Abulafia in the Catalan world the usual ratio for coinage based on the denarius or diner, such the as diner de tern of Barcelona, was 12d=1sous; 20s=£1. In Mallorca accounts were often drawn up in millarenses of North Africa, ten of which constituted one besant, and by 1268 mints in Mallorca began manufacturing imitation millarenses for trade with North Africa. From 1300 a Balearic currency began to be minted, though it was not supposed to be circulated on the mainland territories of the Mallorcan kingdom. Gold coins began to be minted in Mallorca after 1343 and at around this time £1 of Barcelona was exchanged for about 30s of Mallorca in Barcelona (Abulafia 1994, xxii).

The use of viewshed analysis

As part of the attempt to understand the function of the buildings here described, this thesis relies on the analysis of the viewsheds of individual structures in order to complete the picture of their original context and resolve unanswered questions regarding the supposed interconnectivity between sites.

For this a 3D ASTER (Advanced Space-borne Thermal Emission and Reflection Radiometer) matrix of the entire island has been used (Fig. 4.1) on which the locations of the sites have been plotted by their UTM coordinates. The fact that many of the sites are currently in a ruinous or collapsed state makes it impossible to record the visible horizon in situ from the top of its once existing structures, such as towers or walls. The use of GIS software (Global Mapper 10) has made possible the simulation of various altitudes and distances of transmission, providing a detailed visual horizon for each site accounting for the presumed heights of the original structures. At particularly large sites such as Alaró, Santueri and Castell del Rei a minimum of three separate points within the site were used to create various individual viewsheds to account for the variations in the terrain. Furthermore, the distance of transmission was ranged between 25 and 35km depending on the altitude above sea level of a given site. The standard margin of error of around ±4m of the ASTER matrix here employed had to be taken into account for some of the more complex and mountainous locations (Castell del Rei), as did the issue of tree cover, which may have differed greatly during the period under examination. It may be stated, however, that the relatively large scale of the viewsheds in this study (min. 25km radius) permits minor features in the landscape such as trees and individual buildings to have only a negligible effect on the presented results.
Viewsheeds have been used in the past in particular in northern European archaeology and in the context of prehistoric sites such as megalithic monuments (Scarre 2002), often in connection with the study of certain astronomical alignments (C. Ruggles 1999), and in combination with the study of territorial, social and cognitive aspects of the landscape. GIS and in particular viewshed analysis has been criticised in the past for being too limited to mapable features such as topography, geography or hydrology and that it is therefore unable to deal appropriately with the more social features of the landscape, such as settlements, religious centres and culturally determined ways in which the world is perceived (Scarre 2002, 180). In this study, however, the analysis of visual horizons will be linked very directly to past debates regarding the function of coastal and inland defences and their interconnectivity, while also helping to clarify some important points regarding the connection of these fortifications with the island’s urban centre, explicitly aiming to resolve some of the organisational questions of Mallorca’s putative defensive network.
3. Fortification and Urbanism in al-Andalus

A. The physical fortress: the morphology of the hisn

Before one examines in detail the putative political, economic and social functions of the hisn in al-Andalus, it is worth emphasizing that these structures differed not only conceptually from their Christian counterparts, but also structurally. For one, most architecture in Muslim Spain tended to be built from tabiyya (known in Spanish as tapia or tapial), a normally sturdy rammed earth compound which allowed for the quick and cheap construction of large structures. Indeed, masonry, in particular ashlar, was not a common building material in al-Andalus and it appears to have been the prerogative of representative structures in the period of the Emirate and Caliphate with good examples being the Great Mosque of Cordoba (begun 784), the Alcazaba of Merida (835) and the fortress of Gormáz (965) near Soria, while rammed earth was initially the standard material in the rural areas and dwellings of a more humble nature (Maldonado 1990, 586; Azuar Ruiz 1995, 126). Tabiyya, while varying greatly in quality, provided some great advantages over stone as it did not require particularly skilled labour, the raw materials were readily available almost everywhere and it could, when mixed with sufficient lime and aggregate, gain a consistency and solidity similar to that of modern concrete (Gonzalez Escudero 2008, 11). Also, from a structural standpoint, rammed earth walls allow for greater torsion under impact, which could have made them very resilient to ballistics (Torres Balbás 1971, 560-566; Gonzalez Escudero 2008). While this is not the place to discuss the virtues of stone versus rammed earth, it is interesting to note that in al-Andalus masonry architecture becomes scarce after the collapse of the Caliphate in 1031 and the gradual establishment of Berber groups in positions of power among the newly emerging Taifa kingdoms.

It is worth noting that the use of brick was also widespread, but tended to be reserved for certain architectural elements such as gate houses, door- and window mouldings, and decorative elements in general. In the first centuries of al-Andalus we also find a common use of spolia, in particular Roman material and to a lesser extent Visigothic objects, in the form of columns and capitals, though these appear to have been reserved for palatial structures and mosques.

One of the fundamental aspects of Islamic castellology is the necessary distinction between two types of fortresses that existed in al-Andalus. The first type are the fortresses erected by the state in order to protect its borders and aid in the establishment of a central administration. Within these state-funded fortifications one again finds a number of sub-types which coincide with the various periods in which a central government had the necessary funds and manpower to embark on large-scale construction projects. The first of these types are the fortresses erected under the Umayyad
Emirate and Caliphate of Cordoba, and from the few examples that have survived to this day it may be surmised that these buildings tended to be built in stone. The second state-funded group were the fortresses erected by the Almohads from the late 12th century onwards, and these tended to be built exclusively from tabiyya and are most commonly found in the western regions of al-Andalus, coinciding with the Tajo frontier and the Algarve area. The non state-funded fortresses of al-Andalus, however, were by far the most common type and they appear to have been ubiquitous throughout the Islamic territory of the peninsula. These usually much smaller and simpler constructions tended to be the product of the tribal communities that settled the hinterland, and as such were usually emplaced in locations of difficult access requiring little extra fortification, and appear to never have had any residential function. The finer distinctions between the various types and subtypes of these buildings in Mallorca will be discussed in greater detail in chapter 7 as part of the contextualisation of the finds.

The comparative architectural simplicity of most Andalusi fortresses becomes apparent when one considers that most of these structures consisted of little more than a curtain wall with towers where necessary, with a small number of structures on the interior and with one or more water cisterns. Indeed, even the grandest of emiral and caliphal fortresses, such as Gormáz or Baños de la Encina were effectively just shells, not designed to serve as permanent residences to a courtly elite rather than as places at which to rally troops and from which to embark on raids. Whereas fortresses in the Christian north tended to be built by/for the aristocracy (or military orders), most Andalusian fortresses appear to have been built and maintained by tribal collectives and were usually of a much more simple concept that their Christian counterparts. There are, of course, exceptions which confirm the rule, such as the chains or fortresses which protected and controlled the northern borders of the Caliphate along the Tajo and Ebro Rivers, which were clearly the product of a state-funded effort to improve the protection of the northern border of al-Andalus (Gregorio et al. 1954). Though even in the cases where the fortresses were built by the state, they tended to consist largely of a central fortified building, the Saluqiya (Sp. Celoquia), which was the residence of the qāʿid (Ar. castellan or commander), if there was one. Beyond this would be an enclosed open space called the al-Baqqār, which usually contained one or more cisterns and was where the population sought refuge in times of threat (Bazzana et al. 1988, 172-175). Normally the location of a hisn was chosen for maximum natural defence atop rocky outcrops or cliffs, requiring little additional construction in terms of protection by walls, towers or gate complexes.

Due to the widespread use of rammed earth the majority of the minor fortresses of al-Andalus are in a very bad condition, many of them having in fact disappeared completely. Those that have survived, such as Játiva, Baños de la Encina, the Alhambra, the Aljafería of Zaragoza and others are usually the ones that were built from the concrete-like tapial; a material which has proven to be extraordinarily resistant to erosion. The difference in use between the two types of tabiyya was
probably determined by economic concerns, the concrete variety being more expensive to use as it required significant amounts of lime added to the mix.

B. The conceptual fortress: function and location of the Islamic fortress

Our understanding of the castles of al-Andalus has been hampered to some extent by their often very remote locations, far in the hinterland of any given polity, areas which have only recently arrived within the interest of archaeology. Furthermore, up until the 1990s the rural history of medieval Iberia had largely been neglected by political historians for the simple reason that the circumstances of daily life and work in the countryside are largely absent from the historical record (Barceló 1992, 70-82). This problem is particularly poignant in the case of western al-Andalus and the Balearic Islands where documentation from the period is scarce and archaeological interventions have been very few and far in between. In Spanish scholarship it had been assumed that the territorial organization of al-Andalus would not differ greatly from that of its Visigothic predecessors, but as shall be demonstrated over the course of the following sections this approach has been conclusively disproven. Already in the late 60s and early 70s Leopoldo Torres Balbás, who had shown conclusively that Andalusi organisation of urban spaces differed substantially from those found in the Middle East (Torres Balbás 1971), believed that therefore there must also be important differences in the organisation of the hinterland. Kennedy confirms this in stating that in the east the Arabs settled in certain garrison towns, such as Kufa or Basra and only claimed taxes off the land from the local population, whereas in Spain they settled as property owners and appear not to have received a land tax of any sort (Kennedy 1996, 16).

Leading on from the discussions about the impact Islam had on the future creation of a Spanish national identity, the debate has been transported from the history of al-Andalus to the study of the organisation and administration of the territory in al-Andalus and the implementation of control of the hinterland. Over the last three decades a series of differing theories have been trying to establish themselves as paradigms to explain the relations between castle and territory in Muslim Spain: There is, on the one hand, the group associated with Arabists such as Mikel de Epalza, Rubiera Mata, and others who argue for a strongly seigniorial organisation of the hinterland. In their view the territory was highly centralised and even the most peripheral territories of any given Moorish polity were under the direct control of a representative of the state, the qā‘id, who resided in the castle and oversaw tax collection and could dispense law and judgement to his subjects (Epalza 1985; Rubiera Mata 1985; Rubiera Mata et al. 1987; Epalza 1988). Epalza in particular regards the countryside as subordinate to the city and believes that the central authorities controlled the roads and their defensive systems, while absentee landowners generally monopolized the main font of agricultural wealth (Epalza 1988).
Epalza’s heavily ‘feudalistic’ approach had been proposed in opposition to the views introduced during the early 80s by the French archaeological school lead by Guichard, Bazzana, Cressier, Barceló, Poveda Sanchez and others who argued for a more self-determined hinterland that was completely disconnected from the central state. While both parties accept the relevance of husun and qura as centres of the rural population of al-Andalus, they disagree on their relative importance in relation with the urban centre. Epalza’s side argues for an urban society whose hinterlands were 'defined by a wider urban character' (Burns 1999, 17) and in which the city excretes a strong political and economic influence over rural communities, whereas the archaeologists regard the position of the qā’id as practically devoid of all authority and importance (Guichard 1976a; 1991, 19, 169, 203; Bazzana 1983; Bazzana et al. 1988; Cressier 1983; Cressier 1992, 10, 43; Barceló et al. 1998).

From the early 1980s Cressier, Bazzana and Guichard, had supplied a synthesis on the topic by implementing the ‘Guichard hypothesis’, previously applied in their study of the demographic processes by which Islamic culture was implanted on the Iberian cultural landscape, and focusing on the relationship between castles and villages; a socio-political relationship they called the hisn/qarya complex (Bazzana 1983; Bazzana et al. 1988, 259-287; Guichard 1977). Patrice Cressier, following Guichard’s precept, carried out a substantial amount of research in the Alpujarra region on the southern slopes of the Sierra Nevada, were he was able to reconstruct the territorial limits of 10 hisn on a map, based on the textual descriptions of the area. He was able to determine with great accuracy the evolution of territorial divisions between various districts from the 10th to the 15th centuries, concluding that the social and political organisation of the rural communities did not allow for a feudalistic type of centralised administration remarking, however, that the hisn/qarya system might not be applicable to the entirety of Spain, but only to remote and mountainous areas of difficult access (Cressier 1992, 43). In a later study Cressier remarked on the difficulty of determining the exact limits of any given district as during the Islamic period these were usually not clearly defined, and were only later established more or less accurately by their Christian conquerors in their Repartiments (1991, 411). The highly diffuse character of these administrative regions is particularly well illustrated by the ajzā of Mallorca which (Fig. 7.2), while having been interpreted as being units of fiscal control (Barceló 1984, 95-97), are more likely to have been the general settlement areas of certain tribal groups and were not the expression of a rigid system of territorial administration. From a methodological perspective, the most reliable method in attempting to establish the limits of a rural district, or those of a given qarya, is by studying the irrigation units and networks which would have pertained to a certain settlement, or a group thereof (Glick 2007, 41). Indeed, Glick agrees with Cressier in stating that it is in fact impossible to determine the extent of the Islamic villages in dry-farming contexts, as would have been the case on most of the low-land regions of Mallorca (Cressier 1991, 411; Glick 1995a; 1995b, 19).
Guichard's theory is radically opposed to Epalza's in that for him the *qaryya* is the focus of attention, with the *hisl* as a site of refuge and defence built by the villagers for the villagers, arguing that the Andalusi countryside of Eastern Spain was so heavily Berberised that its villages operated as mono-cultural communes without the control of an either absentee or present proprietor (Glick 1995b, 19; Glick 1995a; Cressier 1991, 411). In this picture the towns and cities of intermediate importance 'float above the autonomous rural scene, strangely unrelated, like a colonial power merely exploiting the rural areas, without impact' (Burns 1999, 19). The main political implication resulting from Bazzana *et al.*'s view is that under this system the population of the *qūra* were free of any obligation to a lord or *qā’id*, and held and farmed their lands communally. The *hisl* in turn was a fortified refuge built and maintained by this tribal community as a place of protection in times of danger, and not as a means to implement control from a central authority.

Into this interplay of castle and village in Islamic Spain we will have to insert one other important unit of territorial tenancy in al-Andalus, which is probably also the least well-understood: the so-called rahals or rafals, which have been interpreted as privately owned estates established throughout the hinterland. The existence of these rahals has also generated a healthy amount of discussion and Guichard concedes that certain aristocratic elements may have held rural properties, i.e. rahals, separately and marginalized from the *qūra* and their corresponding *husūn* (Guichard 2008). Guichard does not, however, go as far as Epalza who sees the owners of the rahals as 'monopolising the principal font of agricultural wealth' (Burns 1999, 18). Indeed, in the Repartiment of Mallorca almost 40% of the rural place names listed in the document are rahals (Rosselló 2007b), with the remainder being mostly *qūra*, making it highly unlikely that all these locations were the properties of absentee latifundists. Instead, it is much more probable that the term rahal was applied in relation to certain morphological aspects of the settlement and that they were settlement units smaller than the *qūra*, though without substantial archaeological research this statement must remain speculative. In general it should be noted that so far there is no definite documentary evidence to support Epalza’s theory of the *qā’id* as some kind of feudal lord, and while it is possible to assume that in isolated cases a *qā’id* may have attained enough power to become a true Muslim ‘*señor*’, this does not disprove the organisation of the territory and society as following a tribal pattern (Benco *et al.* 1998).

Burns, in relating the state of the question, gives the example of rural Valencia, stating that in this area a rural *hisl* takes on the military function of that larger society and polity, forming part of a complex defensive network of castles at the centre of which lies the 'ruling power or state', while at the same time helping to collect taxes (Burns 1999, 18). As will be shown in the course of this study, in Mallorca this is unlikely to have been the case, however, as it may occur that in times of war, or in the case of political turmoil the city loses its control over the rural districts throwing them back on themselves and permitting the creation of a power vacuum within which, over time, certain
centrifugal groups take shelter. When order is restored and the city attempts to recover its lost radius of influence clashes between centre and periphery are programmed.

In the late eighties Azuar Ruiz, on studying the territory comprised by the Dénia peninsula in eastern Spain and the pronounced increase of castle building that took place there during the late 10th century, compared it conceptually to the process of Incastellamento observed by Toubert in Italy (Azuar Ruiz 1989, 411-423). Taking into consideration the political developments in al-Andalus, he argued that this castle-building phase must have been too late to be resulting from the large Berber migrations of the 8th century and goes on to state that the construction of fortifications continues through the 11th to the 13th centuries, and seems to be tied to deliberate defensive policies implemented by the Almoravid and Almohad central states, and not to local tribal organisations (Benco et al. 1998, 62). On the whole Bazzana et al agree that it is therefore possible to argue for a widening of the ‘Guichard hypothesis’ into one where the husūn may have worked in a variety of ways depending on the period and the political structure of al-Andalus as a whole (Bazzana et al. 1988).

During the 1980s Acién Almansa had presented a view which largely agreed with those exposed by Bazzana et al., but argued for a more lasting and intense interaction between immigrating Muslim tribes, and the local population, who, he believed, had developed a ‘proto-feudal’ organisation in the decade leading up to the invasion of 711. Acién Almansa goes on to argue that part of the local converts to Islam, the muwaładun, began organising themselves tribally (Acién Almansa 1984; Acién Almansa 1985; Acién Almansa 1986). This settlement model has also received widespread criticism, particularly by Boone and Benco, who believe that throughout much of the debate segmentary and seigniorial organizations appear to be conceptualised as if they were the result of culturally specific mental structures, ‘as if they constitute particular and inalienable characteristics of a particular socio-cultural mentality’ (Benco et al. 1998, 62). They state that ‘these contrasting forms of organisation might more profitably be seen in behavioural terms as variations on a more-or-less universal set of organizational strategies available to any human group’ and that this perspective permits the possibility that segmentary, tribal organizations could have developed independently among indigenous rural Iberian populations (Benco et al. 1998, 62-63). They continue, arguing that the process of Incastellamento is not exclusive to a seigniorial organisation of the territory and its population as was the case in northern Europe, but that it may also have existed in a tribal context of some parts of al-Andalus; a theory which appears plausible, especially in view of the fact that the hisn/qarya complex, as observed in Spain, is practically non-existent in northern Africa, the area from where one might expect it to stem, and also the area where the tribal, segmentary social organisation, which is regarded as the one prevalent in Spain, almost certainly existed (Ilahiane 1999).
C. Other types of fortification in al-Andalus

Beyond the *hисн*, the complex ethnic makeup of Andalusi society coupled with the Roman, Visigothic and Byzantine heritage which had formed the Iberian landscape prior to the Moorish invasion of 711, and the changing political realities of the subsequent centuries, have left us with a wide variety of fortifications which differ in many cases quite substantially. The next pages shall, therefore, be devoted to the various types of fortifications which existed not only in al-Andalus but also the Maghreb in order to provide brief discussion regarding their potential origins and functions.

**Ribat /Ribāt**

The *ribāt* (pl. *ribatat*) is one of the most common types of fortification throughout the Islamic world, and it is usually defined as a frontier fort garrisoned by *muarābata* (from which the Almoravids take their name). Khalilieh has called these fighters ‘holy warriors’. Indeed the *ribāt* was in many senses a type of fortified monastery, and usually served to protect highly sensitive areas in newly conquered territories. Khalilieh, in discussing the defensive arrangements designed to protect the Palestinian coast, mentions that there were in fact three different types of *ribāt*. The first, he states, may be called *ribāt* towns as their *ribāt* was part of the defences of a walled frontier settlement (Khalilieh 2008, 163). Their importance in these instances was also economic rather than just military. Arsuf in particular is often cited as a prime example of one such *ribāt* town.

The second type is the strictly military *ribāt*, such as those of Susa and Monastir in Tunisia. These tended to be located outside the towns, sited squarely between the settlement and the frontier. The fort itself was usually of a square plan with round towers at the corners and gates. Their interior usually consisted of a large courtyard, ware houses, stables, living quarters and a large mosque. The courtyard was often also the site of the large underground water cistern which supplied the garrison.

The third type of *ribāt* is the one defined by al-Maqrīzī as ‘a military lookout manned by at least 5 horsemen equipped with defensive and deterrent arms’ (al-Maqrīzī in Khalilieh 2008, 166).

The *ribāt* in its different forms was also common on the Iberian Peninsula where its name was eventually incorporated into Spanish as *rabida*. They appear to have been less common in Spain than in the East or in North Africa as there are only three clearly indefinable coastal *ribatat* at Tortosa, Almería and Guardamar in Alicante (Rouillard *et al.* 2004). They all stem from the 10th century are likely to be the product of Abd al-Rahman III’s efforts to fortify the eastern coast of Spain in view of the growth of Aghlabid and Fatimid power in North Africa.
In a recent article the eminent Spanish Arabist Míkel de Epalza argued for a clearer distinction between the terms *ribāṭ*, *rabita*, *al-Munastir* and *al-zawiya*, which are usually treated as fairly synonymous in the literature (Epalza 2009). The article is largely concerned with the militaristic aspects which Epalza considers to be inherent to Islam, and he argues that the duty of *Jihad* of Muslims manifested itself differently over time and in different regions. In his argument he proposes the distinction of the *rábita*, which he considers to be ‘convents of militaristic devotion’, from the *ribāṭ*, which he describes as ‘military fortresses for the faith’ (Epalza 2009, 18). He compounds his argument by stating that the former consisted of ‘those who fought to kill’, while the latter was made up of ‘those who fought to die’, going on to attribute numerous Moorish military defeats, such as that of the battle of Cutanda (1120), to the suicidal tendencies of some of the fighting contingents.

**Alquería towers / guelâa**

Among the most characteristic type of fortifications in the Andalusian hinterland are the so-called *torres de alquería*, or alquería towers. These large rammed earth structures, usually of a height of around 22-25m, were normally located very close to or within a given settlement in the rural areas of the Valencian and Granadan hinterland. It is worth noting, however, that despite their relative ubiquity in southern and eastern Spain it is unlikely that this particular concept of fortification originated in Spain, as already in the 6th century the Byzantine historian and court chronicler Procopius (500-565) spoke of these kinds of structures in his recounting of Justinian’s wars against the Vandals of North Africa:

> Now there is on Aurasium [the Eastern Saharan Atlas or Aurès mountains] a perpendicular rock which rises in the midst of precipices; the natives call it the Rock of Geminianus; there the men of ancient times had built a tower, making it very small as a place of refuge, strong and unassailable, since the nature of the position assisted them. Here, as it happened, Iaudas had a few days previously deposited his money and his women, setting one old Moor in charge as the guardian of the money (Procopius 1916, IV xx 23-30, 391).

Writing some 1500 years after Procopius, but about the same region of the Atlas Mountains, in his ethnographic study of the Aurès Berbers Kimble sated:

> The guelâa (qal’a) is the architectural pièce de resistance of Barbary. Built of mud, stone and palm timbers, it is often three to four stories high and occupies the most easily defended position in or near a village. Many a guelâa is only accessible by scrambling up the face of a cliff, or by a really hazardous ascent of a rope ladder; for the storehouse, it should be noted, becomes the village castle in times of trouble (Kimble 1941, 342).
Morphologically the site described by Procopius in this passage is comparable to a large number of towers found in the region of Valencia (Torre Aledua, Bofilla, etc.) and also to some of the towers known from Mallorca (Torre de’n Nunis, Torre de Canyamel), though the Iberian examples differ slightly from the north African ones in that the surviving towers tend to be built from highly compacted rammed earth (*tabiyya*) of a concrete-like consistency. Kimble’s description of the Auresian *guelâa* is, in terms of form and function, also strongly reminiscent of these structures, and their survival is indeed fortunate as it allows us to observe the functional evolution of these buildings, not just over time, but also over large distances. This study shall continue to pay close attention to this type of fortification as there are some examples of this kind of structure in Mallorca, which will be examined in chapter 5.

In particular the *alquería* towers in the Valencian and Granadan hinterland appear to be the direct morphological analogues to the North African examples. There too one finds the towers located within or in close proximity of the village (Torre Aledua, Mussa, Bofilla, Montroy, Illora, Albendin, *etc.*) with an entrance usually placed 3 - 4m above ground, accessible only via a ladder, and with an overall height of 20-25m over 3 or 4 interior stories, the lowest of which tended to be cisterns (M. García 2000). The archaeology of these sites has tended to date them quite firmly into the *Taifa* period (11th-13th centuries), (Guichard 1976b; Cantos Carnicer 2009). Indeed the only major difference appears to be found in the physical fabric of the towers which, unlike the North-African variety, are made from highly durable concrete *tabiyya*, whereas the Auresian examples cited by Kimble tend to be manufactured from less long-lived compound consisting mostly of mud, with little lime and aggregate.

There have been wide ranging debates regarding the function of these towers, some suggesting that they acted as frontier lookout posts against Christian raiders, (Azuar in Cressier 2008), as dovecots, as Beltran suggests specifically for the Torre de Mussa (Beltran 2002, 99), or as forming part of a purposely designed defensive perimeter for the city of Valencia (Beltran 2002). The latter proposition is often backed up by quoting from King James’ *Book of Deeds* a passage in which James comments on the well defended Valencian hinterland (2003, 180-183). James’ comments on this subject may, however, be misleading as he is talking from the point of view of an external attacker, and not from the point of view of a Valencian. Based on the textual and limited archaeological evidence it is highly unlikely that these towers functioned in a coordinated manner as watch towers or as peripheral defences of the city of Valencia, for one because they are not usually visually connected and also because, from James’ own account, their defenders were not garrisons of soldiers but local peasants (2003, 183). In a further passage James writes about the taking of the tower of Montcada:
And the throng of women, children, cows and other cattle inside of the albacar of the tower was so great that the stones which the fenèvol [catapult] fired (...) killed the cattle. (...) Now one thousand one hundred and forty-seven Saracens came out from there. And many fine goods, and pearls, necklaces, and gold and silver bracelets, and many silk cloths were taken, so that with the Saracens and what they had together, the booty easily amounted to one hundred thousand bezants (James I of Aragon 2003, 184).

This passage, strongly reminiscent of Procopius’, serves as a clear illustration for the uses of these towers, functioning as fortified storehouses and refuge for women and children, but it also indicated that the tower’s outlying defences, the albacar, must have been of significant size to house such a large number of people and livestock.

**Fortified Granaries / agadir**

Bazzana has indicated that whereas alquería towers may have sometimes functioned as grain silos (Bazzana 1992, 259-263), there were also larger communal structures, based on the Berber agadir that functioned specifically as fortified granaries, and it is worth noting that grain, as the agricultural mainstay of north Africa since the Classical period, was also an easily taxable product due to its relatively long storability. In this sense, according to de Meulemeester, most North-African communities developed a variety of techniques for the long-term storage of grain, which depended on the structure of the society which could be nomadic, semi-nomadic (or transhumant) or sedentary. The nomadic and semi-nomadic lifestyles tended to employ secret storage places in caves and excavated pits, sometimes cut into cliffs and arranged in tiers. The sedentary peoples, on the other hand, built a so-called agadir, which was a guarded granary which served a village or even an entire district, and in some cases they developed to the point of becoming commercial centres in their own right (de Meulemeester 2005, 613).

Jacques-Meunier, who studied the fortified granaries of Morocco during the mid 20th century, established that morphologically these types of structures varied quite substantially throughout the Atlas Mountains and southern Morocco (Jacques-Meunier 1951). Indeed the agadir of southern Morocco was an institution which was established by the tribal collective, and in which every head of family carried a key for an individual cell. These storage cells and their ancillary structures were guarded by a gate keeper. Frequently the granary was also a fortress, including watchtowers and situated in locations of difficult access (de Meulemeester 2005, 613). Examples of these structures, which are to be found throughout Morocco and western Algeria, are the Tagadirt Durgadjirt, Irherm n’Ussaka and the Agadir n’Uanamer (Jacques-Meunier 1951, 57, 98, 118, 121). Other, usually larger and more accessible agadir can be found in the Tunisian hinterland, with prime examples being the famous Ksar Ouled Dabbab and the Ksar Ouled Soltane.
Bazzana, de Meulemeester and Torró, who have studied these, originally, north African phenomena, and their various manifestations on the Iberian Peninsula, arrived at the conclusion that the fortified granaries of Spain are fundamentally Berber structures, and that they are the result of the reaction of a rural community to insecure times (Bazzana 1992; de Meulemeester et al. 1998; de Meulemeester et al. 1992; Torró et al. 2000). They appear to have been most frequent in the eastern Peninsula, particularly in the areas comprised by modern Murcia and Valencia. Sites such as the Cabezo de Cobertera (Murcia), excavated by Amigues et al., indicated that early phases of occupation during the 11th-12th centuries are quite clearly those of a fortified granary which was later converted to a fully fledged fortress (Amigues et al. 1999). This appears to be the case also at the Castell d’Almizra where excavations have yielded cell-like interior chambers along the perimeter wall with openings oriented towards an open courtyard. Most of these cells, currently about 8 in number, have an interior area of 2.1-4.6 m², which clearly makes them too small to have served residential purposes. Torró sees in this spatial arrangement dating to the 12th century a clear indicator for the castle as having originally been conceived as a fortified granary, which was later converted into a hisn (Torró et al. 2000).

Torró and de Meulemeester, however, disagree profoundly on the motifs and broader socio-political function of these structures. For de Meulemeester ‘the absence of a refuge system set up by the state, and the insecurity characterising the late Almohad period probably pushed the Muslims to build these fortified granaries’ (2005, 611). Torró, on the other hand, sees in them an expression of central control, a mechanism whereby the state articulates its power in the productively important rural areas by providing a ‘collection point’ for the harvest. For Torró the presence of the fortified granaries gives a new dimension to the role of the hisn, giving the granary a cohesive function between hisn and qa‘qa‘, castle and village (Torró et al. 2000, 161-162).

D. Urban Islam: Madīna Mayūrqa and its role within Mallorca’s territory.

Guichard et al.’s definition of tribalism and their view of Islamic territorial organisation has also come under fire by Spanish Arabists such Rubiera and Epalza, who in his 1983 article claimed that the rigid division between rural and urban communities can be misleading in an Islamic context (Rosselló 1987, 84-86). In Epalza’s view ‘all Islamic-Arab societies are urban, city based since their Meccan and Medinese origins’ (Rosselló 1987, 83). He states that everything tends towards the city and is directed by it, and that not even the most elemental religious duties, like the five daily prayers, are conceivable without an inherently urban structure: the mosque. In an attempt to simplify the topic under discussion this thesis distinguishes in general terms between Christian and Islamic cities,
though it should be pointed out that the designation of a city as a religious expression carries with it a nearly inevitable problematic which we shall briefly discuss in this section.

In considering the possibility that the morphology of a city may be defined by the creed of its inhabitants, it is often pointed out that Mohammed, Prophet and founder of Islam, was himself an urbanite, and to some extent a citizen; that during the *Hegira* he fled from his home in Mecca to the city of Medina and there began to spread his message with greater success in order to eventually return to Mecca as a conqueror. Upon his return he not only succeeded in maintaining most of the pre-existing centres of ‘pagan’ worship in the city (first and foremost the Kaaba) integrating them into Islam, but also tied the faithful firmly to the city by making the pilgrimage to Mecca, the *Hajj*, one of the basic precepts of his new religion. Nevertheless, the notion that if Islam is an urban religion then its cities must be inherently Islamic, as espoused by Epalza, is deeply problematic as it negates the existence of an evolved pre-Islamic Arabian urban tradition.

It is a well known fact that within the first two or three generations the Caliphate of Damascus stretched from Khorasan in the east to the mouth of the Tajo River in the west, and the vast majority of cities that lay within the Dar al-Islam were centuries, if not millennia, -old centres with an already established urban morphology and architectural traditions. Even so, the administrative and military challenges posed by this explosive expansion required the establishment of strongpoints in the form of garrison towns in the conquered territories (Torres Balbás 1971, 8). Many of the cities today regarded as inherently Islamic such as Basra, Mosul, Baghdad, Fez, Marrakesh, Rabat, Fustat, Kairawan, etc., were garrison towns of this kind. Military centres similar in their morphology to Roman *castra*, with the obvious exception of the mosque at their centre (Navarro *et al.* 2003, 32). One could make the case that these cities might be truly Islamic as they form part of the religious conquest, integration and assimilation of the territory and are as such a product of the religion itself. This would, however, ignore the fact that these cities are also, in terms of their fabric and architecture, the products of cultural practices which predate Islam by centuries, and that they must therefore be practically indistinguishable from other, pre-Islamic cities in the Levant and North Africa. It may therefore be more accurate to refer to these cities as Arabic or Arabian in their morphology, despite the fact that only a minor fraction of the population may in fact have been Arab.

**The ‘Islamic’ city: research history and state of the question**

The first in-depth studies of cities as cultural phenomena were undertaken, in a very holistic and general approach, by the German sociologist Max Weber. His book *Die Stadt* (1958), first published in 1921, makes an attempt at determining the main features of cities in different cultures often emphasizing their religious roots and backgrounds, and arguing that it is in their cities that one can find the main differences between the ‘Occident’ and the ‘Orient’. In his view the city constitutes the main element in the development of singularity of the Occident on its path to a modern capitalism. By
contrast, in the Orient Weber sees a complete absence of a true urban autonomy and civic development which impedes that even the largest communities can, in the strictest sense of the word, be considered cities (Weber 1958, 99-101).

To some extent the Weberian heritage has survived in a substantial part of the discourse on the 'Islamic' city throughout the 20th century. Questions regarding the role of Koranic law and Islamic institutions in forming the structure of cities and their economic life, the role of the mosque in shaping urban morphology, and the perhaps religiously motivated absence of guilds and syndicates in shaping the city as a mercantile space continue to be posed today, and they are fundamental to the original Weberian effort to pinpoint and dissect the difference between the “Islamic/Oriental city” and the “Occidental city”.

The foundations of the study of the ‘Islamic’ city in particular, are attributable to the efforts of mostly French scholars writing from the point of view of colonial power in control of much of the southern and eastern Mediterranean. Such individuals as the brothers Georges and William Marçais, Sauvaget and Weulersse writing from the second quarter of the 20th century onwards have studied the cities of the Maghreb and greater Syria establishing truisms that have only begun to be contested over the last 30 years. In his article from 1928 ‘L'islamisme et la vie Urbaine’ (W. Marçais 1928) William determined that Islam is fundamentally an urban religion and that the legislative principles expressed in the Qur’an are only possible to follow in an urban context. He lists a series of social arguments, among them the desire of ethnic Bedouins to become sedentary and the urban background of many of the early leaders of Islam, the fact that Islamic civil law can only be applied to sedentary economies and finally that Friday prayer is the privilege and prerogative of the urban population (W. Marçais 1928). The first two of these arguments, however, are of historic and circumstantial natures and therefore not specifically applicable to Islam, whereas the last one, though religiously inflected, is debatable as well. Raymond and Wirth argue that the concept of communal prayer on Fridays, bringing together the entire religious community at the mosque in centre of the city is by an large comparable to dominical prayer in Christian churches and cathedrals (Ilbert 1982; Wirth 1992; Raymond 1994). Navarro and Jimenez, however, argue that dominical prayer in the Christian tradition was parochially decentralized and therefore never concentrated the entire community in one place, or at least not to the degree that the mosque did (2007a, 54-55).

In an attempt to establish a prototype for the ‘Oriental’ city there appeared a consensus among many French scholars that the Islamic city stemmed in its origins from the Classical city, but that it had decayed and in this decay it had destroyed its original Classical model with its orthogonal layout, colonnades, theatres, forum, etc. Its institutions, it was argued, which should have controlled and guided urban development, were too weak and had no control over the increasing destruction of the Classical framework. In the 1930s Sauvaget, in talking about the city of Damascus, stipulated that in
Islamic law no provision is made for the development of the city, and, in a statement strongly reminiscent of Weber’s philosophy, he goes on to say that ‘the [Islamic] city is no longer considered as an entity, as a being in itself, complex and alive: it is just a gathering of individuals with conflicting interests who, each in his own sphere, acts on his own account’ (Sauvaget 1935, 455-456). Some years later, in a study concerned with the city of Aleppo Sauvaget expanded on his view of Muslim degeneracy stating that ‘...[the Muslim era] is unaccompanied by any positive contribution (...) the only thing we can credit it with is the dislocation of the urban centre. ...the work of Islam is essentially negative’ (Sauvaget 1941, 247-248).

In the 1940s Georges Marçais followed his brother’s earlier ideas and examined in more depth the morphology of the cities of North Africa emphasizing the military and administrative character of many early Islamic cities (G. Marçais 1945; 1957). In these articles he commented on the importance of certain defensive aspects and he mentioned the relevance of water management systems in relation to baths and mosques. According to Georges Marçais the narrowness of the streets was due to the fact that they were used exclusively by pedestrians and pack animals as wheeled transport was uncommon in the medieval Islamic world, which has largely been confirmed by subsequent scholarship (Glick 2005, 4). He explained the comparative lack of street-facing windows on houses with the existence of large patios in their interior which provided ample light and ventilation (G. Marçais 1957). He differentiated residential from non-residential quarters and determined that often residential quarters pertained to specific ethnicities.

Over the last decades the predominantly, but no by means exclusively, French orientalist approach has come under fire from many directions (Said 1979; Abu-Lughod 1987; Wirth 2002; Wirth 1992; Raymond 1994). In particular Janet Abu-Lughod and Andre Raymond in their respective articles on oriental cities have done much to clarify the fact that the differences between urban life in Europe, North Africa and/or the Middle East are conditioned less by religious factors than by cultural and bio-geographical ones which precede by centuries the Prophet’s message. In particular those aspects of urban morphology so criticised by Sauvaget and others, such as the extremely narrow labyrinth-like street plan, the cul-de-sacs, and the introspective architecture of the townhouses have been separated from all religious connection as archaeology has shown this to be the predominant urban settlement pattern in the Middle East since long before Islam (Kennedy 1985, 13-14; Raymond 1994, 11).

More recently two Spanish archaeologists, Julio Navarro Palazón and Pedro Jimenez Castillo, have published a series of books and papers outlining their view of the development of the ‘Islamic’ city, which, they argue, may have been conducted with more planning and foresight than in their medieval European counterparts. Navarro and Jimenez, who have excavated nearly the entirety of the Andalusi cities of Murcia and Siyasa (Navarro et al. 1992; Navarro et al. 2004; Navarro & Jiménez
2007a; Navarro & Jiménez 2007b), trace the origin of the seemingly convoluted and disorganised street plan to what they call ‘urban saturation’. Their argument is that when a Moorish city is fortified, the city wall is not built tightly around the perimeter of an already existing urban nucleus, but is in fact built with a significantly greater diameter, leaving ample space for the city to grow within the walls over time. It was mentioned above that the vast majority of Moorish architecture in Spain and North Africa was made from *tabiyya* i.e. rammed earth, which, being cheap, readily available and not requiring specialised labour allowed for the construction of large city walls without major expense in time and money.

In Navarro’s view cities grew from the centre outwards towards the walls, initially along a relatively even grid depending on the topography of the terrain (Navarro & Jiménez 2007a, 51-60; 2007b, 117). Once the city reaches the walls, however, space becomes a luxury and the process of saturation begins: Larger houses are split into smaller units, and the patios of previously large mansions become small plazas giving rise to the so-called *dherbs* (narrow, gated cul-de-sacs which lead to a cluster of dwellings), streets become narrower and less regular, overhangs are built over alleys, and the general height of the houses increases as floors are built upon floors (Navarro & Jiménez 2007a). With space at a premium inside the city walls, certain industries and facilities are forced outside. First among these, as is corroborated by the archaeological record, tend to be those trades and services that require the largest amount of space such as potters yards, tanneries and the cemeteries. With the gradual relocation of certain industries outside the walls a new residential quarter is gradually formed *extra-muros*. This new quarter, called in Spanish the *Arrabal* (Ar. *al-rabāl*), tended to grow without any institutional guidance along the main access routes to the Medina, though at later stages of urban development it is often walled and included in the urban perimeter. In this model Navarro and Jimenez argue for a mono-nucleic growth from the centre of the settlement outwards along the main roads (Navarro & Jiménez 2007a). While this is clearly the case in non-walled settlements it is likely that the moment a city is enclosed and accessed via gates, a multi-nucleic growth must take place: from the centre outwards and from the gates inwardly. This phenomenon is still clearly visible in North African cities such as Marrakech and Fez where urban saturation is more intense near the gates and the inner sectors around the mosque than in the areas lying in between the two.
4. MAYŪRQA: Island and History

A. Geography and climate of Mallorca

The island of Mallorca is, with 3600km², by far the largest of the Balearic Islands. Its roughly rhomboid shape is the result of two near parallel mountain ranges running NE to SW along the NE and SW sides of the island respectively. The western-most of the two ranges, called the Serra de Tramuntana, is the highest and largest of the two, with a maximum altitude of 1445 metres ASL and a length of 87.7 kilometres from NE to SW (Fig. 4.1). The eastern range is known as the Serra de Levant, and is much lower than the Tramuntana range. Comprised between both mountain ranges is a predominantly level plain with occasional elevations called the Pla de Mallorca, and it is here that the majority agriculture is based today.

The geology of the Balearic Islands is largely homogenous with that of the eastern Iberian Peninsula, with the mountainous areas consisting largely of limestone and sedimentary layers from the lower Triassic to mid-Miocene periods (B. Gelabert et al. 1992). The lower parts on the south-
eastern flanks of the Tramuntana are made up of quaternary layers which merge into the sedimentary sandy regions that make up much of the plain at the central, southern and eastern regions of the island (Fig. 4.2). These lower parts on the Pla de Mallorca and some of the coastal areas in the south consist largely of sandstone of varying consistencies, ranging from very soft and brittle marés to medium hard piedra de Santanyí both of which were often been used as building materials in the past.

The height of the water table varies significantly in depth depending on the geology of the area. In the relatively well drained rendzina soils that cover the central plain on Mallorca the normal phreatic level lies at only a dozen metres or so, with seasonal fluctuations of around 1-2 m. in the Tramuntana and Levant ranges the water has to filter through the limestone rock, usually accumulating in underground caverns where the water will eventually contain very high levels of lime scale, and therefore making it unfit for certain root crops. During the Catalan era this problem was overcome with the construction of large reservoirs called safareig which stored the water and, by letting it settle, also contributed to the precipitation of the lime scale on the side walls. The large accretions of lime scale which accumulated in these basins had to be removed every few years and were sometimes quarried into a porous rock called tur in Mallorca which was sometimes used for construction.

Figure 4.2, Geology of Mallorca. Source: Gelabert 1992
The climate of Mallorca is typical for the Western Mediterranean with temperatures ranging from around 33°C in mid-summer to approximately 5°C in January, therefore an annual average of around 16°C. In winter temperatures regularly fall below freezing above 700m, but snowfall below this altitude is a rare occurrence. The climate of the Tramuntana is significantly more temperate than that of the plains, and annual rainfall also varies considerably across the island: While the Tramuntana Range reaches and exceeds the 1000mm mark, the rest of the islands rarely gets more than 400mm of rain p/a (Tullot 2000, 328).

![Figure 4.3, spatial distribution of the castles of Mallorca. Base map SITIBSA 2005](image)

B. A political history of Mallorca

The extraordinarily large variety of cultures that have settled the island of Mallorca and claimed it as theirs from the Classical period to the Middle Ages have all had culturally and economically predetermined solutions to the challenges they met in their acquisition of new territories. In this sense, the fact that during the 3rd and 2nd centuries BC Carthaginians and Greeks, for example, settled Ibiza and Menorca, respectively, but left Mallorca largely to its own devices, is not surprising. Their requirements were wood and water for their trading fleets, and an occupation of the much larger island of Mallorca would have come at a cost rather than being a net gain as there was little potential for trade. The following sections will therefore be devoted to tracking and defining the main systemic
changes in the economic, social and political environment which impacted upon the archipelago during the 1st millennium, by supplying a summary of the island’s political history.

**The Classical period and Late Antiquity**

The conquest of the Balearics in 123 BC by Quintus Cecilius Metellus, called Balearicus, brought the islands under the control of the Roman Empire (Cook 2008, 419). The piecemeal deconstruction of the Carthaginian thalassocracy determined that the Western Mediterranean became a firmly Roman sea, henceforth to be known as the *Mare Nostrum*, Our Sea. We have no references in the primary sources of any Carthaginian settlements on the island of Mallorca, though clearly Ibiza, ancient Ebusus, was still nominally Carthaginian despite the defeat of Carthage some years before (Garcia Riaza 1999). Roman settlement of Mallorca began immediately after its conquest with some 3000 colonists from Italy and Iberia (Horden et al. 2000, 285), and its conquering general, Balearicus, founding the cities of Palma in the south-west, and Pollentia on the island’s north-east, the latter becoming the island’s capital throughout the Roman period (Doenges 2005). The construction of a number of aqueducts at Escorca, Pollença and Palma during the 1st century BC indicate that the urban nuclei grew quickly and that the hinterland was also settled and exploited within one or two generations of the conquest.

The first decades of the Roman occupation are unlikely to have seen the construction of any major fortifications on the island as the threat from Carthage, Rome’s main maritime rival, had been eliminated. By the mid 1st century BC, however, Pollentia was provided with a defensive wall, the remains of which are still visible outside the modern village of Alcudia (Doenges 2005). These defensive measures may also have been accompanied by the erection of fortified lookout posts at various points along the coast of the island among which we may find the first use of the mountain of the Castell del Rei, though permanent settlement and fortification of this particular site may not have begun until the 5th century AD as seen from archaeological evidence at Puig de Sa Bastida and Santueri. The fortification of Alcudia may be regarded as being part of Rome’s anti-piracy policy and, indeed, it appears that after Pompey the Great’s campaigns against the pirates in 67 BC the threat of piracy was largely banished from the Mediterranean until the latter days of the Empire (Souza 2002; Seager 2002, 48-50). There is, however, the alternative possibility that these fortifications were erected by Cilician pirates themselves, who are known to have used the Balearics as a base in the years preceding Pompey’s efforts to eradicate them.

As evidenced by the archaeological remains the settlement of the mounts of Santueri and Sa Bastida during the 5th century suggests that by this time the Empire’s capacity to defend its borders had diminished greatly, and thus its ability to protect its citizenry in these areas, so much so that the Balearics, which had formerly been part of the heartland of the Empire, had gradually become part of the periphery. The Vandal conquest of North Africa in 429 AD is indicative of the Roman weakness
during this period, and it is therefore likely that during the 5th century Mallorca’s population sought means to protect itself from Vandal/pirate incursions. It therefore follows that the first fortifications of Mallorca, the city walls and perhaps lookout posts, were state-funded efforts to protect the colonists, while the gradual collapse of urban life of the later 5th century meant that urban defences were not fulfilling the defensive requirements anymore, and safety was sought away from the coasts, at easily defensible locations in the mountains that led to the semi-permanent settlement of Santuari, Sa Bastida and probably also Alaró and Castell del Rei, among other sites.

The Justinianic expansion, which resulted in the destruction of the Vandal state in 534AD and the Byzantine reconquest of North Africa, south-eastern Iberia and the Balearics (Merrills et al. 2010, 228-235) is likely to have improved the security situation of the Mallorcan populace, and archaeological excavations at some of the Byzantine basilicas of Mallorca confirm the picture of a gradually consolidating polity in Mallorca during the 6th and early 7th centuries, with people abandoning their hill-top settlements and settling closer to their fields again (Ulbert 2003). The Byzantine historiographer Procopius has described the process whereby this expansion was accompanied by an extended castle-building campaign along the borders of the Empire, which was also intended to encourage re-settling of the newly conquered areas (Procopius 1940, VI 361-393). The coinage finds of Santuari indicate that Mallorca was not left out of Justinian’s plans of re-building the Roman Empire (Ilisch et al. 2005), though due to lack of professional archaeological enquiry at the site the extent and duration of the Byzantine presence in Mallorca is still unclear. It is worth repeating at this point that while Santuari is so far the only fortification in Mallorca to yield Byzantine finds, it is highly probable that Alaró, Castell del Rei and possibly Randa would also bring forth Byzantine material because, as it is argued here, it was during the 6th and 7th centuries that these sites were fully fortified for the first time, not as settlements but as stand-alone fortresses, though only large-scale archaeological excavation could confirm this to be true.

The Islamic Period

The gradual decline of Byzantine activity in the Western Mediterranean from the late 7th century onwards must also have affected the status of the fortresses, and though the exact time of abandonment of Byzantine ambitions in the Balearics is unknown, the islands were clearly independent politically by the early 9th century, as suggested by a Mallorcan plea for aid to the Carolingian Count Ermengol of Ampurias in 813, who agreed to send assistance and subsequently obtained an important victory over a reputedly sizeable Muslim fleet off the coast of Mallorca (Taberner et al. 2002, 74).

The integration of the archipelago into al-Andalus
Apart from a few remarks in the literature (Roque 1983; Rosselló 1973), there has rather surprisingly not been any major discussion regarding the reasons for the late integration of the Balearics into the Emirate of Cordoba. The question of why it took nearly two centuries for the emirs of Cordoba to decide to occupy a group of islands that appear to have been ripe for the picking, and what prompted them to conquer them when they finally did, has not been answered or, indeed, asked. It appears that modern European preconceptions about the geopolitical make-up of the Western Mediterranean considered the Balearics to be such an intrinsic part of the Iberian Peninsula that it was simply a matter of time before they were eventually annexed by the mainland, as if it were a mere formality. It may be argued, however, that in the mid 1st millennium AD the geo-political perspective of the western Mediterranean and its islands differed substantially from the modern European view. For example, during the mid-7th century after Justinian’s ‘re-conquest’ of the ancient Roman dominions, the Balearics formed part of the North African administrative province of Mauritania Segunda (Bury 1894, 318-319), and that therefore the archipelago was seen as belonging to North Africa rather than to Europe. Nevertheless it appears that despite their geopolitical context during the late Byzantine period, up until the 10th century the islands were never a particularly important entrepôt. This comparative irrelevance of the archipelago during the late 1st millennium may be a consequence of the slackening Western Mediterranean trade cycle in the aftermath of Islam’s conquest of North Africa during the 7th century, and the resulting lull in long-range commerce in the Mediterranean throughout the 8th and 9th centuries (Hodges et al. 1983; Pirenne 2001; Wickham 2004). The majority of Islamic maritime traffic, even if long range, tended to border the north African coast, and did not usually venture all too far from the sight of land if at all avoidable (Braudel 1975; Horden et al. 2000).

Textual and historical evidence allows for the identification of three main reasons which may account for the lateness of Hishām al-Hawlānī’s conquest of Mallorca in 902/903. The first reason is the continued use of the caravan routes, which were not only regarded as safer and more reliable than sea-borne traffic, but could also be travelled throughout the year, while the reliance on camels is said to have afforded an increase in efficiency of up to 20% over wheeled transport (Fletcher 1994, 61; Glick 2005, 10). Many of the great medieval travel writers such as Ibn Jubayr (1145-1217) and Ibn Battuta (1304-1369) travelled from Spain and Morocco towards Mecca by land (Ibn Jubayr 1952; Ibn Battuta 1986). Hence, throughout the Middle Ages al-Andalus appears to have been connected to the East more by land than by sea, and there was at first no pressing need for the Balearics to act as stepping stones to anywhere; they were thus not contested all too hotly by any of the western Mediterranean powers. Nevertheless, the gradual political and economic consolidation of the Emirate of Cordoba under Abd al-Rahman II (788-852) during the first half of the 9th century encouraged the growth of a wealthy elite in al-Andalus, which contributed greatly to the re-starting of the Western Mediterranean trade cycle in which the Oriental Isles were certain to play a central role.
The second factor affecting the status quo in the central and western Mediterranean was the almost meteoric rise of Aghlabid power in Tunisia during 9th century (Bosworth 2004, 31-32). The Aghlabids, westernmost stewards of the Abbasid Caliphate of Baghdad, expanded throughout central north Africa during the 9th century, and in the last decade of that century the famed Andalusian rebel, Omar Ibn Hafsūn, attempted to enlist their help in his fight against the Cordovan state (Kennedy 1996, 77). In the year 902 the Aghlabids embarked on the conquest of Sicily under their emir Abdallah II, and it stands to reason that a successful conquest of the Mediterranean’s largest and most populous island would hardly have been the end of their ambitions, from which one may discern one of the prime motivations for the Umayyad conquest of the Balearics. They were to serve as a buffer zone to al-Andalus and protect the eastern coasts of the Iberian Peninsula, while simultaneously putting a stop to further Aghlabid expansion westwards and therefore preventing any involvement in Umayyad affairs.

The third and final reason for the conquest of Mallorca must have been the growing power of a new dynasty in Tunisia: the year 909 saw the collapse of the Aghlabid state at the hands of the Shiite dynasty of the Fatimids, and it is possible that in view of growing Fatimid power the rulers of al-Andalus had anticipated an eventual confrontation and the Aghlabid demise. In this case too, it was preferable to take control of the Balearics rather than leaving them to a potential rival (Fletcher 1994, 55). It is noteworthy, however, that tensions or a perceived danger from any north African rivals are difficult to discern from the surviving texts of the time, the vast majority of which are more concerned with Andalusi exploits against their northern neighbours, the Christian kingdoms of Aragon, Navarre, Leon and Castile, than with securing control over the southern, maritime, frontiers. The evidence, however, of this second threat is visible in the chains of coastal fortifications and naval bases erected from the last decade of the 9th century until the 980s at Guardamar, Tarifa, Huelva, Tortosa, Dénia, Almeria, Malaga, Silves, Seville, Alcacer do Sal, Melilla and Ceuta among others (Azuar Ruiz 2004b; Azuar Ruiz 2004a). Azuar Ruiz, however, sees in the establishment of these ribāts not the effort of a state attempting to protect its coast, but the gradual formation of ‘mariner republics’ which traded along the North African coast as far as Alexandria (Azuar Ruiz 2004b, 28). While it is certainly possible that in isolated cases coastal communities amassed sufficient wealth to fund the construction of minor fortresses, I am sceptical about applying this theory wholesale to the entire littoral of al-Andalus. Indeed, other networks of ribāts such as those observed in Tunisia and Algeria (Djelloul 1989; 1999) and the Syrio-Palestinian coast (Khalilieh 2008) were quite clearly centrally coordinated efforts designed to function as integrated networks and not the product of disparate and unrelated coastal communities.

On the basis of the coinage finds at the castle of Santueri, Lutz Ilisch (Ilisch et al. 2005, 37) suggests that the conquest of Mallorca by Hishām al-Hawlānī could not have been a state-motivated effort as al-Andalus was in the middle of a civil war during the early 10th century, and that therefore
the conquest of the island would have been too great a diversion of resources. Instead, he proposes a very gradual influx of Muslim settlers from the mid 9th century onwards, among whom Hishām al-Hawlānī established himself as leader and representative of the Emir of Cordoba. The expression ‘civil war’ as a translation of the Arabic term fitna is problematic in this context, as it does not necessarily mean ‘war’ in a military sense, and may just indicate a deep rift or feud within the Muslim community or Umma of al-Andalus. While there is little doubt regarding the existence of the rebellions and uprisings that Abd al-Rahman II’s consolidation of power was facing, the conquest of the castles of Mallorca, the siege of Alaró and the large-scale infrastructure projects brought underway in the capital city shortly after the invasion are strongly indicative of a state-funded effort. That said, there is no reason to doubt that small groups of Moors, either recent converts or alienated groups, had begun settling on the islands since before al-Hawlānī’s arrival in 902.

Conquest and creation of Mayūrqa

Emirate and Caliphate

Hishām al-Hawlānī’s conquest was initially opposed by a local population made up of what must have been a plethora of ethnicities, and which sought refuge in Alaró, Santueri and Castel del Rei (Barceló 1977). Al-Zuhrī’s designation of the locals as ‘Rumi’ makes it clear that the majority were Christians, probably of local, Byzantine and possibly also Vandal stock, though it is highly likely that there was also a significant Jewish element in Mallorcan society and possibly also a number of Muslims who may have begun settling there during the 9th century. The island was apparently conquered quite speedily, though according to al-Zuhrī resistance at Alaró lasted for another eight years until 910-11 (Barceló 1977). Barceló suggests that prior to the Islamic conquest the population of Mallorca depended in some manner on the three main castles, hinting at a proto-seigniorial system of territorial administration controlling the island (1984, 121). There is, however, no evidence whatsoever, either archaeological or textual, confirming the existence of a landed elite of any kind. Rather what one encounters is a space with a low demographic density and no clearly discernible urban nuclei, wherein the population lived dispersed across the landscape in the manner which best suited its agricultural or pastoral practices. The existence of various rural basilicas of Byzantine origin at Son Pereto, Son Fiol and Son Fadrinet suggest the existence of parishes during the 7th and 8th centuries, though by the 9th century many of these centres appear to have entered a pronounced state of decline, probably coinciding with the Byzantine abandonment of the island (Ulbert 2003).

The island’s conqueror and first governor, Hishām al-Hawlānī, proceeded to turn the ruined remains of Roman Palma into a fully fledged medina with the construction of water channels, mosques, baths and funduqs (Riera Frau 1985; 1993), probably also relying on a sizeable number of settlers from al-Andalus, though unfortunately these are not mentioned in the sources. Archaeology has brought to light many of the early features of the Islamic Madīna, and in particular the water
storage and distribution systems have acted as a ‘skeleton’ along which the city developed over subsequent centuries. As is evidenced by the name of the still surviving Font d’Enelamir (from the Arabic Ayn al-Amīr, ‘Spring of the Emir’) for the city’s main aqueduct, funding for these construction projects is likely to have come from the Cordovan state, and there is also little doubt that substantial amounts of these resources were invested into bringing the island’s Byzantine fortifications up to standard, particularly when considering the rise of the Aghlabids and Fatimids as the political backdrop which conditioned the island’s conquest in the first place. The coinage finds from Santueri indicate a fairly constant, yet low-key presence at the site from around 915-20 onwards (plate 4.2), which permits the suggestion that it is during the mid-10th century that the first major expansions of the fortresses of Alaró, Castell del Rei and Santueri took place, and may therefore indicate that the large cisterns of Alaró (see p. 93-99) may indeed date from this first period of fortification.

In view of the scarcity of textual sources it is difficult to assess the impact that the establishment of the Caliphate in 929 had on the political make-up of Mallorca. On the Iberian Peninsula the consolidation of the Cordovan state over al-Andalus increased centralisation and sparked widespread dissent among the rural communities, as had already been the case under the emirate (Marin-Guzmán 1994). Abd al-Rahman III’s repeated campaigns against these uprisings throughout the first half of the 10th century are likely to have encouraged clans and families to distance themselves from the seat of power, which may help explain the comparably rapid settlement of Mallorca.

The current body of archaeological evidence does not permit us to argue that prior to the conquest there were any other fortresses on the island other than the three mentioned by al-Zuhri (Alaró, Santueri and the Castell del Rei), though there is a possibility that due to its privileged location future excavations may reveal Islamic remains at the Puig de Randa. In any case, it is plausible that during the 10th century the primary defensive function fell to the Madīna, which may for a while have acted as a type of macro hisn which administered the entire island as had been suggested by Rosselló (Rosselló 2000), though it is doubtful that this arrangement survived far beyond the governorship of the wali Mu’Qatil (ruled 998-1012) and the collapse of the Caliphate, and remained unchanged throughout the Islamic presence in Mallorca. The appearance of the minor fortifications sometime during the early 11th century are a clear indicator for deep change in the political fabric of the island’s hinterland and the role of the city is certainly unlikely to have remained static over the following two and a half centuries.

The Taifa of Dénia

The decline of the Caliphate must have been felt in Mallorca from the very beginning of the 11th century. The Andalusian poet Ibn Ghassal conveys the sentiment of the time in the following verses:
O people of al-Andalus, spur your mounts,
For our place here is but a deception.
The Fabric of the peninsula is unravelling from the
Edges, and the cloth even unravels from the centre (D. F. Ruggles 2003, 140).

The image of the fabric of al-Andalus unravelling from the edges and the centre simultaneously illustrates the climate of fragmentation during which the islands were incorporated into the Taifa of Dénia from around 1015. The rule of the highly ambitious emir Mudjāhid (ruled 1012-1044) resulted in the construction of the palatial complex known today as Palau del Reis at Sineu, and some of the possible political implications this building may have had for the local peasantry will be discussed in chapter 7. For one it is certain to have functioned as a physical representation of the absentee emir’s power, as there is no record of him ever having actually resided there. It is also not known whether he ordered any other constructions on the island, though there a number of documents outlining his highly exploitative tax policies that were intended to fund the emir’s overseas campaigns. It appears that Mudjāhid, who was unable to expand his dominions on the mainland, had wanted to use the Balearics as a springboard for his conquest of Sardinia and general expansion eastward (Houtsma 1987, 150; Busch 2001, 168). Writing on al-Mudjāhid’s conquest of the islands, al-Khatib writes the following passage:

...immediately after establishing his dominion over the islands [Mudjāhid] proclaimed himself Dhu al-Wizaratayn [holder of both vizierates, Dénia and Mallorca], a rank to which he had been elevated by one of his sovereigns. He perpetrated many misdeeds against his subjects; humiliated the islanders; pitted himself against the notables and great personages, and filled their hearts with fear for he expected them to contest his power, subduing them with acts strange to piety and politics... (Barceló 1984, 55).

While it is not entirely clear who the ‘sovereigns’ cited in the passage might be, one may assume that it refers to one of the puppet caliphs that nominally ruled Cordoba between 1008 and 1031, and which could quite easily have been pressured to hand out titles (Fletcher 1994, 80). In this instance the most likely candidate would be the caliph Sulayman al-Musta’in (d. 1016), imposed by the Berbers to facilitate and legitimise their re-distribution of lands and wealth. It is unclear, however, whether this title legitimised Mudjāhid’s ambitions or whether his subjects could see right through it, though it is reasonable to assume that the aggressive antagonism and financial exploitation that he pressed upon the inhabitants of Mallorca resulted in their search for ways to protect themselves and their property from the excessive taxation with the construction of towers in the villages and fortified baqqārs in the mountains. Indeed, if there was no antagonism between Mallorca’s city and hinterland prior to Mudjāhid’s rule, then the 11th century must have been the period in which the junūd of Mallorca first entered into open opposition against a ruling party. Nevertheless, the year 1076...
witnessed the conquest of Dénia by the Taifa kingdom of Zaragoza, and with it commences an almost 50-year-long period of de facto independence of the Balearic Islands under the emirs al-Muqatda (r. 1076-1093) and Mubashir (r. 1093-1114).

The 1st Taifa of Mallorca

The death of Mudjāhid’s son Ali Ibn Mudjāhid (r. 1044-1076) brought about a lengthy period of independence for the islands. While in general rather little is known of the so-called first Taifa of Mallorca (1076-1115) it is clear that it ended rather abruptly at the hands of the Pisano Catalan raid of 1114-1115 and the death of its emir Mubashir (ruled 1093-1114, also known by his Laqab as Nasr al-Dawla or Nazareodolus) and his immediate, and short-lived, successor Abu Rabi Suleiman (r. 1114-1115). The events leading up to this raid, as described in the Pisan Chronicle, suggest that Mallorca was drawing a substantial amount of its income from maritime trade and piracy, and from the description of Madīna Mayūrqa in the Liber de Bello Maioricano one may surmise that the island’s capital had already reached its full demographic and spatial extension by around the year 1100 (Veronensis 1996, 50-51, 259-263). An interesting fact regarding this raid on Mallorca is that it concentrated solely on Madīna Mayūrqa, and there appear to have been no significant incursions into the island’s hinterland, confirming not only that this raid was never intended to precede a permanent occupation of the island, rather than simply pillaging the city and punishing its inhabitants for having encouraged piracy, but also indicating that the attackers distinguished between those who lived in the city, and those who lived outside it as being separate entities.

The Pisano-Catalan siege of Madīna Mayūrqa lasted for about a year but came to a rushed end, culminating in the sack of the city and the surrender of its Emir Abu Rabi Suleiman, as a result of the growing power of the Almoravids, who were expanding throughout the Iberian Peninsula and threatening the dominions of Count Berenguer of Barcelona, leader of the Catalan contingent in the raid.

The Almoravids, originating from Morocco, had been conquering and unifying the Taifa kingdoms of al-Andalus one by one and subjecting them to their fundamentalist interpretation of Islam since around 1086 (Kennedy 1996, 158). Even though the Taifa rulers had initially called on them to stem the Christian advance after Castile’s conquest of Toledo in 1084, soon many Taifa emirs opposed Almoravid rule and, in particular, their religious precepts, and some, such as the Taifa of Zaragoza, in fact preferred to pay homage to Aragon rather than subject itself to Almoravid control. It is unlikely that the hitherto independent Mallorcans were indifferent to the growing Almoravid threat, though the events of the year 1114-1115 appear to have forced them to reconsider their options. The Liber de Bello Maioricano outlines how messengers were dispatched to the Almoravid rulers asking for reinforcements from Dénia in their plight against the Pisans and the Catalans, but help arrived too late (Veronensis 1996, 312-315). The Almoravid fleet that arrived in 1116 simply annexed the island
with its devastated capital to the Almoravid state without any apparent resistance (Riera Frau 1993). Opposition, however, came with the new Almoravid emir’s plans to re-organise the island’s territorial administration and re-located its capital into the interior, far from the sea and close to the peasantry. The medieval sources do not mention where exactly the new city was meant to be sited, but being at the centre of Mallorca and already having Mudjāhid’s palace Sineu would have been the most likely choice. In the end, however, local resistance to these plans was too strong and the Almoravid state eventually decided to re-build the destroyed Madīna Mayūrqa (Riera Frau 1993, 65).

The coinage finds from Santueri indicate constant but low-intensity usage of the fortress from the mid 10th century through to the later 11th century, with a small number of Fatimid pieces, but a larger number of coins from 1076-1116, the brief period of the 1st Taifa of Mallorca, indicating a spike in the use of the castle during this time (Illisch et al. 2005, 107-109). The majority of the coins appears to be concentrated around the area of building R7 (see p.136), and are likely to be associated with the main residential part of the castle, that is assuming that the location of R7 coincides with earlier Islamic structures.

Almoravid Period
With the Pisano-Catalan attack on Mallorca and the resulting Almoravid annexation of the islands, the castles enter a new era which, judging from the high concentration of coinage finds from Santueri, appears to have afforded them a very busy 12th century. In particular the Almoravid successor dynasty of the Ghaniyids, which ruled the archipelago during the 2nd Taifa of Mallorca (ca.1158-1203) (Bosworth 2004, 21), appears to have relied greatly on the fortress of Santueri. The coinage concentration of this period is by far the largest of any at the site, and their spatial distribution suggests a divergence from previous activity (plate 4.2). While the coins are spread over the entire plateau there are high concentrations around the area of R7, but the highest concentrations are to be found on the SW corner of the site in sector 1. Unfortunately, Spillmann recorded the finds within quadrants of 20 x 20 m, which does not allow for a particularly precise location of the finds. The distribution however, does indicate that already in the 12th century the main activity at the castle took place on the SW corner in sector 1, rather than at the higher reaches of the plateau as had been the case during the Byzantine and early Islamic occupation.

The Ghaniyids
As mentioned above, the Ghaniyid period (ca. 1126-1203) provides us with the largest number of coins, which is partly due to its length, but also to the fact that they minted their own currency on the island (Illisch et al. 2005). Within the 90 year period of Ghaniyid rule the largest concentrations appear to roughly date from the last two decades of the dynasty, placing them contextually around the time of the other great Berber invasion on the mainland: that of the Almohads, who had begun to fully establish control over most of al-Andalus between 1185 and 1195 (Cressier et al. 2005). These dates
also coincide with the launching of various military campaigns by the Ghaniyids in an attempt at reconquering parts of North Africa for the Almoravid cause (Kennedy 1996, 239), and it is likely that this military focus of the Ghaniyid emirs also resulted in a strengthening of Mallorca’s defences, therefore serving as an explanation for the large number of finds from Santueri dating to this period.

The Almohad expansion throughout the Iberian Peninsula during the 12th century resulted in many of the remaining members of the Almoravid elite seeking refuge in the last nominally Almoravid redoubt of al-Andalus, the Balearics. The Ghaniyid invasion of North Africa resulted in the conquest of Ifriqiya (roughly modern Tunisia) and succeeded in defeating several Almohad armies sent against them. This prompted the Almohad caliph to strike at the heart of Ghaniyid power, the Balearic Islands themselves (Kennedy 1996, 250). It can therefore be argued that while the islands were an independent state, the Ghaniyids were still fundamentally Almoravid identifying themselves in opposition to the Almohads. The Almohad caliph Muhammad al-Nasir (ruled 1199-1213) defeated the last Ghaniyid emir of Mallorca Abdallah Ibn Ghānīya in 1203, effectively bringing the islands under Almohad control. This short period of foreign control came to an end on the 16th of July 1212 with the battle of Las Navas de Tolosa, known in Islamic chronicles simply as al-Iqab, ‘The Battle’, where the combined armies of Castile, Navarre, Aragon, Portugal and the Military Orders inflicted a terminal defeat on the Almohad Empire, from which it was never to recover. The loss of this battle, in which the Muslims outnumbered the Christians by nearly 2:1 has been attributed by the 17th century writer al-Maqqarī to tensions between Andalusians and their Almohad overlords (de Gayangos et al. 2002, 323), a state of affairs which can be said to have been characteristic of Almohad rule in Spain.

In the context of this study it is worth noting that the Almohad period on the Iberian Peninsula was characterised by a massive programme of fortification which consisted mostly of the construction and expansion of city walls, but also witnessed the foundation of new isolated fortresses such as that of Alcalá de Guadaíra near Seville, almost all of which were built in rammed earth (Kennedy 1996, 252). These fortifications projects were a reaction to the fissile situation at the western borders of al-Andalus, where the budding kingdom of Portugal was expanding southward (Márquez Bueno et al. 2008), whereas the Sharq al-Andalus was largely left out of this fortification programme as during the latter 12th century the kingdom of Aragon was still more concerned with its French dominions than with a conquest of Valencia. The political and physical consolidation of the Almohad state in al-Andalus was continuous and appears to have reached the apogee of its power in the years preceding its unexpected and sudden demise at the battle of Las Navas de Tolosa in 1212.

As a result of the battle of Las Navas de Tolosa, the Almohad state ceased to have any real control over the remaining principalities of al-Andalus, and it is for this reason that the period between 1212 and 1229 is sometimes referred to as the 3rd Taifa of Mallorca as there was no foreign power able to claim control over it.
The 3rd Taifa of Mallorca and the Catalan conquest 1212-1229

The chronicle of Ibn Amīrā al-Mahzūmī’s on the last years of the emirate of Mallorca takes up its narrative around the year 1212, the year of the battle, and the year in which one might expect the arrival of the first exiled Almohads on the island. It is this influx of refugees of the Almohad elite which, according to al-Mahzūmī, led to a series of bad decisions made by the Mallorcan emir and eventually precipitated the Christian conquest. Al-Mahzūmī draws a picture of a harmonious society in which the emir Abu Yahyâ al-Tinmalali is much loved by all his subjects and he represents the emir as a cultured, far-sighted and fair leader who is eventually corrupted by the Almohads at his court, who encourage him to raise taxes and impose other repressive measures which eventually causes the rift that splits the island on the eve of James I of Aragon’s invasion in 1229 (al-Mahzūmī 2008). From the sources one is clearly given the impression that the remaining Almohads blamed the defeat of las Navas de Tolosa on the lack of compliance from their Andalusian subjects and sought not to allow for this to happen again, aiming for the establishment of maximum social control.

Al-Mahzūmī does not explain in concrete detail in what these measures consisted, but it appears that the Almohads wanted to pressure Abu Yahyâ to help them regain control over parts of the mainland for which they required substantial funds and manpower. Whatever the reasons may have been, it is clear that by the time James of Aragon’s troops land in Mallorca in September 1229 the island was close to a civil war between the tribes and the urban elites. Indeed, both sources outline the clash as one in which the junūd supported James I in his siege and conquest of Madīna Mayūrqa in exchange for religious and fiscal freedom once the city was under Christian control (al-Mahzūmī 2008; James I of Aragon 2003). Under all previous invasions by Dénia, Pisans, Almoravids and Almohads the main focus of the invaders had always been the city, whereas the hinterland had been left largely untouched by these successive powers, which may explain why the peasantry of Mallorca was so willing to strike a deal with James I, perhaps believing he would content himself with control of the city like all previous conquerors.

In this sense the extremely violent sack of Madīna Mayūrqa is certain to have been a sobering experience for the Mallorcan junūd who thought they had struck a deal with James. The following two years were a constant struggle between the King of Aragon, based in the city of Palma (usually referred to as Ciutat de Mallorca) and the ‘insurgents’ who sought refuge in the castles and mountains. This struggle between supremacy and survival resulted in the entrenchment of the Muslims in various mountain strongholds, which were often improvised fortifications, though some of them may have already served as strongholds during the harsh reign of Mudjāhid, as described by al-Khatib (al-Khatib in Barceló 1984, 55). Their locations tended to be chosen by whichever required the least amount of construction to make it defensible and provide protection. An example of these types of structures is the Castelet d’Esporles, though unfortunately there are no discernible archaeological remains at the site. Other sites, such as the Puig d’en Escuder is known to have served as a Muslim
redoubt between 1230-1231 (Calvo et al. 1997), though there is no extant evidence of any permanent structures or cisterns at the site. It is also highly likely that there were significantly more of these sites than are today known, located on mountain tops of difficult access throughout the Tramuntana range.

The situation of these refugees may not have seemed as hopeless at the time as it looks in retrospect. We know from James’ accounts and also treaties that he signed with the Muslims of Menorca, that his hold on Mallorca was, in fact, rather precarious (F. M. García et al. 2008, 337; Barceló 1984, 77). His army, recruited initially for a short and decisive campaign, had largely disbanded by 1230 and many of his nobles had returned to their mainland dominions. James I himself had to return to Aragón, but was forced to return to Mallorca hurriedly when rumours regarding an imminent invasion from North Africa spread (James I of Aragon 2003, 128). The rumoured invasion never materialised, but events such as these are likely to have given the refugees hope of relief and encouraged them to hold out longer. Their eventual surrender, however, came when James forced the Muslims of Menorca (which he did not have the strength to conquer) to pay homage to him through the Treaty of Capdepera, and therefore cease to supply the Muslims of Mallorca with arms and food (Barceló 1984, 77).

On the basis of the literary evidence it appears that in this context of ever-changing relations between the peasantry and the urban elites during the Middle Ages that the fortresses of Alaró, Castell del Rei and Santueri remained under control of the state, if only nominally. The coinage finds from Santueri indicate an almost un-interrupted occupation of the site since the early 11th century, and it is perfectly reasonable to consider Alaró and Castell del Rei as having functioned in the same manner. The smaller fortifications which will be discussed in chapter 6, follow a different modus operandi and are highly unlikely to have been the product of state-funded construction efforts or requirements. Locations such as the Puig d’en Escuder, Puig de Sa Bastida and the towers in the region of Capdepera did not serve as points of territorial control, nor as long-term sites of refuge (Fig. 4.3). They functioned instead as fortified storage locations where the local population could hide their belongings in times of trouble. The evidence indicates that this trouble came in the form of excessive taxation rather than foreign invasion. In this highly insecure setting the alquería towers of Mallorca were the analogues of the guelāa built by the Chaouï Berbers of the Aurès Mountains, and the Almudaina of Artá a parallel to the fortified granaries of the Spanish mainland and the Moroccan agadir.
5. Madīna Mayūrqa and the fortresses of Alaró, Castell del Rei and Santueri

This chapter is dedicated to a detailed examination of Mallorca’s three largest and most prominent fortresses of the Islamic period as well as the fortifications of the island’s capital city Madīna Mayūrqa. The urban fortresses, (the Almudaina palace and the Almudaina of the Gumāra) will be examined only briefly as, though their historical importance warrants their description, they do not fall within the explicit scope of this study, which is focused on the hinterland fortifications of Mallorca. Of these, the three main ones have seen a fair amount of scholarly involvement, their existence before the Islamic invasion of 902/903 being attested by a number of medieval sources and in some cases recent archaeological finds (Salvator 1910; 1994; Barceló 1977; Ramon Roselló Vaquer 1979; 1984; M. Salva 1999b; Ilisch et al. 2005; al-Mahzūmī 2008). The first serious survey of these three castles was undertaken at the request of the Archduke Ludwig Salvator of Habsburg Lorraine during the 1910s. The topographer charged with the surveys was a certain E. Hölzel, who surveyed the fortresses and drew a series of plans for the Archduke’s seven volume publication on the history, culture, architecture and natural environment of the Balearic Islands (Salvator 1910; 1994; 2002). While these surveys were not particularly detailed or accurate, and largely descriptive in their aims, they do provide us with information from a time in which all these buildings were in a substantially better condition than they are today.
During the 1990s the provincial government of the Balearic Islands commissioned a study of the buildings called the *Pla de Castells*, in order to assess their state of preservation and apply for European funding to develop their potential within the context of the island’s tourism industry (M. Salva 1999a; 1999b; 1999c). Not unlike the one by Ludwig Salvator, this study too was predominantly descriptive though somewhat more detailed and accurate in its representations. Unfortunately, due to a change of administration in the local government, it never saw publication and the sole copy ever printed is currently kept under lock and key at the *Patrimonio* offices in Palma de Mallorca.

Apart from these two general surveys of the fortresses there have been a number of publications by local historians who have attempted, with varying degrees of success, to separate fact from fiction as there have been a multitude of myths and legends surrounding these buildings. Of particular importance in the effort to establish an accurate historical context for the castles have been such individuals as Guillermo Rosselló Bordoy (Rosselló 2007b; 2007a), Miquel Barceló (Barceló 1995b), Ramon Vaquer (Rosselló Vaquer 1984; 1971; 1979), Mascaró Pasarius (Pasarius 1978), Pau Cateura Bennàsser (Cateura Bennàsser 1997; 2001) among others.

Typologically all three fortresses share a series of important similarities in that they are all placed on rocky plateaus of difficult access, whereby a large part of the defensive characteristics are fulfilled by the terrain itself rather than by particularly elaborate architectural elements. The only exception to this rule could be said to be Santuari, where the terrain giving access to the mountain top required a more substantial system of defences. Indeed, typologically they are comparable with a large number of Iberian fortresses in that they fit neatly into the category known as *castillos roqueros*, that is castles placed on rocky outcrops or mountain tops, usually of relatively small dimensions and in which the architecture and layout are determined by the morphology of the terrain. Sites such as Guadalest, Castillo del Alto del Pino (both in Valencia) and Zuheros (Cordoba) share great structural and contextual similarities with these three castles, as indeed would a vast number of fortresses in Valencia and Andalucía. Another important tendency they share with many of their mainland counterparts is their relative isolation, usually located far in the hinterland of a given polity, in the vicinity of minor centres of population but not immediately connected with them. Indeed their location sometimes makes it difficult to associate the castles in this section with any one settlement in its surroundings.

Alaró, Castell del Rei and Santuari have all had long histories of occupation, potentially stretching well into the pre-Classical period. Most of the visible remains, however, are clearly from the post-1229 period and roughly datable to the 13th and 14th centuries with subsequent restorations and minor expansions. Today, their largely ruined state of preservation makes a complete reconstruction, even if only on paper, a highly hypothetical exercise as no archaeology has been
carried out and older layers of occupation are usually not visible on the surface. This study has therefore had to rely in no small part on archival sources from the 13th - 15th centuries from the ARM, in attempting to determine the gradual processes of restoration and expansion that took place at the sites, in relation with the changing political realities of medieval Mallorca.

The methodology employed for the surveys of these buildings and the representation of the structures themselves is based on the examination of the *Pla de Castells*, the plans drawn by E. Hölzel in Ludwig Salvator’s early book on the castles, aerial photographs from 1995-2008 and finally detailed surveys and re-measurements of the buildings by the author. Hence, most of the information in the plans illustrating this chapter is drawn together from all four sources into a new, more detailed and accurate set of plans. The historical and architectural analysis of each building is followed by a short examination of the structure’s location within the landscape by the use of viewshed analysis, based, in the case of each building, on a minimum of 4 separate points within the enclosed area of either castle.

In the case of the city, there are a number of recent publications investigating its Islamic past and its impact on urban life in Mallorca. Prime among these is Magdalena Riera Frau’s doctoral thesis, which examined in some detail the history of the city throughout the Islamic era relying greatly on archaeological finds. For the purposes of this study it will be necessary to concentrate only on the fortifications of the Mādina, of which unfortunately only the two main citadels remain: the Almudaina of Palma, today the king’s summer residence, and the Almudaina of the Gumāra, located on the east of the city at the site of the ancient gate known as Bāb al-Gumāra. Both these structures have seen substantial research and publication in the past, but a short examination of their history and architectural substance will nevertheless be necessary.
A. Madīna Mayūrqa, Palma de Mallorca

Since 1964, when the centre of Palma was declared a national heritage site, archaeological excavations have begun to be conducted with relative regularity. In particular the tourist boom with its influx of foreigners have resulted in large amount of construction taking place in the centre of the old town of Palma resulting in the discoveries which have greatly enhanced our understanding of Madīna Mayūrqa’s urban morphology and evolution. In particular Maria Magdalena Riera Frau has contributed greatly to the study of Islamic Palma by compiling the results and findings of many previous excavations into an over-all study of the city’s urban development from the early medieval period to the Christian conquest of 1229 (Riera Frau 1993).

Madīna Mayūrqa was located on the site of a 1st century BC Roman settlement on the apex of the bay of Palma on the south-western side of the island. During the Roman period the island’s capital was the city of Pollentia (modern Alcudia) in the island’s north-west, and Palma appears to have had a secondary role and was a comparatively small, yet fortified settlement with a good port and large tracts of fertile land surrounding it. In the post-Roman era the island suffered repeatedly from Vandal raids, until it was occupied by the Byzantine Empire under Justinian (Roque 1983). Apart from a series of minor basilicas in the countryside (Ulbert 2003) this period has left few remains, and even less so in the city of Palma where remnants pertaining to the Byzantine era remain elusive. Palma appeared to have been largely depopulated during the 8th and 9th centuries, with the gross of the population living spread out over the island’s interior. One hears little about it in the contemporary sources until in the year 902 when the islands were annexed by the Emirate of Cordoba. Ibn Khaldūn relates it as follows:

The conquest of Mallorca was in 290YH by the hand of Hishām al-Hawlānī and it occurred thus: He [Hishām] had left on pilgrimage in a vessel chartered by himself, when adverse winds forced them to seek for refuge at Mallorca. Their stay there was prolonged and they saw in what surrounded them that its conquest would be desirable, and when he had completed his precept [the pilgrimage] he informed the Emir [Abd-Allah] of what he had seen. He was [Hishām] a man of the same category as those that were with the Emir, and this one sent him as part of the fleet. The people joined him for the jihad, blocking the island for a period of time and occupying its fortresses one after another until the conquest was completed (Riera Frau 1993).

Another version of the conquest of Mallorca by the Muslims was written in the early 12th century by the unknown author (though often referred to as Veronensis or pseudo-Veronensis) of the Liber Maiolicinhus, relating the Pisano-Catalan raid of Mayūrqa in 1113-1115.
There was a large bay on the western part of the island of Mallorca which served as a kind of port from which one can see two capes which span some 20 miles between them; (....) On the left side [of the bay] there was in ancient times a city with very few inhabitants. Here ferocious peoples, coming from the Iberian frontiers with a swift fleet and guided by the general Moalfac, expelled the Christians and built many houses, and here was built the great Majorica with its splendorous walls (Veronensis 1996, 209).

The Moalfac in the above passage likely refers to a Muslim commander/privateer also known as Muwaffaq who harried the south of France for much of the later 10th century (Wenner 1980). He was not involved in the politics of Mallorca in any way, but in Christian Europe he was perceived as being lord of Fraxinetum, an area roughly comprising modern-day St. Tropez, and Emperor Otto I even sent an embassy to Caliph Abd al-Rahman III believing him to be the sovereign of this Muslim exclave (Wenner 1980, 64). His relation to Mallorca is unclear and tenuous at best, but from the text it may be surmised that the author of the Liber Maiolichinus confused ‘Moalfac’ with al-Hawlānī, in stating that the former ‘built many houses’ upon the city’s conquest. The text does, however, confirm our view of Palma as having been largely depopulated by the late 9th century, suggesting a near total collapse of urban life on the island in the decades leading up to the Islamic conquest.

In 903AD Hishām al-Hawlānī announced the conquest to the Emir Abd-Allah who bestowed upon him the governorship of the islands. He governed for ten years, building there mosques, baths and funduqs (Arab. warehouses for foreign traders) (Bazzana et al. 1988, 49). When he died the
peoples of the island elected his son Abd Allah as successor and the Emir confirmed him as governor. The constructions carried out in the city by al-Hawlānī appear to have largely followed the Roman settlement’s grid pattern (Fig. 5.2). To this day, in the quarter surrounding the cathedral, one can still discern an element of orthogonality in the layout of the streets. Part of the reason for this plan’s survival probably lies in the water channelling systems which were constructed shortly after the city’s conquest and which appear to have followed the Roman street plan. To this day the city draws its main water supply from the spring known as Font d’Enelamir, from the Arabic Ayn al-Amīr (fountain of the Emir) (Jaquotot 2002).

The most accurate and exhaustive descriptions of Islamic Mayūrqa stem from the Pisano-Catalan raid of 1113-1115, the author of which displays an extraordinary knowledge of the surrounding countryside and Arabic place names. He provides the reader with a detailed description of Madīna Mayūrqa according to which:

Three were the cities which have the same name, but which, if you want, you can call every single one by its own name. The first is called Arabathalgidit. Nazaredeolus was the founder of this city which is surrounded by fifty towers. Then comes Bebelgidit: this is the name of the second city. A high wall, which begins at the Arabatalgidit surrounds the body of the city and, slightly touching the waves of the sea, it extends along the water until it reaches to where the city Almudaina shows her excellent towers. A wall separates them; one is surrounded by the other two which measure close to ten thousand cubits. (…) should one want to know the exact number of towers it is one-hundred and seventy four. (Veronensis 1996, 259-261)

Nazareodolus is the Latinized name of the Emir Mubashir Ibn Sulayman (r. 1093-1114), called by his subjects Nāsir al-Dawla, the second emir of the Taifa kingdom of the Balearics and who had taken the emirate from his predecessor, the first emir of Mayūrqa, al-Murtada (Riera Frau 1993, 48). The writer of the Liber Maiolichinus attributes to Nasir al-Dawla the construction of the Arabalgidit. The location of this ‘city’ is defined in the text with the indication of its southern limits, the eastern coastal part of the city (Fig. 5.3).

Attempting to determine the location of the Bebelgidit from the literature is somewhat more complex: The Llibre del Repartiment of 1231 mentions a gate known as Bāb al-Djadid, which, according to Riera Frau, corresponds with the Porta de Porto Pi in the Liber Maiolichinus, and it is therefore plausible that the urban area known as Bebelgidit corresponds to the location of this gate. Tracing the limits between both ‘cities’ is eased by the topography of the terrain, and as there is no wall to separate them the limit between them must be defined by the bed of the Riera river, which ran from north to south through the centre of the city. Basically, the area originally enclosed by the Roman settlement corresponds to that of the Almudaina and its palace, the al-Qasr (Ar. citadel). Around this grew the Al-rabad al-Djadid, cited in the Liber Maiolichinus as Arbatagalidit. The third
‘city’, the *Bab al-Djadid*, or *Bebelgidit* of the *Liber Maiolichinus*, is the one located on the western side of the Riera river (Fig. 5.3) (Riera Frau 1993, 48).

Riera Frau also suggests that, while the *Liber Maiolichinus* mentions a wall separating the *Arabatalgidit* from the *Bebelgidit*, there probably never was one and that the differentiation between both parts of the city came more from their physical aspect rather than from an actual architectural feature that separated them (1993, 48). It is, however, possible, not to say likely, that before the city’s expansion beyond the Riera river its western confines were fortified in some way along the river, and that these fortifications were demolished once the outer walls were constructed around the entire urban space.

We know from the *Liber Maiolichinus* that the Pisano-Catalan raid of 1113-1115 only really affected Madīna Mayūrqa and did not involve the island’s hinterland in any traceable way. It did, however, result in the near complete destruction of the city, the sack of which is related as follows:
Then the count of the Pyrenees [Ramon Berenguer III] climbed joyfully to the fortress [the Almudaina] and proclaimed that the enemy had been defeated. Many had fallen by the sword; many had thrown themselves from the windows. Some made certain of cutting the throats of men, others dragged off the women, and after grabbing their loot they burn the walls and buildings. The fire did away with the dead and the wooden houses (Veronensis 1996, 411).

The scenario described in the Liber Maiolichinus is very nearly identical as that drawn by Ibn al-Kardabûs from the perspective of the vanquished:

When the [Almoravid] fleet arrived they found the city deserted its houses burnt, blackened, dark and blinded. (al-Kardabus 1986, 150)

From then on the Islamic sources become somewhat confusing and there is some contradiction regarding the identity of the first Almoravid governor of the island. Indeed, the celebrated Arabist Rosselló Bordoy states that ‘the only point on which Ibn Idhârî and Ibn Khaldûn agree is on the rebellion of the Mallorcans against the impositions of the new governor’ (Rosselló 1968, 66). The rebellion cited in the Islamic sources is the one caused by the new governor’s plans to re-locate the Madīna to the interior of the island in order to better defend it against future attacks from the sea (Riera Frau 1993, 65), and it appears likely that the rural populace rebelled against this undertaking, with success, because it would have resulted in a greater influence over the rural districts, which their inhabitants sought to escape (Bernat i Roca et al. 2002).

The settlement reached regarding the relocation of the island’s capital was achieved during negotiations between representatives from Mallorca and the Almoravid Emir Ali Ibn Yusuf, which also resulted in the appointment of a new wāli (governor) for the islands: Muhammad Ibn Ali Ibn Yahyâ Ibn Gâniya al-Masûfî, founder of the dynasty of the Banû Gâniya (Riera Frau 1985, 25-27). The rule of the Banû Gâniya dynasty was largely characterised by a constant and enduring antagonism between the city and its hinterland (Rosselló 1968, 66-67). According to Rosselló the Almoravids, in control of only Madīna Mayûrqa, were opposed by a strongly anti-Almoravid rural ‘native’ populace seeking to escape the jurisdiction of the occupants (1968, 68). These centrifugal tendencies, which appear to have been particularly strong in Mallorca, were in part explained by Barceló in stating that, ‘the Madīna is defined by a series of jurisdictional characteristics and not by geographic or demographic ones. Conceptually, the term madīna was not a ‘city’ in the urban sense of the word, but could be any location with jurisdictional, political and usually also religious supremacy’ (Barceló 1984, 99). Basically, Barceló argues, the opposition to the city did not stem so much from an opposition to urban life or communal living, but did instead result from a desire to live outside the jurisdiction of other tribes or groups.
According to Rosselló and Riera Frau the constant confrontations of this period have their origin in the strong pressure the state exercised on the peasant communities, and they appear to have lasted as long as the Almoravid attempt to re-conquer the Almohad territories in North Africa by the Banû Gânîya of Mallorca. In general, however, it appears that the rule of the Banû Gânîya had little to no effect on the physical fabric of the city apart from the reforms and expansions carried out on the Almudaina palace during the first half of the 12th century (Riera Frau 1993, 127). The same may be said for the eventual Almohad conquest of 1203 which appears to have left few architectural traces, though, granted, they only held the city for some 25 years. While we have very few contemporary sources on this period in Mallorca’s history, there is one which has recently allowed us to re-evaluate the short Almohad presence on the island, and has also thrown new light on the events that led to the eventual Christian conquest in 1229. The author of the Tarij Mayûrqa, Ibn Amīra al-Mahzûmî, mentions an influx of Almohad refugees coming to Mallorca in the aftermath of their defeat at the battle of Las Navas de Tolosa in 1212 (al-Mahzûmî 2008, 87-89), which saw the end of Almohad dominion on the Iberian Peninsula. Despite this late influx of population it appears that the city never reached the point of ‘saturation’ as proposed by Palazón and Castillo, as there is no evidence, either textual or material, of urbanism outside the city walls (Riera Frau 1993, 144-145).

It is also of importance to note that the city of Mallorca appears to have only a very minor huerta surrounding it. This agricultural belt which surrounded many Andalusian cities such as Valencia, Seville and Cordoba, to name just the most famous, appears to have been for many cities their main repository of wealth. Indeed the extraordinary productivity of the huerta of Valencia determined the city’s growth and enormous wealth. To the conqueror King James of Aragon the huerta was the greatest prize all of his conquests (James I of Aragon 2003). Most of the farmers who worked on the fields outside the city usually resided within the city or one of its outskirts, though there were also large villa-like estates called almunias, of which in Mallorca there appear to have been only three (Rosselló 2007a), suggesting that Madīna Mayûrqa drew the gross of its income from maritime trade.
Almudaina of Palma

What is today the Royal palace and summer residence of the King of Spain is probably one of the oldest medieval structures on the island, and as such has seen a fair amount of research and publication, though no archaeological excavations have been carried out there.

Rosselló, who has written one of the most complete histories of the Almudaina palace, dates the earliest occupation of the site to the Roman era, arguing that a substantial part of the foundation blocks utilised in the Islamic structure appear to be Roman spolia. In medieval sources the Almudaina palace makes only two clear appearances: one in the Liber Maiolichinus, where it is referred to as the central quarter of the city and the citadel called Elmodenia, and another in Ibn al-Abbar’s Kitāb Takmila, where it is mentioned in relation to an uprising by Christian slaves who attempted to storm the palace in 1184 (Rosselló 1985, 4).

The Islamic foundations of the Almudaina are likely to date to the period of Hishām al-Hawlānī in the first half of the 10th century as its ashlar construction is consistent with the palatial architecture of this period, though substantial modifications were carried out on the structure over subsequent centuries. For example, Cordovan marble capitals from the period of al-Hakam II (r. 961-976) found on the site...
suggest substantial expansions around this time. The complex consisted of a rectangular double enclosure in which the southern wall ran along the sea (Fig. 5.4). Here there was a large arched opening in brick, approximately 15m wide, which allowed for the passage of ships to a fortified port on the interior of the complex (Fig. 5.5). This feature, known today as the Arc de la Drassana, is probably the ‘Porta Marina’ mentioned in the Liber Maiolichinus and is therefore likely to be of 11th century construction (Veronensis 1996).

Later modifications and expansions were carried out under the Gâniya dynasty who resided in the palace for much of the 12th century. The majority of the architectural expansions and restorations carried out in this period appear to have all been made in tabiyya and, occasionally, brick. Indeed a substantial part of the visible Islamic remains at the Almudaina Palace date to this period, though these too were heavily modified again during the Catalan era. King James II of Mallorca, upon embarking on the large scale architectural programs which saw the construction of Bellver Castle and the cathedral of Palma, also invested heavily in converting the Almudaina into a gothic palatial complex fit for his standing (plate 5.1).
**Almudaina of the Gumāra**

One of the great singularities of Madīna Mayūrqa, as already noted by Torres-Balbás, is the fact that Madīna Mayūrqa counted with 2 citadels. The name of the site has brought about a significant amount of debate as it appears to draw its name from the Berber tribe of the Gumāra, who originated from northern Morocco. The fact that a Berber tribe was given control of such an important fortification has been interpreted as a signifier for the weakness of the Arab elites in the city prior to the Catalan conquest of 1229, though more recent discoveries have revealed the structure to date to the 12th century and therefore predate the domestic troubles of the early 13th century, and that indeed already the city gate which preceded the construction of the citadel carried the tribal name. Barceló has pointed out that rather than being controlled by this specific tribe, the Bāb al-Gumāra gate probably drew its name not so much from its owners but from the settlers of the lands it was oriented towards (Bernat i Roca et al. 2002, 194).

![Figure 5.6 Almudaina of the Gumāra/Temple as seen from W. Hypothetical reconstruction, Vila et al. 2010.](image)

The fact that there is no clear mention of the Almudaina of the Gumāra in the otherwise detailed description of the Madīna in the *Liber Maiolicinus* makes a post-1116 construction date likely as the Pisano-Catalan troops, who assaulted the city in 1115 entered the city from this precise location, mention only the gate (Veronensis 1996, 234), but no major fortifications of any kind. Bernat i Roca *et al.* locate the construction date of the Almudaina of the Gumāra sometime between the reigns of Muhammad Ibn Gānîya and Ishak Ibn Gānîya (1143-1185), arguing that it was built to extend greater control over the city and the immediate surroundings during the uprisings of the Christian slaves and other occasions of civil unrest during this period (Bernat i Roca *et al.* 2002, 199).

The oldest illustrations of the Almudaina of the Gumāra are from 17th century plans of the city of Palma and they show a large trapezoidal enclosure defended by 12 or 14 towers of which today only the main two remain flanking the inner/western gate (Fig. 5.6, plates 5.2-5.3). In 1231 the entire site was ceded by the Crown to the Order of the Temple, who installed their main commandery on the island there. The Knights Templar also constructed a chapel within the enclosure, most of which was
lost to a ‘restoration’ carried out in the 1880s. A recent archaeological examination of the site (Vila et al. 2010) has determined the Almudaina of the Gümāra to have evolved along 4 main phases:

- Mid 12\textsuperscript{th} century construction of the enclosure and towers in rammed earth and timber.
- Late 12\textsuperscript{th} century partial revetment in stone of the two gate towers, possibly after damage and partial collapse suffered during the popular uprisings of around 1180.
- Templar expansion of the gate towers into a residential complex with a hall, conversion of the northern tower into a keep and construction of the chapel from 1230 onwards.
- Gradual destruction of the enclosure by surrounding buildings and modern additions to the gate complex.

Due to the continued use and architectural expansion of the site, little is known of the original aspect of the enclosed space inside the citadel, though from 18\textsuperscript{th} century plans of the city the interior of the Almudaina appears empty with the exception of the Templar chapel. This may suggest that whatever structures originally stood inside the Islamic fortress, were of a more temporary nature or were destroyed during the siege of 1229 and never rebuilt. The expansion of the city defences and construction of various artillery barbicans along its perimeter in 1574 resulted in the isolation of the fortress as it ceased to have any significance as a point of transit by the blocking of the outer gate (Fig. 5.8).

Judging from the occupational history of the site and its repeated expansions and the Almudaina of the Gümāra was clearly an important focal point in the city’s medieval history. The choice of its location was probably influenced by the Pisano-Catalan raid, the troops of which gained entry into the
city from this precise location, perhaps leading to the conclusion that this was a vulnerable section of the city’s defences. It is, however, an interesting fact that the fortress was built inside the city rather than outside the walls and that its most heavily defended part (the gate towers) was directed at the city itself rather than at the space beyond the walls. It may, in this sense, be argued that the Almudaina of the Gumāra was conceived with a dual function in mind: strengthening of the Madīna’s walled perimeter and to exert a greater degree of control over the urban populace.

Figure 5.8, Almudaina of the Gumāra, Garau 1799.
B. Castell d’Alaró, *Hisn al-Rum*  
(39° 43’ 52”N, 2° 47’ 45” E)

The castle of Alaró is the most famous of the early medieval fortresses of Mallorca and has received ample mention in the sources, both medieval and modern. Its location, some 800m above sea level atop a natural rocky plateau with difficult access (plate 5.4), not only makes it a naturally powerful stronghold, but an abundance of water from permanent springs has also allowed it to withstand a number of drawn out sieges throughout its long history. Furthermore its placement on the southern slopes of the Sierra de Tramuntana provides it with a commanding view of the entire interior of the island, from Palma in the SW to the bay of Alcudia/Pollentia in the NE. It is located about 2.5km north of the village of Alaró of medieval origins, which is today the capital of the municipality of the same name (Fig. 5.9).

![Figure 5.9, Topography of Alaró and surrounding territory, Source: SITIBSA 2005](image)

The morphology of the plateau on which the castle of Alaró is situated is complex and highly varied due to the large area it encompasses, though it is made up predominantly of calcareous limestone. The vast majority of the surface of this plateau, which ranges in height from 841m ASL to about 740m ASL, has suffered significantly from soil erosion due to the intense production of charcoal carried out at the site until the early 20th century. Today the majority of the plateau, especially the southern sections, is covered with pine and holm oak forests with thick undergrowth, which impairs visibility and complicates ground level surveys. It should also be noted that there is very little level ground, and that flat ground such as there is, is mostly artificially created by way of retaining walls and terracing.
The dimensions of the fortress itself are determined by the size of the plateau upon which it stands, which has a perimeter of about 2.4km and an area of approximately 0.16km², and therefore makes it by far the largest structure in this study in terms of area enclosed. The roughly teardrop-shaped castle mount runs roughly from NW to SE, with the main access to the complex lying on the NW side, which is also where the majority of the fortifications are located (Fig. 5.10).

**History**

The castle of Alaró received its first mention in an account by al-Zuhri (Barceló 1977), which relates the conquest of the island of Mallorca and the gradual taking of its fortresses by the armies of Hishām al-Hawlānī in 902/903. In this account al-Zuhri states that there was a fortress of such strength that it had 'no equal in the world', and that it served as refuge to some 15,000 people for eight years and seven months after al-Hawlānī’s conquest (Barceló 1977, 37). There is little doubt that the numbers are exaggerated, but it is noteworthy that the fortress, inhabited by the Rumi (Romans, i.e. Christians), was occupied by the refugees long enough for it to take on the name Hisn al-Rum (Castle of the Christians), which evolved into today’s denomination Castillo de Alaró, which has also given its name to the nearby village of Alaró. Having therefore attested its existence by the early 10th century, the construction date for the actual fortifications remains something of a mystery. The archaeologist Aramburu Zabala, who has carried out a series of field surveys at the site, discovered ceramic remains dating to the 5th century or possibly earlier (Aramburu-Zabala 2000), but no architectural remains dating to this period can be discerned with any certainty. In view of the ready availability of water it is likely that the site has seen occupation, either temporary or permanent, since well before the Classical period, but definite proof will remain elusive without archaeological intervention.

James I of Aragón, in his account of the conquest of Mallorca, relates how in the aftermath of the fall of Madīna Mayūrqa (January 1230) some 3,000 men and 15,000 women and children sought refuge at the castle of Alaró, and held out until late 1231, when the signing of the Treaty of Capdepera ensured that the last defenders of the three castles capitulated (James I of Aragon 2003, 127). Whether the numbers cited in James’ Book of Deeds are exaggerated or in fact accurate cannot be determined with certainty, but it is of interest to point out that several other figures he cites (for example the 30,000 people fleeing the city during the sack of Madīna Mayūrqa, (James I of Aragon 2003, 108) are in fact fairly close to the 24,000 cited by al-Mahzūmī in his version of the events (al-Mahzūmī 2008, 60), therefore making it possible that indeed some 10-12,000 people held out at Alaró for nearly two years.

From the Christian period, beginning in the first half of the 13th century, we have a substantial number of archival sources from the ARM, referring largely to the maintenance of the castle, construction work carried out there, and expenses and salaries of those in charge of its maintenance. Its earliest archival mention dates to 1237, when a certain Pere Cerdà received from the Mayor of
Palma a title and a *huerto* (Cat. land for cultivation) in the vicinity of the castle, in return for which Pere Cerdà was to swear allegiance to the King, James I of Aragon (ARM Prot. ECR 431 f.109). Most of the 13th-century documents referring to the Castle of Alaró relate to payments and supplies being brought up to the fortress, and the sequence of castellans taking charge of its upkeep. In 1242 Martí Yvanes becomes castellan of *Oloron* (Alaró) and confirms the receipt of 290 *quarteres* (medieval Catalan measurement of volume usually applied to grain, whereby 1 *quartera* is usually equivalent to around 70-80 litres) of wheat, and 112 goats (ARM Prot. ECR 342 f. 140). Five years later, in 1247, a certain Aries Yvanes, likely to be a relative of the previous castellan, states having received from Arnau Font, Mayor of Mallorca, 1000 sous assigned by King James I for the maintenance of the Castles of Alaró and Pollença (Castell del Rei) (ARM Prot. ECR 343 f. 223). In 1252 Sancho de Sadova, lieutenant of Aries Yvanes, confirms having received 400 sous and 60 *quarteres* of wheat for the *Castell d’Oleron* (ARM Prot. ECR 345 f. 198). In June 1285 Bernat and Francesc Ripoll swear an oath of loyalty to King James II of Mallorca before the lieutenant Ponç Guardia, and promise to defend the castle of Alaró under command of the *alcaid* (castellan) Ramon de Palada (ARM Prot. ECR 351 f. 16)). During the year 1290, the kingdom having been returned by Aragón to its rightful monarch James II, a certain Guillem de Santa Coloma becomes *alcaid* of Alaró. He confirms the receipt of s.1780 for clothing and salary for two servants, the purchase of beans, oil, onions and iron for the manufacture of two shields. At this point there were reportedly twenty servants, one woman and six dogs at the castle (ARM Prot. ECR 644 ff., 15v, 23v, 24v [plates 5.74-76]). For 1311, the year of James II’s death, the *Llibre de Dades* mentions makes of a series of restorations being carried out at Alaró *Item paga(re)m a Pere Garriga per la messio e despesa la qual feu en adobar e en cubrir les cases del dit casteyl e en adobar la carrera ab (sic) la fusta la que se fo tramesa £19. 1s.1[d]. ‘And we will pay to Pere Garriga for the works and expenses which he incurred in plastering and covering the houses of said castle and in strengthening the path with the wood which was given to him £19. 1s.1[d].’ (ARM, Baratillo, vol 1, part 2, 122 [plate 5.80]) This construction phase is not unusual in so far as the illness and death of a monarch normally prompted a heightened state of alert and was normally accompanied by an increased fortification of the castles.

For the purposes of this study the most relevant archival mention of the castle of Alaró refers to the construction works carried out during late 1319 and throughout 1320. From the time that Ramon de Tornalboix takes charge of the fortress as castellan, the *Llibre de Dades* (Cat. Book of Figures) of the year 1319 contains a detailed receipt of the expenses for the reparation of weaponry, the transport of construction materials to the castle and other works. Among these is a mention of the mending of various crossbows, that 4000 roof tiles were bought from a certain Asmet Quarto and that large quantities of lime were brought up to the castle (ARM RP 3.394 ff 35,60 [plates 5.77-78]).

Ramon de Tornalboix was succeeded in 1320 by Pere d’Enveig, and under his stewardship the castle was significantly strengthened after news that Sancho, the King of Mallorca, had fallen ill.
The salary of the castellans of Alaró and Castell del Rei rose in that year to £25 per annum. The servants receive d.12 per day, and d.3 for the maintenance of the dogs (ARM RP 3.397 f.140 [plate 5.79]). The *Llibre de Dades* for the same year states that several loads of lime were brought up to the castle, one consisting of some 1.858 quarteres which would roughly be equal to some 140-150m³ of lime. Furthermore the *aljubs* (cisterns) were cleaned and repaired. At this time there were reportedly 100 men and 40 knights garrisoned and working at the castle, with the total sum of expenses reaching £229, s.18 and d.7, making this the last major restoration and expansion in the building’s history (ARM, *LLibre de Dades* 1320). It is from this period that the majority of remains today visible at Alaró appear to date. There are, however, some parts and elements which are likely to pre-date the Christian period altogether, and to these we shall direct particular attention.
Architectural analysis

For the sake of simplicity and coherence this study divides the total area enclosed by the fortress of the Alaró into five sectors, each containing different elements and aspects of the complex (Fig. 5.10). It has been noted that the fortress was in use well into the Renaissance and Early Modern period, and while the remains from these periods will be mentioned and analysed, for the purposes of this study, it will no be necessary to give them the same attention as the medieval remains.

Sector 1. Outworks, gate tower and cistern.

The castle of Alaró is accessed from the north-west via a foot path leading up from the village of Alaró. This path is too narrow and steep as to have allowed for wheeled transport to enter the fortress at any point in its history and even today mules are used to supply food and building materials to the refuge and bar at the top.

The first architectural feature one passes are the outworks which would have blocked the path to the gate tower (T1) (Fig. 5.11). The outworks consist of a masonry wall about 15m in length running perpendicular to the face of the rock entered though a large arched gateway. The width of the wall is of about 0.9-1.1m at ground level, proving enough space for a narrow parapet and wall walk with three arrow-slits covering the approach to the gate. The wall makes a 45 degree bend to the NW, rising with the ground level and creating an enclosure which, along a series of winding steps, leads to the gate tower (T1) itself (plate 5.5). The function of these outworks was quite clearly to slow down any potential attacker, forcing him to climb the tortuous steps and therefore turn at the corners and exposing his flanks to the defenders situated in the tower and along the parapet above him.
The materials used in the construction of this section of the castle of Alaró coincide largely with those expected for a late 13th-early 14th-century dating for the building: the wall sections are straight and clearly drawn in a well planned fashion, while the fabric itself consists largely of undressed or roughly hewn limestone, bound by a grey lime mortar with high chalk and clay content. In general the materials used in this section of the building are of clearly local origin, with the limestone probably stemming from the mountain of Alaró itself or its immediate surroundings. Certain architectural details, however, such as arrowslits, quoins and vussoirs are made from well dressed sandstone, again suggesting a late 13th century to early 14th century manufacture, but with material of a more distant origin, probably closer to the southern or south-eastern coast of the island. Originally all wall surfaces of the castle would have been plastered and whitewashed therefore covering the wall fabric, but today hardly anything of this feature remains, except on the western wall of the gate tower (plate 5.7).

Proceeding through the outworks along a series of tight uphill bends one reaches the entrance to the fortress proper, which is accessed through a large, massively constructed gate tower of square plan with two floors, the bottom floor being set into the hillside (Fig. 5.12, plates 5.6, 5.7). The gate consists of a large round arch set in well-dressed sandstone leading to a vaulted chamber which opens on the east end to the castle grounds via a pointed arch gateway, the latter being the only pointed arch in the entire complex. The building technique is largely homogenous with that of most of the castle in that it consists of un-worked stone placed in semi-regular courses and sandstone elements, such as quoins, vussoirs, window mouldings, and arrowslits. It is worthy of mention that certain sections of the ground floor, such as the west facing wall, were constructed from the outset and in their entirety from well-dressed sandstone ashlar. This difference in construction techniques between the lower and the upper floor may indicate different construction periods, but it seems more likely that structural reasons determined the more solid and compact architecture of the lower floor. The entire structure,
except possibly the sandstone details, would have been covered by white plaster, which is still clearly visible on the some parts of the exterior walls.

The ground floor of tower T1 consists of just one chamber with no indications of any other architectural elements in its interior apart from a pointed barrel vault supporting the upper level (Fig. 5.12). The vault springs directly from the eastern and western walls without supports of any kind and is made of un-hewn rocks wedged together perpendicularly to the profile of the vault and held in place by copious amounts of lime mortar. The upper floor has a more residential character. It is accessed from level ground from the north through a small arched doorway and was originally lit by two arched windows, one to the south and another to the west directly above the main gate. A pair of arrowslits, placed at ground level and angled sharply downwards, are directed towards the outworks and the steps leading up to the tower, providing complete cover for the last 150 metres of approach to the castle. On the NW corner remains of soot on the wall suggest the existence of a fireplace and traces of plaster on the walls indicate that there may have been a chimney flue. A series of limestone corbels suggest that the tower was covered by a flat roof supported by six beams running east-west (plate 5.8). A clearly visible parapet along the perimeter of the top of the tower, and the machicolation above the tower gate make it clear that this roof was accessible, probably via a wooden ladder from the interior of the top floor of the tower.

As one passes the gate tower (T1) one enters the castle grounds, with the area immediately behind the gate being among the few parts of the fortress with completely level ground. Originally, however, the topography of the terrain beyond the gate determined that the flank of the mountain above the outworks had to be levelled by the construction of a 45-50m long retaining wall. It appears that the interior of this wall left a sufficiently large space which, instead of being filled with soil and debris to level the ground, was used to construct a large cistern (W1) which still retains water today (plate 5.9). The practice of building cisterns and reservoirs into the side of the hill, using the curtain

![Figure 5.13, Alaró, Cistern W1, plan. Source: Author](image-url)
wall as a retainer is one we find repeated in the majority of structures this study is concerned with, and, in view of the evidence, it appears to be of Islamic origin. At Alaró the outer wall is in fact slightly arched inward, like a dam, allowing for greater water capacity in the cistern without the need of substantially thickening the structure of the retaining wall itself (Figs. 5.13, 5.14). The fact that the medieval sources mentioned the cleaning and restoration of the cisterns makes it likely that these features are for the most part of Moorish origin. A closer look at the southern wall of the cistern W1 reveals that the lower sections were built from highly compacted tabiyya of the concrete-like variety (plate 5.10). This makes an Islamic origin of the wall and cistern highly likely. The interior of the cistern is daubed with a 1-3 cm thick layer of reddish plaster which is made from finely ground ceramics mixed with lime and sand known as opus signinum (plate 5.11). This layer acted as an efficient waterproofing coat and is to be found in a more or less similar manner on all other water-related features of Alaró and the other structures in this study.

With a volume of some 224 m³ W1 was the largest of the cisterns of Alaró, and unlike the others this one appears to have been filled largely by surface runoff. The small basin next to the steps may have been used as a trough for pack animals, but it may also have acted as a decanting basin for silty water running into the cistern (Fig. 5.14). If this was the case then the other inflow, located at the north-western corner of the cistern maybe have been filled by rainwater from the roof of tower T1, as it quite clearly lacked such a basin. A short stump of a stone lined channel runs from the cistern in direction of the tower, although on the tower itself no remains of any conduits or piping remain.

Some 20 metres to the south of W1 stands another, smaller, tower (T2) perched on the cliff that oversees the outworks. Due to its reduced dimensions (aprox. 4x3.5m) it is unlikely to have had residential function (Fig. 5.13). Nevertheless, while it is quite small it does have four solid walls around a completely enclosed interior, which is rather unusual as in Mallorca defensive towers of this

![Figure 5.14, Alaró, Cistern W1, cross section. Source: Author](image)
size were often open-backed, (i.e. they lacked a rear wall in order to render it useless towards the interior of the fortress in case of capture, as at Santueri and Castell del Rei). It is built in the same style as T1, with round arch windows and door, but here the quoins and mouldings are made of limestone rather than the softer sandstone. Remains of a large lintel in the vicinity of Sector 4, suggest that these limestone elements were quarried and carved on site, rather than being brought from a more remote location. Again, just as at T1, this tower too would have had a flat roof supported by a series of beams which rested on limestone corbels. While there are no remains or any merlons, its originally flat roof suggest that the top floor was accessible, either from the inside of the outside, via a ladder, as there are no remains of any stairs.

Sector 2. Bulwark and spur
The northern sections of the fortress of Alaró consist of a long wall straddling a rocky spur of 2 - 6m in breadth and about 75m in length (Fig. 5.16). The majority of the remains are in a very poor state of preservation, in particular the outworks beyond the bulwark (T3), where only one short stretch of curtain-wall still stands to its original height. The ground level, however, appears to coincide largely
with that of the medieval period, and in most places the retaining structures supporting the ground
surface are also still in place.

While all the remains visible today appear quite clearly to date to the early 14th century, it is
likely that the spur was already fortified or strengthened in some manner during the Islamic period as,
though with 2 - 4m in height it is of difficult access, it could be climbed with relative ease. In
particular the retaining wall which allowed for the levelling the terrain on the spur, may date to the
pre-conquest period. While rammed earth was the preferred construction material for free-standing
structures, the moors were highly adept in the use of stone for landscaping features such as field-
terracing (M. Salva 1999c, 38-39). Also, rammed earth structures usually stood on low masonry
foundations in order to isolate the fabric from rising humidity, all of which make it likely that on
terrain as rough as on the northern spur of Alaró the retaining walls were built from masonry while
the curtain wall above was made from tabiyya. It may therefore be stated that, as over the rammed
earth gradually eroded away centuries, it was consequently substituted by masonry during the
Christian era.

The spur is accessed from an arched postern immediately east of the bulwark (F3), along a
narrow path leading along the top of the ridge (plate 5.15). According to the architect Hölzel, who
surveyed Alaró in 1908, the tip of the spur was occupied by a tower (T4) which may have acted as a
lookout point towards the north (Salvator 1994, 347). He supplies no images or description of this
feature, of which today nothing but a knee-high wall remains.

The remaining section of curtain wall (F2) can give us some important clues as to the original
aspect of this part of the fortress. Originally the wall stood to a height of approximately 2.5-3.5m on
the inside, but which varied significantly with the rise and fall of the terrain, probably providing a
relatively level platform behind the parapet of which the crenellations make up the upper 45cm.
Between the merlons, set into the wall and framed by sandstone ashlars were a series of arrowslits,
probably spaced at regular intervals of about 1-1.30m (plate 5.14). Fragments of plaster substantiate
the claim that originally the entire structure had been plastered, and that the actual fabric of the wall
would not have been visible. A faint line along the mid-section of the wall, cutting through the plaster
may hint at the presence of a wooden platform which has since disappeared, but which would have
acted as a wall walk giving access to arrowslits and parapet.

The wall fabric is consistent with the other early 14th-century remains in that it consists of
coarsely hewn and irregularly set limestone held together by a grey mortar with a high chalk and clay
content. The bulwark is a polygonal platform of roughly triangular shape which separates the spur
from the interior sections of the fortress. Its construction suggests that the northern spur of Alaró was
perceived to be the weakest spot of the complex, perhaps due to the comparatively low height of the
ridge upon which it stands. It consists of a crenellated platform which can only be accessed along the
north eastern wall. The construction of the bulwark and the wall from which it was accessed created a courtyard-like space immediately to its south, which may perhaps have been enclosed by another wall (F1) which ran perpendicular to the wall giving access to the bulwark. Of this putative second wall (F1) nothing remains, but angles in the south-western sections of the curtain wall suggest a continuation which may have connected it with the wall which gave access to the bulwark.

The fact that the rock platform upon which the bulwark stands (plate 5.12) was carved out in order to give the bulwark a higher section and levelling the ground, further compounds the existence of this courtyard. Furthermore, the fact that this area of Alaró is so heavily fortified, suggests not only that it was a vulnerable point, but also that it was a potential exit for those inside as it would be unusual, particularly for a fortress of this size, for Alaró not to have had some kind of secondary exit/entry point. Postern F3 suggests that there may have been a path leading off the spur into the valley from the north of the castle (plate 5.13, Fig. 5.16).

**Sector 4. Water cisterns**

Probably the most interesting feature of the fortress of Alaró is also the one which has received the least attention in past publications. The water cisterns, known as *aljibes* in Spanish from the Arabic *al-jub*, appear to be the only clearly Moorish remains of Alaró, and some of the very few on the island of Mallorca.
In all three cases the tabiyya casing is clearly visible through under the opus signinum plaster, and at the entrances, where the whole thickness of the concrete-like fabric demonstrates the extremely high quality of this construction material. The use of tabiyya is the main and clearest indicator for an Islamic origin of these features.

The issue of water management in the Mediterranean region has received a fair amount of attention in the past and there has been a large number of publications on issues regarding irrigation techniques and the administration of irrigation units, systems and networks (Glick 1968; R. C. Hunt et al. 1976; K. Butzer 1982; 1985; Kirchner 1995; 1997; Barceló et al. 1998; Poveda Sánchez 1999:) It is noteworthy, however, that the study of water catchment systems and water management in enclosed complexes such as fortresses have received very little attention, which is somewhat surprising when one considers water to be just as essential to the survival of the inhabitants of any fortress as walls, towers, moats or gates, which have of course been the main focus of scholarship for over a century. In the case of Alaró, where we are told that some 15,000 people withstood a siege of 8 years (Barceló 1977, 37), an efficient management of resources must indeed have been of the utmost importance.

Together with the aljibe next to the gate tower, designated W1 in this study, there are 3 large cisterns (termed W2, W3 and W4), plus two wells with smaller cisterns and another large feature (W5) which may be an un-finished aljibe (Fig. 5.17). Apart from W1 all the others are clustered together in an area of some 1000m² in a lower part of the eastern side the fortress. On Hölzel’s plan they are represented in a completely erroneous alignment, as is also the case in the Pla de Castells, suggesting that the latter used the former as a model, but their general location is more or less correct.

Of the four large cisterns in this sector W2 is the best preserved and, from an architectural standpoint also the most interesting because of its elaborate vault arrangement (plate 5.16). While the actual vault today is made from flat un-worked stones simply wedged together into a self-sustaining shell with mortar filling the gaps in between them, a pair of pointed arches made from sandstone rising out of the walls of the cistern on two pairs of consoles, would have supported the original vault (fig 5.18). While the use of sandstone for the manufacture of structural elements is not unusual in itself, it is of interest to note that the arches of cistern W2 were built in a fashion reminiscent of Islamic brick work. As a construction material, brick is comparatively scarce in the Balearics, but sandstone, thought not offering the same structural qualities as the much more solid brick, could be carved to look the same. Hence we find that at Alaró thin sandstone slabs are set onto a pair of sandstone consoles or corbels, with the initial courses of the arch being positioned horizontally creating a platform which then supports the voussoirs of the arch, which is slightly pointed on the extrados, but perfectly round on the intrados (plate 5.16). The second, southern, arch is of the same shape and materials as the first one, and while it too has a slightly pointed extrados it is somewhat less elaborate in that is dispenses with the consoles. Structurally it appears to be coetaneous with the first
arch, though stylistically it is impossible to clearly determine its origin. The arches act as independent supports for the vault itself, which appears to date a later period as it does not bond with the arches. Instead it appears to lie on top of them as if replacing an earlier covering which collapsed.

Figure 5.18, Alaró, cistern W2, interior elevation. Source: Author

Cistern W2 is placed in the ground at a depth of some 3.60m, with the only part visible from outside being the vaulted roof. At its east end the concrete tabiyya wall had an opening which gives access to a staircase leading to the bottom of the cistern (Fig. 5.18). The interior is relatively well preserved, but cracks caused by roots, which allow seeing the thickness of the concrete casing, have damaged significant parts of the walls (plate 5.16). It is interesting to note that on the tympanum

Figure 5.19, Alaró, cistern W3, interior elevation and plan. Source: Author
created by the arch of the vault one can clearly see that *tabiyya* manufacture, particular in the part where the tympanum has been pierced, just above the original inlet.

W3 is in general somewhat similar in terms of shape and dimensions to W2, with the exception that it dispenses with vault supports of any kind (fig 5.19). The vault itself, however, is of the same style and manufacture as that of W2. Just as at W2, here too the plan of the structure is rectangular and very regular (plate 5.18). This cistern too is accessed from a flight of stairs which lead all the way to the bottom of the cistern. On the far end there is an inlet at about 4 metres above the bottom of the cistern, which most probably formed part of the channelling system which kept the aljibe full. If this aljibe was filled from the same source as W1 then it would make sense that the channels filling them forked somewhere down the slope or that W3 was filled by the overflow of W2, which would have required an outflow from W2 into W3. This, however, is purely conjectural without detailed excavations.

W4 is situated the furthest east from all the other others, some 50m from W2. In many ways it appears to be the least well thought-out of the cluster in that its plan is highly irregular and it has no stairs leading into it, presumably forcing users to draw water with bucket and rope and making maintenance significantly more complicated (Fig. 5.20). The fact that the materials and techniques employed in its construction are largely identical to those used at W2 and W3 (plate 5.20) make it likely that they were built in sequence, with W2 being the oldest, followed by W3 and then W4.
W5, which consists of nothing more than large, irregular depression in the ground, appears never to have been completed (plate 5.23). Its walls were daubed in the same manner at those of the other cisterns, and while it appears to have had a set of stairs leading to its interior, its large dimensions probably meant that it was never covered.

As with most cisterns in Mallorca the ones at Alaró too are usually said to have been filled by surface runoff. While this method of water catchment is not unusual for agriculturally used water and livestock, it is not normally used for human consumption. Water catchment by surface runoff is neither an efficient nor a reliable means to maintain a steady supply as the morphology of the terrain along which the water floods changes with heavy precipitation, therefore affecting the rate at which the reservoir is filled, and there is the added effect that the impurities washed into the cistern (leaves, soil, animal excrements), increase the likelihood of pathogens in the water. Also, for surface runoff to be effective in filling a 135m³ reservoir (W2) one requires some kind of funnelling structure, which is usually provided by the reservoir being built perpendicular to the slope, offering the maximum surface to the water running down the hillside, as was the case at cistern W2 at Santueri (plate 5.68). However, at W2, W3, and W4 this is clearly not the case as they are all placed in line with the slope. Furthermore, a series of inlets, all pointed in the direction of the nearest well, provide further evidence that these reservoirs were not filled by fortuitous streams making their way inside, but by an elaborate system of channels which connected them with springs and possibly with each other.

The two other structures in this sector (F5, F6) appear to be the most recent, in terms of their fabric, but their function is not entirely clear. They both appear to drain water from a series of springs and stored in a pair of attached cisterns, perhaps also acting as wells. F5 is the best preserved of the two and appears to have been in use until relatively recently. It consists of a cylindrical body which contains a drum-shaped cistern with a vaulted roof pierced by a wellhead (Fig. 5.21, plate 5.21). On its uphill side a 6m long platform protrudes towards the south-west, acting as an access to the well.
head, but also as a covering for a channel which runs to a spring in the rocks. This spring appears to bear water all year round as in midsummer the cistern was still half full.

On the downhill facing side of the cistern, just above ground level, is an outflow in the direction of cisterns W2 and W3 which lie about 50 metres away and 6-8 metres lower. It therefore stands to reason that there was a connection between F5 and the cisterns, but excavations which could provide a clearer picture of this arrangement have to date not been carried out.

F6 stands about 60 metres to the north-east of F5 on lower ground. This structure is in a largely dilapidated state of preservation and appears to have gone out of use long before F5 (plate 5.22). It consists of a cylindrical structure which appears to have contained a well, with a trapezoidal opening to its southern side, probably giving access to the well itself. This well is today filled with debris up to a depth of approximately 1m, making its original depth is impossible to determine without excavation. Abutting the circular feature to the north is a square depression in the ground with remains of low walls on the eastern side. This structure is likely to have been a reservoir similar in function to that of F5, probably filled by the overflow of the well during the rainy seasons.

**Sector 4. Chapel and refuge**

While it is likely that the site of what is now a hostel with a chapel and a canteen was originally the location of some of Alaró’s main structures (Fig. 5.22), no architecture from the medieval period remains to this day. The majority of the structures that are currently visible were built in the 16th century, a time when the threat of Ottoman invasion was at its greatest, to house the relics of the town of Soller, while other parts were built in subsequent centuries up to the 1980s.

There are, however, three cisterns of possible medieval origin underneath the complex, one of which is currently used as septic tank and other two are used as rainwater-collection tanks. The fact that all three cisterns are still in use makes it impossible to closely examine their wall fabric to accurately determine their construction dates.

The porticoed chapel was dedicated to the two local heroes known as Cabrit and Bassa, who were among the defenders of the fortress during Alfonso of Aragon’s invasion of the island. They repeatedly mocked the monarch from the safety of the castle, though when the fortress finally surrendered to the troops of Aragon Cabrit and Bassa were executed. The figures of Cabrit and Bassa
became personifications for the Mallorcan drive for independence from the mainland, and are in many ways considered, even today, to be martyrs for the cause of a self-determined kingdom of Mallorca.

**Sector 5. Torre de la Cova/Ermita de Sant Antoni**

On the southern edge of the plateau that makes up the castle of Alaró, there is a small cluster of ruins known in the medieval sources as the Torre de la Cova and today as Ermita de Sant Antoni, perched on top of a cliff some 400m high (plate 5.25). Structurally the ruins appear to be largely homogenous with the buildings of sectors 1 and 2, therefore dating quite firmly to the late 13th and early 14th centuries (Fig. 5.23, plate 5.24). In the *Llibre de Dades* of 1320 there is an entry dated February 28th detailing that 2 sous and 8 dinars were paid for ‘1 quartera de trespol ad ops de la Torre de la Cova’ (1 quartera of lime and aggregate for the construction works at the tower of the cave) (ARM, *Llibre de Dades*, 1320). This confirms that initially there was only a tower here, perhaps dating to the pre-conquest period, which was at a later date given a more residential character by the addition of a few minor ancillary structures. It is, however, unlikely that this expansion was undertaken in 1320 during the great expansion of the fortress, as in 1330 the site is still known as the Torre de la Cova (ARM, LC AH 9 f.23v,plate 5.83), whereas the name Ermita de Sant Antoni seems to appear at some time in the 16th century (Ramon Roselló Vaquer 1979). The original function of the tower was probably that of a lookout post, while the function of the later buildings is difficult to discern without excavation, but it appears likely that they date from the time the tower was transformed into a hermitage and they were therefore used for storage and living spaces. Unfortunately the plans drawn by Hölzel in 1910, when the structures were probably in a better state of preservation, are too inaccurate as to be of any help (Salvator 1994, 229) in assessing their original aspect.

![Figure 5.23, Alaró, Torre/Ermita de Sant Antoni, plan. Source: Author.](image-url)
It appears that the tower had no water cistern of its own, but this appears to have been unnecessary as some 30m to the east is a large cave, known as the ‘Cova de Sant Antoni’ which has a small spring with water all year round. There is also a small niche which appears to have had some kind of religious function.

One of the rather unusual features of the buildings in sector 5 are the arrowslits on the walls, pointing at nowhere in particular. The sheer impossibility of attacking the fortress from this angle might indicate that arrowslits were not used simply for defensive purposes but that, given a large enough angle of vision, they could be used as lookout posts while not exposing the observer too much to the elements.

**Viewshed analysis**

Due to the vast extension of the site the viewshed was generated from a total of six different points, all located within the castle enclosure. The resulting visual radius of the Castell d’Alaró is quite clearly directed at the interior of the island and due to its height of about 600m ASL the overall viewshed is among the most far-reaching of all the fortifications of Mallorca. From the Ermita de Sant Antoni, on the southern tip of the castle mount, one has a clear view from the bay of Palma in the south-west to the bay of Alcudia in the north-west (Fig. 5.24). Relevantly, however, the only other fortification that was possibly in use during the Islamic period as is visible from Alaró is the Puig de Sa Bastida, located about 3km south-west of the castle. As shall demonstrated in chapter 5 this site was of minor importance, and was unlikely to have been directly connected to Alaró in any way. This comparative lack of visual interconnectivity is indicative of the early settlement date of the castle mount, chosen initially only for its natural defences rather than for broader contextual implications.
There is a possibility, albeit a remote one, that though the castle of Santueri is not visible from Alaró, the mount of Randa, located about 15km to the south of Alaró, formed a relay point between the two sites. Unfortunately the lack of archaeology at Randa has prevented any conclusions as to Islamic use of the site.

**Conclusion**

As has been seen, the extremely long history of occupation of this site has turned the archaeological sequence of Alaró into a veritable palimpsest. Yet, despite the variety of different layers, of occupation and the complete lack of archaeological excavation it has been possible to a certain extent to determine the gradual changes in use of the fortress.

For one it was most certainly occupied during the Late Antique period, but acting rather as an *ad hoc* refuge rather than a permanently inhabited fortress. This role it appears to have maintained throughout most of its existence, though it may be assumed that during the Byzantine period the site was maintained with central funds rather than by the local peasantry (Procopius 1940, 129). It is likely that during the Islamic period it was precisely this point which proved to be the most substantial change for Alaró. While there was certainly an important enhancement of the site during the Islamic period, visible today in the construction of the cisterns, it is not entirely clear whether these reservoirs were built by the island’s central power or the inhabitants of the surrounding communities. Considering the important political changes which affected Mallorca between 902-1229, it is likely that at different periods the centre exerted more control over the hinterland than at others. In this context it may be stated that more elaborate elements, such as cistern W2 with its complex arched vault, date to a period of a comparatively strong centre, such as the 10th century. With the changing political realities in the wake of the collapse of Cordoba, the rise of the *Taifa* of Dénia and intermittent periods of de facto independence from the mainland, we may assume that renewed efforts were made to maintain or expand Alaró’s protective capabilities. In the time of the Emir Mudjāhid the peasantry attempted to evade taxation by fleeing with their livestock and other possessions to the fortresses in the mountains (Barceló 1984, 55-58; Riera Frau 1993, 141). By the early 13th century, however, we know from Ibn Amīra al-Mahzūmī, that the emir of Mallorca had no real control over the hinterland and that castles were not occupied by a representative of the state or a regular garrison (al-Mahzūmī 2008, 87-88).

At the time of the Christian conquest Alaró was in a readied state and from the sources we know that it was able to give refuge to several thousand people for about 2 years. In this context it is likely that Alaró must have had a number of features such as mills, storage facilities, shelters and of course sufficient water to support such a large number of people for a relatively long period of time. Clearly, however, of these structure nothing but the cisterns remains, and most of what we see today dates to the Christian constructions phases of the early 14th and 15th centuries.
C. Castell del Rei, Hisn Bulānsa
(39° 55’ 21”N, 3° 00’ 37”E)

The so-called Castell del Rei (Cat. Castle of the King) is one of the most fascinating and possibly also enigmatic of the castles of Mallorca. By comparison to Alaró and Santueri it has seen relatively little in the form of research and publications, and even today access to it is highly restricted by its current owners, the Fundació Joan March, as it lies in the midst of a large nature reserve. According to the Pla de Castells its current name came about at some point in the 18th century, prior to which it was simply known as the Castle of Pollença (M. Salva 1999b, 11), which is the name it already had in the Islamic period, Hisn Bulānsa, from its proximity to the ancient settlement of Pollentia (modern day Alcudia), which is not to be confused with the modern town of Pollença, which lies about 5km inland, and some about 4km from the gorge of Ternelles which leads into the valley of Ternelles where the castle is located (Fig. 5.25). In the Early Modern sources the fortress is sometimes also known as Castell de Ternelles, Castell de Cala San Visenç and occasionally even Castell de Cala Castell, the latter meaning rather redundantly Castle of Castle Cove.

The fortress is located in the far north of the island of Mallorca above the sea on a mountain looking towards the N and NW. The castle mount consists of a roughly longitudinal plateau running from NE to SW, with high cliffs on all side bar the SE, which limits the access possibilities to the top to this area. The mountain is located on the NW side of the valley of Ternelles, some 4.5 km from the entrance to the valley (Fig. 5.26). This valley can only be accessed from the sea, via the cove of Cala
Castel, or from the south through the narrow gorge of Ternelles, which is likely to have given its name to the entire valley as it holds an abundance of water and as such was probably important to the local farmers and settlers since the classical period. Pere Ventayol, in fact, has suggested the spring of Ternelles to be the starting point of the aqueduct which supplied the Roman city of Pollentia, some 16km to the SE (Ventayol 1924; 1927).

The valley of Ternelles is relatively narrow with steep rocky flanks, but appears to be quite fertile and the fact that there is an abundance of water in this area was probably one of the factors which had influenced the Romans in locating their capital city on the island, Pollentia, in this area of Mallorca.

The earliest mention in the literature of the Castell del Rei is likely to be that of al-Zuhrí, who, in relating the account of the Islamic conquest of Mallorca, talks of three fortresses which were conquered in the course of the invasion. Two of them are clearly Alaró and Santueri, and it is highly likely that the third, Hisn Bulānsa, is the Castell del Rei (Barceló 1977). Ibn Amīra al-Mahzūmī corroborates this in relating on various occasions how the three castles were prepared and fortified in the face of the Christian threat and how they served as safe-havens for refugees in the aftermath of Madīna Mayūrqa’s conquest in 1229 and 1230 (al-Mahzūmī 2008, 61,87,133). In his autobiography King James I of Aragón, also relating his conquest of Mallorca describes in some detail how the Muslims who had sought refuge in the mountains and castles of Mallorca elected for themselves a leader by the name of Xuaiq, native of Alcalà de Xivert, who set up his base at the Castell de Pollença (James I of Aragon 1997, 133). Xuaiq was succeeded after his death in 1230 by Abensiri
(Abū Hafs Ibn Šayrī) who held out in a mountain stronghold in the north of the island, from where he conducted regular raids into the lowlands until his death in 1231 (James I of Aragon 2003, 127). In the absence of any other fortresses of the medieval period in the north of the island the Castell del Rei is the most likely candidate for having served as the headquarters for Xuaip’s and Abensiri’s resistance movement.

In the aftermath of the conquest the island’s territories were shared out among the victors, and in the *Repartiment* it was stipulated that the Castell del Rei, just as Alaró, were retained by the King. This is probably the reason for which medieval sources tend to refer to either fortress in conjunction with the other. The documentation makes it quite clear that at certain times during the later 13th and early 14th centuries both fortresses were under the command of one and the same Castellan. This also explains why some of the dates regarding major restorations or expansions at Castell del Rei coincide with those undertaken at Alaró.

King James’ personal account of the conquest of Mallorca, though written towards the end of his life, contains the earliest Christian mention of the ‘Castle of Pollença’ (James I of Aragon 2003, 127). In the ARM the first document explicitly mentioning the fortress dates to 1311 and mentions the expense of £7, s.11 and d.6 for construction works at the castle (ARM, Baratillo, vol. 1, part 2, 122 [plate 5.80]). From the documentation we also know that the Castell Rei formed part of the fortification efforts undertaken during King Sancho’s reign in 1319-20, discussed in the previous section (ARM RP 3.397 f.140 [plate 5.79]) though these documents do not outline with the same precision as at Alaró the materials and expenses destined to the fortress.

The next mentions we find all date to the fateful year 1343, in which king James III of Mallorca, after having pursued a fairly expansionist policy in the Western Mediterranean and attempting to distance himself from the ever looming Kingdom of Aragón, was declared a rebel by his cousin Peter IV of Aragón (Abulafia 1997, 177). Peter invaded Mallorca and very quickly took control over the city and the island’s hinterland, with the exception of the three fortresses. Initially the defenders of Alaró, Santueri and Castell del Rei all offered resistance to the Aragonese claims but eventually surrendered when it became clear that the kingdom of Mallorca had passed into the pages of history on September 4th 1343 (ARM Prot. ECR P-145 f.3v, ARM Prot. ECR P-145 f. 4v-7 [plates 5.84-90]). In the case of the Castell del Rei we have at our disposal a number of documents which suggest that a variety of techniques and siege engines were used to besiege the fortress in the summer of 1343. Hence we find that in a document dated September 1st 1343 Pere de Conaguell, *castellanus Castri Pollencie*, confirms the receipt of *machinarum sive trabuchs* (machines such as tebuchets) together with large quantities of wood from Ibiza, galley masts as well as *millen ducentos agutos sive aguts*, (1,200 nails) (ARM, Prot. P-145, f. 10 [plate 5.91]). The practice of dismantling galleys and other ships in order to use the wood to construct siege engines was a relatively common practice.
among the seafarers of the Middle Ages (Kennedy 1994, 102), and indeed, during James I’s attack on Madīna Mayūrqa in 1229 he received help from sailors from Marseille who...have come here to serve God and you, and propose to make a trebuchet, at [their] own expense, from the masts and wood of the ship... (James I of Aragon 2003, 93).

There were several subsequent construction phases, like that of 1423 during which the walls of all the castles (Alaró, Castell del Rei and Santuari) were strengthened and ... é per ço se feu fortificar tots els castells é portar en aquells munisons de pedres é ballestes é las viatuallas necesaris... (…and because of this the castles were to be strengthened and to bring to them ammunitions of stones and crossbows and the necessary supplies) (ARM Baratillo, vol I part 2, 213 [plate 5.93]) as a result of a potential Genovese invasion. The large stone balls lying on the floor of area A3 (plate 5.32) are probably the remains from this fortification effort, and they were likely to have either been ammunitions for a rather large trebuchet, or simply used to drop from the parapet onto any potential assailant. Another important restoration of the castle which took place during the time of the Ottoman threat in 1543, during which £48, s.9 and d.8 were spent on construction materials for the fortress (ARM, Baratillo, vol 2, 183, ARM Llibre de Dades 1543-44 [plate 5.93]).

Architectural Analysis

The significantly smaller size of this structure, in comparison to Alaró, does not make it necessary to break-up the entire complex into different sections, though it is useful to divide the lower/southern sections into 3 general areas, comprising the outworks (A1), the yard with its adjacent structures (A2) and the spur (A3) (Fig. 5.27). Hence, in its examination of the architecture, this section will proceed from south to north, starting with area around the gate and outworks (A1). The level plateau on which

![Figure 5.27, Castell del Rei, plan. Source: Author](image)
the fortress stands drops off quite significantly towards the south providing the only comfortable access point to the plateau, and it is here where most of the structures are concentrated. The morphology of the plateau allows one to roughly distinguish three different levels, with the lowest part of the castle being comprised by the southern spur (A3), while the central parts comprising the courtyard (A2) and several ‘service’ structures (R2, R3, R4) are set at mid level. Proceeding to the north the terrain gradually rises giving access to a large hall (R1), a pair of cisterns (W1, W2), a lengthy building of unclear function (R6) and a barracks dating to the civil war period (R7). Further to the north we find the remains of an open-backed tower (T2) which gave access to a postern (F2).

The castle is usually approached from the south-east along the floor of the valley of Ternelles, from where it becomes visible only over last kilometre or so. The last 100m to the castle are along a narrow and steep path, while the entrance to the structure itself is through a crevasse in the rock face of the cliff, barely one metre wide, making it impossible for wheeled transport to enter the fortress.

**Outworks and gates**

One approaches the fortress walking along the base of the cliff, directly below the fortifications of area A3, from where the entire path is covered by arrowslits. Today the complex is accessed from the east via a narrow gap in the cliff face, though there are remains which clearly indicate that originally the gate was protected by a series of outworks (A1) (Fig. 5.28). despite their largely dilapidated state of preservation makes it is still possible to discern their original aspect: A convex wall (plate 5.28) connected to the main body of the castle created an enclosure (A1), which at its southern end appears to have made a 90 degree angle towards the castle, creating a parapet for a platform which was created behind it by levelling the ground. The wall, parapet and platform are all made from fairly regular courses of un-worked limestone, with lime mortar and fine aggregate used as a binding agent.

---

**Figure 5.28, Castell del Rei, main buildings, plan. Source: Author.**
It is likely that the threshold between the parapet and the wall-stump which extends east from the castle was originally gated, perhaps by a large round arch, as at Alaró and Santueri. A series of broad steps carved into the bedrock at this location give further indication that the access to the fortress was originally much more elaborate than it appears today. In view of the stylistic and documentary evidence it is in fact likely that this section of the Castell del Rei stems from the same fortification effort as the outworks at Alaró, and taking into consideration the materials employed at its construction and its current state of preservation it appears reasonable to set its construction date to around 1319-1320, the year of Sancho’s illness and subsequent strengthening of all of Mallorca’s castles.

After following the steps from the outworks around a left-hand bend one arrives at what is today the main gate (plate 5.30) which is accessed through a crevasse in the rock face leading up a narrow vaulted passage underneath chamber R3. The gate-arch and jambs were heavily restored during the late 1990s with a reddish sandstone not locally available, and is therefore probably not of the same appearance as the original. In the wall above the gate one can see the outline of an arch the function of which is unclear, though one might be able to draw a parallel between this feature and the machicoulis on the top of floor of the gate tower at Alaró (plate 5.7). Hence this opening might have been part of a machicolation which protected the gate. The entire gate arrangement appears to have been the subject of many successive modifications and restorations, and its current state is not indicative of its medieval appearance as in a sketch by Ludwig Salvator (plate 5.29) it consisted of two round arches one above the other, leaving a large open gap between them. The interior ceiling of the vault is somewhat higher than the extrados of the gate arch, leaving space for a murder hole immediately behind the arch, suggesting that originally the gate was about 50cm further inside the crevasse than it is today.

The ground inside the gate rises gradually along a series of broad steps paved with beach pebbles making a sharp left hand bend, to meet the level of area A2, which consists of a large open courtyard, though originally access to this courtyard appears to have been closed off by another gate, as a hole carved into the rock at the end of the steps leading to A2 was likely to have been used as a hinge for a gate post. The courtyard comprises the mid-level section of the fortress giving access to a series of ancillary chambers such as the kitchen and bread oven (R2) (plate 5.33), the gate chamber with the murder hole above the gate (R3) (plate 5.35) as well as leading to the lower sections of the castle with the main defensive systems (A3), and the higher sections where the great hall/chapel (R1) and the water cisterns (W1, W2) were located.
Southern Section: spur, shooting chamber, curtain walls and ‘Latrine’ tower

The lower, southern, sections of the Castell del Rei consist of a roughly V-shaped and heavily fortified platform (T1) with a *cambra de tir* (Cat. shooting chamber) on its interior (plate 4.31). Extending north from this platform the curtain walls run along either side of the cliff creating an enclosed space which appears to have been uncovered throughout its history as there are no visible remains of corbels or pilasters that might have supported a roof. The ‘shooting chamber’ is one of the more unusual elements of the Castell del Rei. The writers of the *Pla de Castells* suggest that this section of the castle might initially have been only a trapezoidal wall section which was closed off from behind sometime in the early 14th century, creating an enclosed chamber which was then provided with a large arrow slit for heavier weaponry such as iron crossbows and the likes (M. Salva 1999b, 36). One may largely agree with this view as the wall fabric from the rear wall of T1 is quite distinctive in its appearance from that of the curtain walls against which it abut, but does not bond.

The platform created by the construction of the chamber below was accessed from the east along the wall walk. A line of corbels along the exterior of the chamber wall suggests that wooden boards or beams were used to create a foot bridge from which one could step from the wall walk onto the platform. The platform was quite heavily restored during the late 1990s by the current owners of the castle (*Fundació Joan March*) and they have erased the last traces of a series of merlons which were described but not depicted in the *Pla de Castells* (M. Salva 1999b, 36). The possible deployment of ballistic weapons such as trebuchets at the castle has been mentioned above, as suggested by the stone balls lying in area A3 (plate 5.32), and the platform above the shooting chamber was the most likely location for such a device. At present, however, this assertion is largely conjectural, despite the fact that the use of large siege engines for defence rather than for attack is not unusual in itself, as is attested by James I account of the siege of Mađīna Mayūrqa, which was defended by fourteen *algarrades* (catapults) and two trebuchets, placed above the towers that protected the city wall (1997, 68; 2003, 93). The sections of curtain wall making up area A3 stand to their original height with a wall walk still intact and a total of 7 arrowslits the interior faces of which have been restored with reddish sandstone, but are otherwise in original condition. The plaster on the interior of the walls is still largely intact, suggesting a relatively late application, while the wall-fabric itself is difficult to date, due to its homogeneity with the rest of the structure. With a breadth of about 1.8-2m, however, the sheer massiveness of the east wall demonstrates a clear distinction between the external fabric (smaller stones and highly irregular coursing) from the much more regular interior fabric which also employed larger blocks of masonry and occasionally well-dressed ashlars, suggesting that the walls were gradually strengthened over time towards the interior, rather than built from the ground up in one continuous effort.
There is little doubt that these walls stand upon Moorish foundations, as this area comprises the main defensive features of the complex, but the fabric of all currently standing remains is clearly post-conquest in that there are no traces of any tabiyya elements at this section of the Castell del Rei. Nevertheless, just as at Alaró there is the distinct possibility that the lower levels of the retaining structure, which was built to level the ground on the interior, is of Moorish origin, though in order to verify this excavations on the interior of the fortress would be necessary. There are also a number of interesting features in the chamber here designated as R5 (plate 5.37). This small, square structure, with disproportionally solid masonry walls was unlikely to have had any kind of residential purpose simply because of its reduced dimensions (1.3x1.2m). The fact that it is crossed by a channel which is accessible from the interior, coming from section F1 (Fig. 5.28), might suggest that this building was used as a latrine, though that function would beg the question why a fortress perched 500 metres above the sea would require a latrine positioned next to the entrance and with such an elaborate drainage system. If this building was, in fact, a latrine then the sewage would have been transported along the interior of the curtain wall downhill towards section A3 in a channel which has here been designated F3, where it would have gone through the wall to the outside via a drain. The solidity of its walls and the stone vaulted ceiling suggest that it formed part of the fortress’ defensive perimeter, most likely as a platform with a crenellated parapet, covering the main access route to the castle. There are no remains of any access to the top of this feature, though judging from its size it is likely to have been accessed via a wooden ladder rather than an elaborate masonry stairwell. The interior of chamber R5 gives no further clues as to its function, where, with the exception of a single very small arrow slit directed at the outworks and a window looking toward A2 there are no discernible features.

**Mid-Section: courtyard, kitchen, oven and ancillary chamber**

The area of the fortress designated as A2 was an open courtyard, though it is possible that some parts of it were porticoed. In particular the southern wall of the kitchen (R2) building appears to have enclosed a section of the courtyard. The medieval sources mention the existence of a mule-driven mill at the castle and, though its location is unclear, the necessity for fairly level ground would make the courtyard a likely placement.

There appears not have been any clear spatial differentiation between areas A2 and A3, apart from the difference in elevation, and a low retaining wall levelling the ground for area A2. The threshold, however, connecting the two sections of the castle contains some interesting features. In the area immediately north of the ‘latrine’ tower R5, between two low standing wall sections, the path is carved out of the bedrock (plate 5.34), with a channel and a pair of horizontal grooves perpendicular to the channel standing out as unusual elements. The two grooves were probably related to the gate or
door which blocked this passage, though while the channel was part of the drainage system (F3) for the higher sections of the fortress.

On the northern side of the courtyard one finds a building which can quite easily be identified as the castle kitchen because of its association with a rounded and domed structured which was clearly a large bread oven, of which it may be assumed that it would have supplied the garrison (plate 5.33). This building too is largely dilapidated, standing only to a height of about 50cm, with the oven being in only a marginally better state. Its dome is almost completely collapsed though its curvature and brick/ceramic revetment are still clearly visible. The oven in particular bears a striking resemblance to the one at Santueri which shall be examined in the following section. In terms of its construction technique, R2 and the oven are completely homogenous in their fabric and appear to have been built simultaneously. They do, however, differ slightly from other parts of the complex, in that the walls are made from smaller stones, compounded with larger amounts of lime mortar, making the whole structure somewhat weaker. This may be due to the more mundane functions of this building which cannot have been expected to withstand the abuse of warfare.

The other two structures in this area of the Castell del Rei are the two chambers, designated R3 and R4, which are attached to each other and the curtain wall being located immediately above the entrance passage of the main gate. The functions of either of these chamber is difficult to discern without further evidence, though it is fair to assume that they were basically destined for storage and residence. In the case of R3, there is a vaulted undercroft (plates 5.35, 5.36) set into the curtain wall that acted as a murder-hole from which to cover the entrance to the castle which passed underneath. This entire section of the curtain wall, together with the murder-hole was quite heavily restored during the 1990s, as can clearly been seen by the re-pointing of the wall with an orange picadis plaster and the aforementioned reddish sandstone also used at the entrance arches. Presumably these materials were chosen to give the fortress a more ‘rustic’ character though it could not be further from the structure’s original appearance, in which the walls were covered with white lime plaster. Considering the location of Chamber R3, above the passage way, it is unlikely to have formed part of the original fortification concept of the site as the architectural solution to vault the passage is probably too elaborate for what was never a particularly high status structure. A later addition of both chambers is in part also corroborated by the fact that the walls of the chambers do not interlock with the fabric of the curtain wall, with which it simply abuts. The walls of chambers R3 and R4 are of the same construction style and materials as those of the kitchen and oven buildings (R2), probably making them coetaneous. It would, however be interesting to carry out an archaeological examination of the ground under the floor level of R4 or R3, as this location is likely to yield older levels which could give some much needed clues regarding the occupational history of the Castell del Rei.
Uphill from area A2 one climbs a short ramp about 2.5m high, around a rocky outcrop atop which stands the building known in modern sources as the chapel (Pla de Castells 1999). Judging from its alignment and proportions, however, it was most likely constructed to serve a more social function, which is further suggested by the fact that it is clearly aligned NS and lacks any kind of chevet or other architectural elements reminiscent of ecclesiastical architecture (Fig. 5.29). Indeed, in an inventory dated August 3rd of 1343 there is no mention of any religious structures at the fortress (ARM Prot. ECR P-145, f. 4v-7 [plates 5.85-90]). By 1354, however, it is stated that there is a casa de la capella which had a campanar (belfry) and a scela (small bell). This substantiates the claim made here that the structure was originally conceived with a secular function in mind, but that the changing political realities which saw the end of the Kingdom of Mallorca around 1343, also determined a change in function for the Castell del Rei. Hence, sometime between 1343 and 1354 the hall was transformed into a church or chapel. From photographs taken in the early 1900s (plate 5.39) and also from the descriptions in Ludwig Salvator’s book we know that it was initially covered by three bays of pointed groin-vaults, separated by two transverse arches of unequal width and originally standing.
to a height of approximately seven metres, which is today completely collapsed as a result of a storm (Salvator 1994, 258-259).

The hall/chapel is a fairly regular rectangle measuring almost exactly 7x14m, and with a large access about 1.1m wide on the eastern side, which was originally likely to be arched. Stylistically it matches the architectural style that characterised the reign of James II (d, 1311), who became the patron of many important architectural monuments in the city of Palma. Among them we find such structures as the castle of Bellver, the (much restored) Cathedral of Palma and the Almudaina Palace, all of which brought to the island large numbers of highly skilled masons from the Spanish mainland and southern France. It is therefore possible to see the hall of the Castell del Rei, with its large cross vault and daring location in this tradition of architectural adventurism which swept Mallorca in the early 14th century. In this context it is quite fitting that a large part of the western wall consists of the very rock that makes the tip of the cliff upon which the castle stands (plate 5.38). The rock face was carved out so as to appear to be part of the building. It was also plastered to match the wall texture, while the bracing arches which supported the vault rose directly from the rock, as can still be seen by markings on the rock itself and from old photographs. Today its walls are almost entirely collapsed standing to height of only 40cm to 1m. There are, however, still a number of features which may give some clues as to its original appearance and function. A large number of stone vussoirs lying around the area are likely to be not only the remains of the vault and arches, but also of an arched gate which would have lead to the interior of the building, where one can still clearly see the octagonal bases of the pilasters from which the southern arches rose to meet in the middle. The ground was covered by a thick layer of white plaster, which was originally probably tiled, though the tiles have now all disappeared. On the western side a narrow ledge about 15-20cm wide was carved into the rock giving it the appearance of a bench. Similarly on the northern end there are clear remains of what appears to have been a masonry bench running the length of the wall.

We know nothing of the original appearance of windows and the lighting of the interior, though, in view of the extremely exposed location of the structure, it is unlikely to have had any overly large opening. There are also no remains of a fire place or chimney which, if it was used for social gatherings, it is most certain to have had.

The Cisterns: a potential dating sequence for Castell del Rei

Immediately to the north of the hall/chapel, and connected to it via a narrow channel, let into the ground to a depth of around 3m is a cistern, termed here W1 (plate 5.40). This is the best preserved of the two cistern of Castell del Rei, probably because it was the one which was used by republican soldiers stationed at the castle as lookouts against enemy aircraft and vessels during the Spanish civil
war (1936-1939). The cistern appears to have been carved partially into the rock, but was largely the product of a gap generated by the construction of the retaining wall which was built above the cliff, (as at W1 in Alaró) but with which it does not abut, leaving some 4-5 metres between the interior of the cistern and the exterior of the wall. It is slightly trapezoidal in shape, with the southern side measuring about 2.8m and the northern side 3.4m, by about 7m in length. The cistern is today covered by a barrel vault roof supported by two solid round arches rising from square pilasters of clearly modern manufacture. With an approximate volume of about 60m³ it is the smaller of the two cisterns of Castell del Rei and also one of the smallest in all the major castles in this study. While its current appearance is largely the product of 20th century restoration is it likely to predate the construction of the hall, quite simply because of the relevance of water and it being a basic requirement for construction. Furthermore, in view of the clearly pre-invasion remains at W2, it is likely that W1 also already existed prior to 1229, though without a more invasive examination this is impossible to confirm.

The channel which connects the cistern with the north wall of the hall/chapel (Fig. 5.29) was probably used to collect and conduct water from the roof of the hall directing it into the cistern as it is much too narrow to allow for a person to access it with ease. The channel is about 90cm wide and 45cm deep but it does not appear to have been covered. Its interior is laid out with limestone slabs in a manufacture similar to that of the hall. It does not appear to have been plastered, which would have been a likely requirement if its function was to carry water, and a narrow step appears to have given access to it from the eastern side. It is also worth noting that the channel walls do not interlock with the northern wall of the hall, indicating that is was built sometime after the hall. The function of this feature is therefore somewhat enigmatic, as it is quite simply too narrow to allow for a person to access comfortably, while at the same time appearing too over-dimensioned for just carrying water.
Even if it were in fact used to fill the cistern with runoff from the roof of the hall/chapel it would still not explain how the second cistern (W2) was filled, unless there was some kind of overflow arrangement between both cisterns, the traces of which might have been erased by the restoration of W1 during the Civil War years.

Cistern W2 is situated a few metres further north of W1, with no visible connecting feature between the two. Its location was determined, just as at W1, by the gap left by the retaining wall. Hence it is morphologically almost identical to W1, though with approximately 104m³ it is somewhat larger in volume. Being un-restored and in a collapsed state, the remains of this feature provide us with a unique glimpse of its structural history as all its various construction layers, from the tabiyya casing of the Islamic period to the remains of a sandstone vault and cladding, likely to date to the restorations of the early 15th century, are clearly visible (plate 5.41). It was quite clearly also covered by a vault, as can be seen from the remains of two arches springing from the cistern walls. Of these arches only the first few stones remain but the fact that they are flat, gradually rising at an angle directly out of the wall suggest that they may have originally born a striking resemblance to those of W2 at Alaró. A series of faintly visible flat vussoirs on the south-eastern springing (plate 5.42) might indicated that here too, just as at W2 in Alaró, the arches rose from two pairs of corbels, which were obscured by later daubing and re-proofing of the interior (Fig. 5.30). Also, the vussoirs appear to have been flat, brick-like slabs of limestone rather than large wedge-shaped blocks. There are also remains indicating that the entire vault was decked out in flat, rectangular limestone slabs, though whether this vault was still supported by the original arches or whether these were already collapsed by the 15th century would require an excavation of the cistern interior. Another revealing feature of cistern W2 are the collapsed sections of the interior wall in the SW of the structure which shows in detail the successive layers of mortar and aggregate used to fill the space between the exterior retaining wall and the cistern itself (plate 5.41). One can quite clearly see that these layers reach only as far as the springing of the arches, the breakage of which reveals a tabiyya casing behind the thick ceramic based waterproofing plaster observed elsewhere in these kinds of structures. While this small wall fragment of rammed earth does not conclusively prove an Islamic origin for this structure, it does make it likely to have been built in the pre-conquest period, with many successive reparations and expansions taking place in later periods. The horizontal layering of the plaster and aggregate also give some hints regarding the construction techniques employed during these later periods. The aggregate consists of rough stones, probably broken on site in order to generate gravel, mixed with beach sand and lime. The larger rocks were spread out on the ground and then covered with a layer of mortar creating successive layers of rocks and mortar. The fact that the mortar was mostly hardened by the time the next layer of rocks was put down, suggests that either the workforce engaged in the restoration of the castle was quite small, or that the waits between successive arrivals of material were quite long, or indeed both.
The northern, higher, sections of the Castell del Rei are largely barren rock, with very little in the way of clearly identifiable archaeology. There are a number of sections of retaining wall along the eastern and western cliff faces, but due to their exposed location a close up and detailed examination of the fabric is a risky undertaking without the proper equipment.

**The Northern Tip: postern and watch tower**

On the far northern tip one finds the structural remains of what is likely to have been a tower, designated T2, and a small postern, which would have allowed exiting or entering the castle practically unseen, along an extremely dangerous path which originally lead to a narrow ledge from which a 5 metre drop onto another ledge was required to continue further down the cliff side. Considering the difficulty of walking/climbing this route it is likely to have been used only in case of emergency, though from it, it might have been possible to reach the cove of Cala Castel unseen from the valley. Of T2 little more than the foundations remain, but it had a side length of approximately 4x4m and probably had a similar appearance to the tower at Santueri in that it was made in an opus spicatum technique and was most likely gap-backed as there are no discernible remains of a southern wall. Today the remains of these two features are limited to a 1.20m high stretch of wall from the tower’s western side, and a narrow flight of steps leading from the north of the tower down the cliff (plates 5.45, 5.46), making a left hand bend after 6 steps. A series of corbels on the wall next to the steps suggest that the stairs were originally covered by a vault, which would have required substantial supports on the opposite side, of which today only the foundations remain.

The tower itself, rather than having had the function of defending this practically inaccessible postern, was probably used as a higher vantage point from which to survey the surrounding coast. Also, from this point on a clear day one can see as far as Menorca, though the distance was probably too large for the practical use of any medieval visual signalling devices. It appears that this structure and the gap-backed tower at Santueri stand in a tradition which became common during the 12th and 13th century.

**Channels and water catchment**

There is little doubt that water catchment and storage were among the most important aspects for a fortified refuge such as the Castell del Rei was probably conceived as. We have established with reasonable certainty that W2 is of Islamic origin and it is therefore also likely that W1 was constructed in the pre-conquest period, though the substantial alterations which have taken places on this structure do not allow for any conclusive dating. Indeed, an Islamic date for at least one of these two reservoirs is highly likely as tabiyya construction requires a fair amount of water for the mixture
of the compound. It is, therefore likely that a reservoir of some kind would be among the first structures to be built at the construction site. As with most other structures of this type in this study, the question as to how these cistern were filled have largely been ignored, or simply expected to have been filled by surface runoff. It was mentioned above that this was by no means unusual in Mallorca, but surface runoff water was usually used for agricultural use, and not commonly for human consumption.

At the Castell del Rei there are a series of water channels, the function of which is not entirely clear. They appear to have been part of a complex network of channels but are not readily associable with any of the reservoirs, with the exception of the connecting feature between the hall (R1) and the cistern W1, though whether this is in fact related to water catchment is unclear.

There are further channels set into the eastern curtain wall immediately behind chamber R4 (plate 5.43). Here the channel appears to have started at the level of the wall walk and then disappears into the wall, and about 3m to the north at the bottom of the curtain wall it re-emerges towards the interior of the castle. Judging from the thickness of the walls of R3 and R4 it is reasonable to assume that these chambers were covered by a wooden roof with roof tiles which may have been angled towards the wall walk, instead of towards the interior of the building. Water flowing down the roof could have been caught in this way and conducted along the channel to a reservoir. It is likely that these conduits transported water that ran off the roofs of chambers R4 and R3, which was then channelled downhill toward the courtyard and perhaps connected with the other system of channels which appears to have acted as a sewage system. As there are no remains of any water storage facilities below the level of W1 and W2 the function of these conduits is not entirely clear.

While it is possible to date the two cisterns with reasonable accuracy, to the Islamic period, pre-dating 1229, dating the canals is somewhat more complex as they cross all layers in the wall fabric. In particular the channel running along the lower sections of the castle is likely to originally have formed part of a simple drainage system. With heavy winter rainfall area A3 would have filled up like a bowl within a very short amount of time if did not have a series of drains evacuating the water. The long channel (F4), however, does not readily fit into this function. for one, there is not practical reason for conducting water from the courtyard along a 30m long canal when one could just let the water run off the cliff side. Furthermore, the elaborate system whereby F4 crosses through and below chamber R5 makes it appear as though it was purposely designed to work in conjunction with this structure (plate 5.44).

**Viewshef analysis**

In order to generate a viewshed for the Castell del Rei a total of 4 point were taken in order to account for the length and variations in topography of the site. Due to the location in the mountainous
surroundings the visible radius of the castles spans most of the valley of Ternelles to its south, and providing also a 180° view of the entire northern maritime approaches to the island. While on a clear day one can see as far as Menorca, located about 65km to the east, without visual aids it becomes impossible to distinguish individual vessels beyond a distance of 30-40km.

![Figure 5.31, Castell del Rei, viewshed analysis. Source: ASTER matrix and additions by author](image)

In terms of interconnectivity it may be argued that the Castell del Rei was practically isolated from a visual point of view as it does not connect in any obvious manner with any of the other fortifications in this study. There is, however, a narrow gap between the mountains on the southern flank of the valley of Ternelles which permits a direct line of sight between the castle and the town of Alcudia, Roman Pollentia (plate 5.47). While due to the standard deviation of ±4 metres of the ASTER matrix here employed it has not been possible to recreate this in the viewshed rendering (Fig. 5.31), this does give us a direct link between the castle and the Roman capital of Mallorca placing the castle’s origins squarely into a Roman context.

**Conclusion**

It has been pointed out that the settlement history of the Castell del Rei is largely comparable to that of the castle of Alaró, and in general fits into the same typology in that it too is a *Castillo Roquero*. There is, however, one important difference between the two structures in that the Castell del Rei is oriented towards the sea, rather than the interior of the island. In this respect one could argue that the entire concept of this fortress differed substantially from that of Alaró in that the Castell del Rei could be called a coastal fortress or fortified lookout point. This however, appears overly simplistic because it presupposes that the site was used in the same manner throughout its history.

In all likelihood the site was first occupied in any significant manner during the late Roman period, and in this context its proximity to the city of Alcudia/Pollentia was probably the main reason
for the choice of location. This might suggest to some that the decay of Pollentia as an urban centre of political and economic importance would also have seen the Castell del Rei being abandoned. It is, nevertheless, difficult to agree with this point as the fortress continued in use during the early 10th century, suggesting that there was no need for a direct association between fortress and city for the former to remain in use.
The third and last building in this chapter is the castle of Santueri, located in the south-east of Mallorca, near the town of Felanitx (Fig. 5.32). Santueri is one of the best preserved and most complete of the castles of the island, though there are significant lacunae as to its documentation in the medieval sources, due largely to the fact that it was not part of the King’s domain until around 1300 (Rosselló 2006, 462; 2007a). Despite this comparative lack of textual sources, Santueri is the only building in this study to have received some archaeological attention, albeit by an amateur metal detectorist (Ilisch et al. 2005). As with Alaró and the Castell del Rei, Santueri also figures in al-Zuhrī’s text about the Muslim conquest of the island in 902, though the fact that it is not mentioned by name has caused some discussion regarding the location of the site named by al-Zuhrī (Barceló 1977; Rosselló 2000). The reference to Santueri as one of the three fortresses conquered by the armies of Hishām al-Hawlānī in 902 has largely been confirmed by al-Mahzūmī’s mention of the fortress as Hisn Falanis or Faloms, coinciding with the nearby settlement of Felanitx (al-Mahzūmī 2008, 148).

**History**

Over the years there have been a number of theories on the fortress’ origin, in particular in regard to its denomination. The Pla de Castells attests the first mention of the name Santueri to the Dominican friar Pere Marsili in his Chronicon of the life of James I (1999, 13). He writes that during the preparations for the invasion of Mallorca, at a meeting in 1228 at the house of Pere Martell in Tarragona the host told those present, among whom was the young king, that the island was protected
by three very strong fortresses, one of which looked towards the parts of Africa and was called Santuery. The place-names used in this document are unfortunately only of minor value as Pere Marsili was writing some 90 years after the events he describes and at the request of King James II of Mallorca. There is, therefore, a strong political bias in the text, aimed primarily at establishing a sense of continuity between the pre-Islamic and the post-conquest period, as if the Islamic period had been a mere parenthesis to the Catalan claims to the Balearic Islands. In the first Christian archival sources of the 13th century it may be found written as Sentoeri (M. Salva 1999c, 9). Its history in the aftermath of the Catalan conquest goes a long way to explain the scarcity of sources referring to the castle in the ARM. Upon the island’s conquest of 1229, King James I divided the territories out among his vassals and those who helped him in the campaign. The king kept for himself the lion’s share, approximately 50% percent of the island, including the fortresses of Alaró and Castell del Rei. Most of the SE of the island, and with it the castle of Santuerei he gave to his uncle, Nyno Sanç count of Roussillon. Hence, the documentation outlining proceeds and expenses from his dominions on the island were not archived at Palma, but at Perpignan and/or Montpellier. The fact that he laid claim to the fortress even before the invasion was underway has been suggested by the authors of the Pla de Castells to mean that one of his ancestors, who might have taken part in the Pisano-Catalan raid of 1114-1115, had already laid claim to the fortress (M. Salva 1999c, 14). This is, however, completely conjectural, and to substantiate this claim further would require the availability of the Sanç family archives, which have largely been lost.

The earliest dates of occupation of the site of the castle of Santuerei have been subject to a degree of controversy. Studies undertaken at the beginning of the last century by the geologist and archaeologist Darder Pericàs have suggested a chronological horizon of approximately 2000-1600 BC for the earliest occupation of the rock shelters in the cliff face below the castle (Pericàs 1915), and, while a modern re-evaluation of these finds might provides a different dating sequence, the fact that the mount was occupied during the Talayotic period is largely beyond dispute.

**Archaeological finds**

During the late 1990s a Swiss amateur metal detectorist, Rupert Spillmann M.D., systematically surveyed the entire enclosure of the castle mount of Santuerei, unearthing some 10,000 metal artefacts ranging from simple metallic fragments to coins, weights, seals, fibulas, needles and clasps of practically all western Mediterranean ages. With agreement of the castles’ owner, Spillmann took these finds to the University of Tübingen, where they were examined, and a study on the coins and weights was eventually published (Ilisch et al. 2005). The finds, which are now on display at the Museo de Mallorca, shed some much needed light on the history of the island, in particular for the periods between the collapse of the Roman Empire and the Islamic conquest of the 10th century; a
period about which we, again, know next to nothing due to the near total lack of archaeology conducted.

**Coinage finds**

The coins of Santueri, found dispersed over the entire area of the plateau provide us with a unique glimpse of the settlement history of the site, and a prudent interpretation of these finds will allow us to make certain assumptions regarding Alaró and Castell del Rei, while their spatial distribution can provide us with some important clues as to how these sites were used at different periods in their history.

*Figure 5.33, Santueri, plan and sectors of study. Source: Author.*
Of the 10,000 or so artefacts recovered some 10% are coins, most of which are datable with a fair amount of precision. The earliest coin found at the site is a bronze numisma from Ibiza, dated to 214-150 BC, with finds from the Classical period gradually increasing during the Republican era, and the bulk (ca. 230) dating from the late 4th to the late 5th centuries (Ilisch et al. 2005, 10-13). This is suggestive of a constant usage of the site throughout the Classical period with a sharp rise in activity at Santueri in later Antiquity. Due to the comparatively small number of finds from this period their spatial distribution appears somewhat erratic, though there are concentrations on the high ground, suggesting a more permanent settlement of this location during the period. A move to the high ground by the rural population is often indicative of a weakening of governmental institutions, and/or a rise in the threat-level perceived by the people. The fact that at Santueri the intensified use of the site coincides with the gradual decline of Imperial power in Hispania, Vandal migration into the Iberian Peninsula (AD 409) and their eventual conquest and settlement of North Africa (AD 429) supports a picture of increased potential danger on the Balearic Islands.

The Vandal period in Mallorca itself, dating roughly from AD 468-543, appears to have left no substantial remains in the coinage finds of Santueri. Ilisch et al. mention but one find minted at Carthage dating to 494/496 (2005, 15), and it is possible that due to the relatively long circulation dates of silver coins its date of deposition in fact falls into the Byzantine era.

From the mid 6th century the islands enter into the Byzantine sphere of control, and with a total of 11 coins, the finds from this period may appear small in number, but the fact that 5 of them are 8th century gold solidi is suggestive of a prolonged and intense use of the site until at least 775 (Ilisch et al. 2005, 22-25). A number of copper coins dating to around 715 and usually considered to be without value outside the Empire, suggest that the islands were firmly under Byzantine control and linked economically to southern Italy and Sicily, which is where the majority of the Byzantine coins found at Santueri were minted. Together with a large number of lead weights and seals the finds from this period are the most varied in terms of type of artefacts, again suggesting a long and multi-faceted usage of the site until the late 8th century. (Ilisch et al. 2005, 19-25, 106). In particular the surprising number of lead seals indicates that the castle had a role which extended far beyond the simple scanning of the coast. Indeed it appears that the fortress’ functions were of a far more administrative and fiscal nature than had hitherto been expected.

With some 570 coins the bulk of the finds from Santueri are of Islamic origin, the earliest of which date to the early 8th century, being fragmentary gold coins minted in North Africa around 710. Ilisch et al. state that these finds do not represent any kind of Islamic involvement in the Balearics, but that instead they belonged to the Byzantine trade convection, which often used precious metals at base value in more peripheral areas of the Empire (2005, 35). The Islamic coinage from Santueri is roughly divisible into three main groups or types, with 130 fragmentary dirhams dating to the periods
of the Umayyad Caliphate of Cordoba and the subsequent Taifa kingdoms, among which Mallorca figured as part of the Taifa of Dénia (which was the first Taifa to strike its own coinage) from 1015 to 1050. The early 12th century, around the time of the Pisano-Catalan raid on Madīna Mayūrqa (1114-1115), is barely represented in the finds, leading Ilisch et al. to suggest an interruption in the use of the site (Ilisch et al. 2005, 34). The second group is comprised by some 370 silver coins of the Banū Gāniya dynasty of the second half of the 12th century, and the third group consists of 43 square silver coins of Almohad origin dating to the late 12th and early 13th centuries (2005, 34-35) (plate 4.2).

The finds dating to the 10th and 11th centuries may confront us with some hitherto unexpected possibilities regarding the Islamic settlement of the ‘Oriental Isles’. While the coinage finds from this period largely confirm Ibn Khaldūn’s assertion that the Balearic Islands were conquered in AD 902-903, Ilisch et al. contend the view expounded by Riera Frau, Barceló, Rosselló Bordoy et al. regarding the momentous conquest of the islands by the Caliphate at the hands of Hishām al-Hawlānī, arguing instead for a much more gradual ‘infiltration’ of the Balearics at the beginning of the 10th century. They state that Ibn Khaldūn’s assertion that Hishām al-Hawlānī was to have ruled the islands for 10 years and his son for another 50 are dates identical to those of caliph Abd-al-Rahman III, and therefore to be taken cum grano salis, as it where (Ilisch et al. 2005, 37).

Judging from the comparatively small number of 10th and 11th century coins, and also from their strong signs of use wear, Ilisch et al. conclude that the coins were deposited later in their circulation, and that by extension it is possible to suggest that the site of Santueri was not in occupation, or perhaps only sporadically so, during the first 200 years of Islamic presence in Mallorca (2005, 37). Were this to be corroborated by further archaeological data, it would completely re-arrange the traditional view of Mallorca as a highly centralized polity, where the city exerted a large amount of control over the peripheral areas of the island.

Other finds
By far the majority of the metal finds from Santueri are unidentifiable metal fragments of unclear provenance, found dispersed across the entirety of the plateau, though there is a large variety of finds which can be clearly said to be attributable to the following categories: trade, dress, food, jewellery tools.

Relating to the first category there is a number of metal weights which, though not easily datable with precision, are of clearly Roman origin and the byzantine period. This may be indicative of a variety of periods during which Santueri may have acted as an economic centre of either foreign trade or, more likely, local taxation. Indeed the Byzantine solidi recovered from the site hint at the presence of significant amounts of capital at the castle, certainly during the late 7th to early 8th centuries.
The second category is probably the largest outside that of the coinage addressed in the previous section, though at times it is difficult to determine with certainty the function of an object. Spillmann recovered a number of clasps and belt buckles which can only be dated on stylistic grounds but are most likely to date from the Byzantine period. Likely to also fall into this category is a collection of some 25 bronze needles, all of about 15-20 cm in length. Their exact function is unclear though Illisch has suggested that they were used as turban fixtures.

Jewellery finds are quite numerous and of a wide range of provenances and quality. The gold finds are not limited to coinage as Spillmann also recovered a gold ring with an Arabic inscription and a large gold nugget, which may be evidence of gold working, though without further excavations this will remain purely conjecture. Beyond the gold finds there is also a wide variety of fragmentary objects like beads, crosses, and pins which may have formed part of larger pieces which have been lost.

**Historical documentation**

The coinage finds from Santueri have given us a unique insight into the occupational history of the fortress from its earliest times. Unfortunately the historical documentation on the castle does not give us much information on the years immediately after Mallorca’s conquest by the Catalans, which might allow a clearer reconstruction of the Moorish appearance of the fortress. Indeed, apart from a few indirect mentions in the *Llibre del Repartiment*, the castle of Santuiri does not make regular appearances in the documentation until the year 1311, the year of the death of James II of Mallorca. In 1311 we find that the castle is being strengthened and a construction work in the value of 12 pounds, 8 sous and 9 dinars are carried out (ARM, Baratillo, vol. I, part 2, p.122 [Plate 5.80]). While Santuiri is not explicitly mentioned, we may assume that this fortress too was fortified and readied during Sancho’s illness in 1320, though without a clear mention of expenses and materials it is hard to determined the scope of these construction works.

In 1325 Arnau Vezega was castellan of Santuiri and he resided there together with 9 servants. They earned in total a monthly salary of 12 pounds, 11 sous and 9 dinars between May and November of that year (ARM, RP 3410, f.42). Five years later, in 1330, again there are construction works carried out at Santuiri, during which the aim was to *retornar una caza e alguns merlets del mur, so es en jornals e loguer de besties e compra de caus* [lime mortar], segons que en Berenguer Juny qui fo obrer ne rete compte XX£ IIss at VIIIIdr... (restore a house and some merlons of the wall, so that the salary of the masons, the rental of the beasts and the purchase of lime, according to Berenguer Juny, who was the master mason, accounted for £20, s2 and d8) (ARM, RP 3043, f. 47).

Throughout the 14th century there are a relatively large number of mentions of the castle of Santuiri in the archival sources, usually mentioning new castellans, their salaries and those of their servants. It is not until the early 15th century that we have mentions of new construction works being
carried out at the site. In an entry dated August 20th 1406 we read that orders had been given by the crown to... _fortificar el Casteyl de Santueri per motiu de la noticia que corría quels moros venien a Mallorques._ (...)fortify the castle of Santueri as there were news that the Moors were coming to Mallorca), (ARM, Baratillo, vol. 1, part 2, p.174). Equally in the year 1423 we find that the threat of a Genoese invasion, which also saw the fortification of Castell del Rei in that same year, prompted restorations and expansions at Santueri, (ARM, Baratillo, vol. 1, part 2, p. 213 [plate 4.72]). The expansions of 1423 appear to be the last major construction works at the site of Santueri. From here on in, the sources mention the occasional cleaning and re-proofing of the cisterns, but no substantial building works appear to be carried out.

Clearly, by telling us with some precision the amounts invested in the fortresses, the sequences of castellans, the sizes of garrisons, etc., the sources provide us with an important amount of information on the inner workings of the Kingdom of Mallorca and, by extension, that of the Crown of Aragon. Nevertheless, despite all the information available, distinguishing and dating the whole range of building phases of the fortress remains a complex task, as the sources hardly ever specify in any detail what changes or expansions were in fact carried out at any given date. The following section aims to remedy this by conducting a detailed examination of the architectural remains at Santueri, and attempting to date the different parts of the building in relation to all available sources.

**Architectural analysis**

The castle of Santueri is located some 430m above sea level on the southern hills of the Serra de Levant. The castle mount itself consists of a relatively flat plateau atop a vertical cliff, with the lowest part being in the SW, where the only access route leads up the plateau and where most of the defensive structures are concentrated (plate 5.49, Fig. 5.33). The state of preservation of the fortifications is likely to be the best of the three large castles in this study. This is due in part to its continuity of use, but also the comparatively high quality of materials employed in its construction. Standing out in Santueri’s architectural fabric we find a technique known as _opus spicatum_, (named thus because of its resemblance to a fishbone pattern), which appears on most structures in the complex and shall be referred to repeatedly in this discussion of the architecture of the castle. This technique, whereby stones are laid in regular courses ‘leaning’ against each other diagonally alternating the direction in each course (plates 5.66, 5.69), is of Classical origin (Lancaster 2005, 59) and not at all common in the medieval architecture of Mallorca, making its copious use at Santueri something of an oddity.

As at Alaró, here too the castle grounds have been divided into different sectors (Fig. 5.33). Each of the four sectors contains different features and aims to provide this analysis of the architectural remains with a more structured approach.
This sector comprises some of the main architectural features of the fortress, situated on the south-western edge of the plateau (Fig. 5.34). The castle was originally probably approached along a path which wound around the mountain from the south. There are remains of steps carved into the rock immediately below the wall-towers T2 and T3, though they are unfortunately impossible to date. Today a tarmac road leads all the way to the castle with the last 100 metres or so being accessible only on foot. A narrow path leads up the hillside around two or three narrow bends and arrives at a feature clearly reminiscent of Alaró and Castell del Rei: a small gated enclosure consisting of a series of low walls at right angles and arrowslits on the inside (A1). The enclosure was most likely gated towards the east, though of this feature nothing remains except for a few steps carved into the rock. The walls themselves are too thin as to have supported a wall walk, or parapet. As one crosses the space comprised by A2 we arrive at another gate set in a north-south alignment which gives access to yet another set of outworks (A2) immediately below the castle’s grand round tower (plate 5.51). This second set of outworks is accessed through a large arched gated and basically just encloses the path which enters the castle. The walls of A2 stand on the bedrock of the mountain and are pierced at
various points by arrowslits pointing at A1 and also in toward the west of the castle. The path winds past the tower along a section of curtain wall, gradually becoming narrower and rising along a number of broad steps as it nears the fortress’ main gate.

It was mentioned above that the comparatively good state of preservation of Santueri is largely due to the high quality of the materials that were used in its construction. While one finds a variety of techniques and materials employed here, most of the structures in the south-western section of the fortress are made from un-hewn limestone cores held together by lime mortar. At first glance this is largely the same technique employed at Alaró and also Castell del Rei, but at Santueri the wall fabric is much more homogenous (plate 5.50). There are fewer changes in manufacture, the dimensions of the stone are much more regular and the coursing of the masonry is also much clearer. In short, one gets the -probably misleading- impression that the majority of the structures extant today on the southern section are of one the same construction effort. Quoins, mouldings and the frames of arrowslits and doors are all made from the same high quality compact sand stone known as *Piedra de Santanyi*, quarried from the nearby town of Santanyi.

The 15m stretch of curtain wall (C1) through which one enters the castle itself is pierced by a total of 11 arrowslits in two tiers. The German castelologist Bodo Ebhardt, in his controversial compendium on European castles from 1939, states that the walls of Santueri were originally surmounted by machicoulis projecting from the top of the walls (Ebhardt 1977, 125). While it is clear that the entire southern curtain wall as well as the round tower bear limestone corbelling along their upper perimeter, there is no evidence for actual masonry machicolations, as we might find them, for example, at Bellver. The complete lack of masonry remains that may have been supported by these corbels may suggest the use of wooden hoardings, though the use of wood in wall defences would be highly unusual for Spanish fortresses of the period. The most likely solution, therefore, is probably that of a corbelled parapet which was accessed from the room of the gallery which ran the length of C1.

Stepping towards the gate, which is let some 50cm into the wall, one stands below a broad murder hole which was serviced from a vaulted gallery above the gate. In crossing the gate one enters a passage (F6) about 4m long and 1.3m wide, which leads onto the castle grounds. This feature is in some respects a repetition of the entry passage found at Castell del Rei, with the exception that here it is not determined by the topography of the terrain but by a purely architectural choice, with a large gallery running the length of the curtain wall and giving access to arrowslits, wall walk and machicolation. It is of relevance, however, that at Santueri, when one steps into the passage, on the inside of the curtain wall immediately below the passage vault, are visible two large stone corbels (plate 5.52) in the style of those found at Alaró. This makes it quite clear that the vault is part of a later construction phase, and that the buildings which originally stood on the interior of the walls had
roofs supported by wooden beams, which rested on these corbels. This, however, does not mean that the over-all architectural arrangement of these chambers differed substantially from those we see today. Indeed the fact that the wall fabric, the materials and the repeated use of opus spicatum, speak for a simple change of covering, from wooden beams to stone vault, probably during the fortification work of the early 14th century. This is substantiated by the fact that the wall which received the beams which covered the passage is still extant, as are the corresponding corbels (plate 5.53). Yet, during the construction of the vault in the passage, the upper gallery, which ran along the interior of the curtain wall, was probably also vaulted, as the outside of the wall (F5) was significantly strengthened (plates 5.56, 5.57), and two large sandstone arches framing the passage and the entrance to R1 respectively were added to the entire ensemble. This new wall rose to the same height as its predecessor, against which it abuts, matching the height of the curtain wall C1. This suggests that the original, much thinner and less compact, wall of F5 supported the wooden roof of the gallery, which was later changed for a masonry vault, resulting in the strengthening of F5.

Dating these changes without adequate archaeological data or documentary evidence is a complex task, though one may be given a clue by the original gate arrangement leading from the passage into A3. Here the opening of the passage consists of a round sand stone arch, framed by a segmental one. This is the style in which nearly all openings at Alaró and also the Tower of Canyamel are kept, perhaps suggesting a similar construction date. This would make the vaulting of the passage, the strengthening of F5 and the construction of the upper gallery likely to date to a period post 1319-1320. The alternative possibility, however, is that the original arrangement with the wooden roofs stems from the 13th century, perhaps even from the period of Nunyo Sanç, who was lord of Santueri until his death in 1241, and that the reforms we have just discussed were, in fact, carried out during the fortifications of 1319-1320. Indeed, the fabric of the older wall of F5 consists of a compound similar to rammed earth (plate 5.57), though containing larger amounts of medium sized aggregate, and faced on the southern side with coarse masonry which makes it clearly post 1229.

The passage itself leads into an open area (A3) which appears to have been a courtyard which was limited on its eastern side by the slope of the hill and gave access to the Tower (T1) and a series of ancillary chambers to the north (R3, R4 & R5). To the left lies a room (R1) which may have acted as a guard room or for storage, while also giving access to three arrowslits aimed at areas A2 and A1. Chamber R1 is currently the only wholly intact structure in the entire fortress as most others are at least partially damaged or completely collapsed.

The gallery above the passage and chamber R1 was originally probably accessed from the western side of the courtyard, though there are no remains of any steps leading up the slope. On the side abutting the tower we can still see remains of the vault which covered this space (plate 4.46), and it may be assumed that under the collapse one would find the original floor level still intact. It is
worth repeating at this point that this gallery was likely to have been used as a kind of kitchen, largely due to the proximity to the large bread oven (F4), which stands at its eastern end attached to the curtain wall. The gallery may well have had other functions than simply the preparation of food, as with 12.5x5.5m it was a relatively large space. It may hence have served a variety of functions throughout its existence, including residential quarters and storage.

The oven (F4) is similar in size and design to the one seen at Castell del Rei, but this is not necessarily indicative of them being coetaneous (plate 5.56). Indeed, one finds ovens of this type being built up until the 20th century, many remaining in use even today. The oven at Santueri was not in fact inside the gallery, but abutted against its eastern wall. The fact that the oven’s western side is plastered suggests that is was built before the gallery wall against which it leans, the latter consisting of the same earthy compound which we observe on the southern face of F5.

The round tower T1, is the most emblematic feature of the fortress of Santueri (plate 5.55). It stands in an architectural practice quite common in southern French and Catalan fortress architecture of the late 13th and early 14th century. The castles of Bellver (1309) and Perelada figure prominently in this tradition. Indeed the construction of large round corner towers is not unusual in 14th century Europe, but it is particularly in the Mediterranean region that these structures are being moved into a ‘forward’ position, rather than acting as a last retreat. The exterior of the tower has a diameter of about 6.10m and the interior is divided into three floors which increase in diameter with height. The telescopic segmentation of the interior is not unusual in towers where the interior floors are supported by horizontal beams rather than by vaults, and may also be observed at the castle of Bellver (1309) in Palma. Unlike at Bellver, however, the tower of Santueri is attached to the main body of the fortress, forming the intersection of two stretches of curtain wall, from which it could, however, not be entered. Instead the two walls were connected by a walk which surrounded the tower along its NE curve. The walk, which was presumably made from wooden boards, was supported along the curve of the tower by 5 or 6 stone corbels, three of which are still visible (plate 5.55). The tower’s only access point was through a single door on ground level, which opened onto the mid-level floor. The door was framed in limestone ashlars with the lintel supported by corbels similar to those that supported the hoarding at the top of the tower and the southern curtain wall (C1).

The interior of the tower was divided into three stories, with the diameter of each cylindrical floor gradually expanding as one climbs them (fig 4.28). The lowest floor, placed below ground level, appears to have been either a cistern or a storage area, and the other two floors have only a slightly more residential character, as a lack of windows or chimneys would have made this building rather unpleasant, in particular during the winter months. The upper chamber of the tower was covered by a dome made from concentrically placed limestone ashlars. As the top of the tower was surmounted by a corbelled parapet like the one at C1, it must have been accessible. While the dome of the tower
currently appear to have been open to sky this is likely to be the result of a collapse rather than an intention access to the top of the tower (plate 5.58). Instead, the parapet was probably accesses via wooden ladders from the tops of walls C1 and C2.

Stylistically, the tower is likely to date to the early 14th century, probably coinciding with the expansions of around 1319. The extraordinarily high quality of the dome, however, may be of later manufacture and might be the result of the construction works carried out during the North African threat of 1406 or the rather more substantial expansions undertaken before the feared Genoese attack of 1423. Indeed it is possible that the hoardings, and thus the corbelling around the top of the tower and the southern curtain wall, are also the product of the fortifications of 1423.

The northern sections of sector 1 contain a number of chambers wedged into the space between the curtain wall and the slope of the castle mount. While the curtain wall itself is in remarkably good condition, with all bar one of its 25 merlons still standing to their original height, the chambers, here designated R3, R4 and R5, are in a very dilapidated state (plate 5.59). Their coverings and much of their walls have all but collapsed, and the entire area is so thoroughly overgrown with dense vegetation that a clear view of the structures is currently not possible. In view of their general size and location, however, it is possible to make a number of reasonable assumptions. From the traces on the curtain wall they appear to have risen to the approximate height of the wall walk, or
shortly below it. The thickness of their walls determined a comparatively lightweight covering, therefore excluding masonry vaults. A roof supported by beams would most likely have been gabled, therefore making it inaccessible from the wall walk. The latter is demonstrated by large amounts of roof tiles being scattered around the area. The Pla de Castells suggests that the walls which abut against the curtain wall (C2) had the function of buttressing the wall and provide it with added stability (M. Salva 1999c, 133). While this is in principle not unusual, the walls referred to at Santueri, are quite simply much too thin, their mass being too low to address structural concerns on the curtain wall. Furthermore, the fact that they do not bond with the curtain renders them useless as buttresses, particularly considering that they stand on the up-hill side of the curtain.

Sector 2. Secondary defences: Wall towers, cistern and graffiti

While this sector consists largely of a stretch of curtain wall, two towers and a cistern, it is worth considering as an element apart from the rest of the south-western sections as it contains some of the most relevant features of the entire castle.

![Figure 5.36, Santueri, Sector 2, plan. Source: Author](image)

The wall fabric of the towers and the upper parts of the curtain wall are for the most part completely homogenous with the fabric of sector 1. Tower T2 stands on a square foundation of solid bedrock measuring roughly 3.6x3.4m on the outside, rising completely vertically to a height of around 10m (plate 5.60, Fig. 5.36) The quoins on the corners of this tower display an extremely high level of craftsmanship in the precision with which they are carved, perhaps making them coetaneous with the construction of the dome of T1.
The tower could be entered only from the back, from ground level and also from the level of the wall walk, which probably passed over the lower entrance by way of an arch of which faint traces remain on the wall (plate 5.62). While the front of the tower displays largely the same fabric as the curtain wall, the rear of tower T2 was almost entirely made from sandstone ashlars with the exception of the door frames and lintels, which are carved from large blocks of limestone similar to those found on the entrance of the round tower (T1). The middle floor of T2 probably contained a wooden ladder with which to access the top floor which was originally crenellated with a series of limestone merlons which are today almost unrecognisable. A square depression on the floor of the tower may have been used as a storage facility, as it is definitely too small for habitation.

Tower T3 is significantly smaller than T2 in that it is mostly just a protruding section of wall acting as a platform. Its fabric, however, gives some important clues as to the age of this section of wall, and by extension the entire fortress. While most of the visible wall fabric coincides quite clearly with the early 14th century masonry technique, a closer look at the base and the rear of the tower will reveal that it stands on a tabiyya foundation, and that in fact almost the entire section of wall between both towers is made from rammed earth of the concrete-like variety (Fig. 5.37). Parts of this have eroded away over the years, leaving deep hollows from which one can see the thickness of the original wall (plate 5.61), upon which the limestone masonry was later constructed. The tradition of building wall towers which do not contain any interior chambers and are instead just forward positions on the wall is one widely observed among Moorish fortresses in Islamic Spain. The majority of the examples visible today stem from Almohad fortresses in western al-Andalus, particularly along the Tajo frontier. The albarrana towers of the city of Caceres (1174) –Roman Castra Caecilia-, illustrate the Almohad practice of bringing forward the wall defences, by detaching the tower from the wall altogether, connecting the two only via a narrow bridge. Tower T3 at Santueri, was clearly not an
albarrana tower as it forms part of the body of the wall itself, though it may be possible to date this feature to the late 12th or early 13th centuries.

This stretch of wall between the two towers is, therefore, of clearly Islamic origin, and also acted as curtain wall and also as a retaining wall for the cistern (W1) which was constructed behind it (plate 5.63). Hence we have an arrangement all too similar to those found at Alaró and the Castell del Rei, in that here too we find the oldest remains to be those of the cistern. Determining the original aspect of this cistern, however, is today impossible as its interior was thoroughly restored and probably substantially changed during the expansion of the fortress during 1319-1320. There is, nevertheless, a possibility that the cistern is somewhat older than the documentation regarding constructions works suggests. During the late 1990s there were discovered a series of graffiti carved into the north-west wall of the interior of the cistern, depicting a series of ships carrying knights with shields (Fig. 5.38). While they were quite widely publicised in the local media at the time of their discovery, they have not received much scholarly attention, with the exception of brief mention in the Pla de Castells and a dedicated publication the following year (Gozalo et al. 2000).

The identification of these personages would provide some important clues regarding the construction date of the cistern, while also providing us with important information regarding the use of the cistern itself.

It is difficult to determine with certainty who the individual knights depicted are as without colour the heraldic symbols on their shields may be easily misinterpreted. There are, however, a number of individuals which are readily identifiable:
Individuals 1 and 13 depict the same person, and the coat of arms of vertical bars is quite clearly that of the king of Aragon. The fact that the shield of figure 1 bears five vertical bars and that figure 13 has 6 is most likely the result of a miscalculation of space by the author of the image. De Riquer states that the royal coat of arms of Catalonia of red and gold vertical bars appears in 1150 under Ramon Berenguer IV, probably with four bars, which is expanded upon under Alfonso the Troubadour around 1195 by adding two more bars. De Riquer adds that it is possible that under Peter the Catholic (1207-1210) the blazon retuned to consisting of just four bars, but by the time of James I the shield was again changed to one of six bars, and by the 14th century the 4 bar shield was again in use (1983, 112). This makes it likely that the monarch depicted in the graffiti is in fact James I, conqueror of Mallorca, which might suggest that the event shown is the conquest of Mallorca by the armies of Catalonia in 1229. However, the fact that he is shown twice suggests that the images were made on different occasions, perhaps showing different events.

Individuals 3 and 8 are again likely to depict the same personage as both shields consist of six and seven circles respectively, in practically the same alignment. Parting from the assumption that figures 1 and 13 do in fact depict King James I, then it would be reasonable to assume that figures 3 and 8 show William II, the viscount of Bearn, who died in 1229 during the battle of Porto Pi, the first major assault on Madīna Mayūrqa (Gozalo et al. 2000).

According to the Pla de Castells, the zigzag pattern on the shields of figures 4 and 9 clearly depict the coat of arms of the Vilarig family, which may be confirmed by de Riquer’s description of this lineage’s coat of arms (M. Salva 1999c, 100; de Riquer 1983, 114).

Individuals 5 and 6 again appear to depict the same person, though number 6 is somewhat too weathered as to be 100% certain. It appears to depict five or six plants arranged in a layered fashion, though in the case of number 6 the lower part of the image is somewhat damaged. Considering the context of the image it may well depict a member of the Cardona family who are known to have fought with James I at the conquest of Mallorca. De Riquer, however, points out that while the Cardona shield consisted of a number of gold cards (Cat. thistles) on a red background, it was never depicted as holding more than three of these plants (1983, 269). Hence the individual 5/6 cannot be identified with certainty.

Figure 7 is also somewhat enigmatic as the image shown on its shield is either not complete or was damaged in later years. The authors of the Pla de Castells see in it a representation of the cross and suggest that it may therefore be the coat of arms of the bishop of Barcelona Berenguer of Palou (M. Salva 1999c, 100).

Figure 10 is also difficult to identify due to the imprecision of the drawing, which is likely to have consisted of more than simply two diagonally crossed lines. Without colour or relief to fall back
on, the *Pla de Castells* suggests as potential owners of this coat of arms either Joffre or Sant Just of Aitona (1999, 101), thought they did not participate directly in the conquest of Mallorca.

The last individual requiring identification is figure 12, with six diagonal lines, which according to the authors of the *Pla de Castells* might be Nunyo Sanç, Count of Roussillon, uncle of king James I and also Lord of Santueri from 1229 to 1241 (M. Salva 1999c, 104). Nevertheless, it should be pointed out that the fact that this individual, who figured so prominently in the early life of James I and in his conquests of the Balearics and the kingdom of Valencia, is depicted on only one of the two vessels, may indeed indicate that the author of the graffiti was in fact depicting two different events, or quite simply someone else.

While it is not possible to identify all the figures on the graffiti with certainty, the fact that they are there does give us some important clues regarding the use of cistern W1. For one, their existence suggests that the cistern was probably used as a dungeon for some time around 1300, if not earlier. We do not know with certainty when cistern W1 of Santueri was restored, though it was in all likelihood one of the very first structures to be re-used after the fortress’ conquest. Hence it is possible that its current aspect predates the construction of most of the other structures at the castle such as Towers T1 and T2. It is, of course, also possible that the interpretation of the heraldic symbols exposed here is entirely fallacious and that they do not depict the conquest of Mallorca by James I, but rather a future invasion of the island by a Catalan king and his vassals, such as that of Alfonso in 1286 or that of Peter IV in 1343.

The interior of cistern W1 is remarkably well preserved considering its likely age (plate 5.64). Its shape is similar to that of W1 of Castell del Rei, though Santueri’s is significantly larger and the arches supporting the vault are of a slightly pointed style. It measures approximately 16x4.4m and was originally accessed from the northern end, though it appears never to have been provided with stairs leading to the interior as was the case at several of the cisterns at Alaró. A large opening on the north gable, which is likely to coincide also with the original access, has led to large amounts of debris falling into the cistern, making the north end ground level about 1.3-1.5m higher than the south end. The walls of the cistern are vertical to a height of about 1.7m, when they start bending inwards forming a longitudinal barrel vault which rises to about 3.6m and is supported by three large arches resting on pilasters abutting the walls. The chamfered feature running along the west wall represents the likely remains of the original Islamic vault which covered the cistern pre 1229, and the low masonry ‘bench’ which runs the length of the opposite wall was probably part of this vault as well. As the adaptation of cisterns into dungeons is not unheard of in Mallorca, as at the castle of Bellver, the literature tends to identify the one at Santueri as a dungeon, citing the graffiti as evidence for this claim (M. Salva 1999c; Gozalo et al. 2000). In reality, however, this space could have been used for nearly anything, ranging from residential purposes as a barracks to a storehouse.
Sector 3. The Plateau: Hall, cisterns and northern defences

This sector is the largest in this examination of Santueri as it comprises practically the entirety of the plateau of the castle and includes a variety of isolated structures, ranging from social buildings, to cisterns, wells and fortifications.

The examination will proceed as elsewhere, from south to north; beginning with the long hall here designated R7. This structure is located some 20m east of the cistern W1 in sector 2. This structure has a side length of some 18.7x6.5m, with the eastern wall being built upon a 1.3m high stone pediment (plate. 5.66) which was carved out from the bedrock in order to accommodate the hall. With about 5m in height the eastern wall is also significantly higher than the west wall, suggesting that originally the roof of this structure sloped towards the west. There are no remains of any interior partitions to this structure and it originally appears to have been accessible only from the north. On the eastern side of R7 we find two smaller structures one which may have been a small water reservoir as there are remains of the opus signinum-type plaster so common in features of this type (Fig. 5.39). To this building are attached another two structures (R8, R9) which are set into the side of the slope using the east wall of R7. All three structures are in a largely collapsed state, having lost their roofs and much of the wall fabric being on the verge of collapse. Most vertical elements contain sections made in the ubiquitous opus spicatum technique which is also found elsewhere in Santueri, though the erratic placement of this technique on the wall-fabric does not allow for any clear dating. The function of these chambers is hard to determine, but three large openings in the west wall of R7 may be the remains of windows, which would make a social function of this room likely. Without archaeological excavations at this structure, however, it is impossible to determine with certainty its function within the overall complex of Santueri.
About 30m NNE of R7, further up the hill, are the remains of two attached cistern set into the side of the slope. Both these structures, which are of a slightly irregular rectangular plan, were covered by masonry vaults, though currently only the larger one (W2) remains intact (plate 5.68). W2 measures some 11.30x5m in plan, while W3 is only slightly smaller, measuring roughly 10.3x5m, and with an interior altitude of about 3.7m they would have had an approximate volume of 209m³ (W2) and 190.5m³ (W3) respectively. W2 was converted to a new role at some later point in its history as it was provided with a large doorway on its western side. As both cisterns are built into the side of the slope their eastern sides are completely underground up to the level of the vault. W2 has a large inlet on the top of its east wall, from which one may assume that is was filled. A closer look at the area to the east of the cistern reveals and area of about 40m² which was cleared and levelled, and it appears that the ground was originally plastered, forming a gentle slope towards the inlet of cistern W2, thereby funnelling rain water into the reservoir. While this catchment technique is in effect a type of surface-runoff collection it guarantees relatively clean water as the collection surface can be kept clean and free of pollutants. Judging from the coarse masonry wall-fabric the construction date of these two structures is most likely to be post-conquest, possibly coinciding with the construction works carried out during the early 14th century, if not later.

About 50m to the west of the two cisterns there are remains of another water-related feature. W5 was a well set into the bottom of a cistern, though the exact functionality of this arrangement is unclear, as placing a well on the summit of a hill makes little sense. It might, however, be possible that strong winter rains could force water up the well through artesian pressure building up in the carstic limestone plateau. The bottom of the well itself has never been examined, and there is little doubt that it would reveal interesting data regarding the settlement history of the castle.

The cistern, into which the well was set, is of a somewhat irregular plan with an approximate side length of 8x6m. The remains of a low standing wall on its eastern side may indicate that it was originally covered, and the large amount of debris in the features interior may be part of this collapse. The interior of the cistern was daubed with opus Spicatum of a manufacture identical to that of W2, W3.

The final feature in examined in the sector 3 is feature F1, situated on the northern-most tip of the castle mount of Santueri. It consists of an angular stretch of curtain wall which in places still stands to its original height of around 5m with a thickness of approximately 70cm is was able to support a parapet and a narrow wall-walk, which was originally probably accessed via ladders or other wooden structure of which nothing remains. A series of putlog holes along the base of the wall-walk might indicate that there was an interior space to this feature of which today nothing remains, Feature F1 has 10 small arrowslits placed at ground level, all aiming directly north and framed in well-dressed limestone (plate 5.69). Indeed, the entire structure was manufactured completely from
limestone, though the apparent homogeneity of the structure is disturbed by a variety of construction techniques. At a closer look one finds stretches kept in roughly hewn ashlar while other parts were laid in the *opus spicatum* style found elsewhere at Santueri. The fact that the ashlar sections are usually on the lower course suggest that there are older than the *opus spicatum* parts which tend to lie higher up along the wall. Nevertheless, the fact that one finds both techniques used simultaneously on other structures of the site suggests that at Santueri there might have been different groups of builders employing various techniques working side by side. The location of this stretch of wall is also of interest as this area of the castle is completely inaccessible from below. The path which approaches the fortress from the north does not in fact pass near this feature and the terrain under the cliff is too rough as to allow for an attack from this side.

**Sector 4. The Eastern End: cisterns and open-backed tower**

This last sector of the castle of Santueri is the eastern-most, and from here one looks to the eastern and southern coast of Mallorca with a clear view with the territory from the foot of the castle mount all the way to the sea.

   Proceeding from the south the first feature we shall discuss is a small complex of structures (F2, W4), consisting of a cistern, and a platform or terrace immediately to its south. The cistern has an approximate side length of 4.8x8.5m and is half buried in the ground to a depth of about 1.20m. Its northern side is formed by being set into the slope of the hill, whereas its southern wall is made from a solid masonry compound similar to that of W2 and W3. The cistern was covered by a slightly pointed masonry vault, which has collapsed in parts but still stands along the cistern’s mid-section. The platform to the south of the cistern was created by the construction of a retaining wall, which appears to have supported a parapet. Of the latter, however, next to nothing remains as it appears to have collapsed downhill.

   Apart from the dilapidated remains of another collapsed cistern (W5), the most interesting feature of this entire sector is likely to be the open-backed tower (T4) (plate 5.70). This structure stands on the eastern most point of Santueri, looking out onto the coast and the villages of Porto Colom and Porto Petro and the land in between then and the castle. The location of this tower is somewhat odd in that an approach to the castle from this side is not possible. It is therefore likely to have acted as a lookout point.

   In the section on Alaró we briefly alluded to the fact that it was by no means unusual to leave towers open towards the back, that is, the side facing the castle itself, the purpose of which was to render the tower ineffective if it was taken by an attacker.
Its dimensions are approximately 4.4x2.7m on the exterior, with an average wall thickness of around 70cm and standing to height of about 5.7m. The entire structure is built from limestone blocks, with the quoins made from relatively well-dressed ashlars, and the walls made from un-hewn limestone blocks laid in the *opus spicatum* technique which we find elsewhere in Santueri. On the interior the tower was quite clearly provided with a platform behind the parapet, which was crowned by merlons similar to the one we find on the western curtain wall of sector 1.

**Viewshed analysis**

![Figure 5.40, Santueri, viewshed analysis. Source: Author](image)

The visual radius of the castle of Santueri is probably the most ample of all the fortresses of Mallorca as its field of view comprises almost a complete 360 degrees (Fig. 5.40). In terms of visual orientation the view of the island’s interior is very extensive, though hampered somewhat towards the north-east and immediate south-west by extensions of the Sierra de Levant range. Having fixed the radius of clear visibility at approximately 25-30km gives the impression that the island of Cabrera to the south of Mallorca does not fall within the castle’s field of view, the island as a whole is nevertheless clearly visible from Santueri. Equally the mounts of both Randa and Alaró are visible from Santueri, though the distance between Santueri and Alaró was clearly too large for the transmission of any kind of visual message. It would nevertheless be feasible for Randa to have acted as a relay station for message from and to Santueri from either Alaró or the city of Palma.
6. The Minor Fortifications of Mallorca

A. Introduction

The previous section discussed in detail the archaeological and architectural remains of Mallorca’s three most prominent Islamic fortresses and attempted to determine how the buildings changed over their occupational history, both in terms of form and function. This section will continue the effort of reconstructing the Islamic landscape of power in Mallorca by exploring in depth the many smaller fortresses and strongholds of the island (Fig. 6.1). Due to the lack of archaeological excavation and documentary evidence it is possible, or even likely, that there are in fact significantly more military structures from the Islamic period than are here described. Nevertheless, despite the comparative lack of Islamic documentation, as well as the almost complete deficiency of specialized archaeology in this field history has left us with a variety of minor structures to be examined.

![Figure 6.1, distribution of the minor fortresses of Mallorca. After SITIBSA 2005](image)

It should be noted that, unlike Alaró, Castell del Rei and Santueri, the minor fortifications had much shorter occupational histories and in general did not appear to have been permanently inhabited even during the Christian era. While none of the fortifications in this section are mentioned in any of the medieval Islamic sources, the fact that they often appear in the very earliest Christian documentation, the Repartiment, allows one to infer their existence prior to the Catalan conquest. In other cases the toponymy and/or archaeological remains give us clues regarding their potential construction period.
It is also worth pointing out that whereas in the previous section all fortresses fitted neatly into the typology of the Felsenfesten (rock castles), the structures discussed in this chapter range into a variety of categories, from towers in villages (Torre d’en Nunís, Torre de Son Mas) and rural ‘palaces’ (Sineu) to fortified enclosures (Sa Bastida) and small mountain refuges (Puig d’en Escuder) with little in the form of architectural defensive measures and relying solely on the morphology of the terrain.

B. Puig de Sa Bastida
(39° 42’ 51”N, 2° 46’ 26” E)

Of the sites in this section Sa Bastida was certainly the largest in terms of enclosed area, and probably also the one with a longest history of occupation. Located on a so-called mola, (a sloping table mountain), about 1.5km NE of the village of Alaró (Fig. 6.2), the site lies within two hours walk of the castle of Alaró from the previous section. The two sites are, in fact, completely intervisible being separated by about 3km.

The tongue-shaped mountain of Sa Bastida rises from SE at the bottom of the valley of Son Borrás (316m ASL), to some 576m ASL along a 30% incline. All sides except the SE are sheer cliff faces and therefore completely inaccessible.
In the close vicinity of Sa Bastida there are a number of springs which provide large amounts of water throughout the year. In particular the Font de sa Bastida, on the mountain’s southern flank, produces flows throughout the year. Equally, on the northern flank we find the Font de Ses Artigues which supplies the Village of Alaró with water all year round.

The fortifications of Sa Bastida are of a rather simple nature, consisting mostly of a series of wall-stretches which close off access to the higher reaches of the mountain, and a large number of water cisterns, usually placed behind the enclosure wall, but potentially also dotted around the upper sections of the slope (Fig. 6.3).

There are no Islamic sources mentioning, either explicitly or implicitly, any kind of fortification in the vicinity of Alaró other than the Hisn al-Rum, possibly indicating that the site was of either little importance or wholly unoccupied during the Islamic period. The Christian sources, however, mention fortifications being built or restored at the Puig de sa Bastida within three years of Mallorca’s conquest. Indeed the Llibre de les Cabrevacions dels Magnats de Mallorques of 1382 and 1390, talking about how the lands of the magnates of Mallorca were shared out among secondary tenants, states that in 1233 a certain Pere de Vilaragut was granted permission to construct a castle above the alquería of Beniarri which coincides roughly with the modern Font de ses Artigues (de Oleza 1948, 751; Kirchner 1997, 280). Item damus tibi licencia et tuis et cuicumque vellis ut posis facere et construere castra et fortitudinem in ipso podio est super Beniarri (and we give you and yours permission to make and construct a castle and fortifications in that peak that is above Beniarri) (ARM AP Llibre de les Cabrevacions dels Magnats of 1382 and 1390 fº57 in de Oleza 1948, 751).

In 1396 Sa Bastida again appears in the documentation as a result of a conflict among two neighbours who argued over the correct layout of their respective possessions. One party argues that
the cliff and ancient walls of Sa Bastida enclose what is his: *(aquí haja parets antigues epenyes molt grans, les quals, segons que diu, clarament denotan e designen los tèrmen de les dites possessions...)*

(...here there are very ancient walls and great cliffs which, according to what is said, clearly outline and define the limits of said possessions...) (ARM LC AH 69 ff.266r/v [plates 5.81-82]).

There is no significant later documentation on the fortifications at Sa Bastida, though it appears likely that from the later 14th century onwards the site was used largely for the grazing of livestock and the production of charcoal, which allows us to date the construction of the walls and cisterns quite clearly to around 1233, with likely minor restorations occurring over subsequent decades.

It will be noted, however, that the architectural remains visible at the site today are unlikely to be the earliest structures at the Puig. The archaeologist Aramburu-Zabala, who carried out a tentative field-walking survey of the Castel of Alaró, also undertook a minor survey at Sa Bastida, cataloguing and publishing a series of ceramic surface finds. He claims to have identified remains of several dozens of Late Antique huts or hovels made from stone, all completely collapsed and in a very bad state of conservation due to the effects of erosion and forest fires (plate 6.1). Most of the structures appear to have been built in small clusters of four to five hovels, placed along relatively level portions of the slope. It is likely that there would have been more of these structures on the summit of the hill of Sa Bastida, but the dense vegetation in that area makes a clear view of the potential remains impossible. According to Aramburu-Zabala the individual hovels appear to have been of a roughly oval shape, and placed into the hillside often with the hill acting as a rear walls (Aramburu-Zabala 2000, 3). Recent examination of the site, however, has revealed no clear traces of these structures. Instead there appear to have been 2 or three clusters of buildings built in close proximity to each other, so that their collapse resulted in extended fields of rubble and debris (plate 6.3). Judging from this debris (loose, un-hewn stones), the lack of foundations and also the clear absence of mortar these buildings appear to have been very low status, and unlikely to have been used for prolonged habitation.

As mentioned above Aramburu-Zabala also recovered a comparatively large amount of datable ceramic materials, all dating to the late Roman period and into the Byzantine era, that is from around 400 to 660AD (2000, 5). These dates coincide with those suggested by the coinage finds of Santueri, where we also see an increased use of the site during that same period (Ilisch et al. 2005), again suggesting a move to the high ground by the rural population. Interestingly, Aramburu-Zabala states that the majority of the ceramics were recovered from the interior of the cisterns which abutted against the inside of the curtain wall (W1, W2), though this is likely to be the result of the steep incline of the mountain which has aided the downhill displacement of these materials, eventually trapping them within the cisterns. Notably, however, according to Aramburu-Zabala there are no
ceramic remains of later dates (2000, 3). The Islamic period appears to be completely unrepresented in the ceramic record of Sa Bastida, as is the Catalan era.

Nevertheless, the fact that the site was so intensively occupied for most of Late Antiquity, and immediately re-used in the aftermath of the Catalan conquest is suggestive of a relative importance of the location during those periods. It is also unlikely that the aforementioned Pere de Vilarragut had decided to build a *castrum* at a site of no previous relevance. Furthermore, we should point out that at Alaró Aramburu-Zabala also recovered no significant Islamic ceramics, despite the fact that we have concrete historical evidence for the sites’ use and occupation during that period. It is therefore possible to suggest that in the context of Islamic Mallorca, a lack of ceramic remains from the Islamic period is not necessarily indicative for a lack of use and occupation of a particular site.

**Architectural analysis**

The fortifications of Sa Bastida consist largely of two long stretches of wall running NS and EW which close off the mountain from the lower part of the slope (Fig. 6.3). The North wall runs almost exactly from North to South, with the western wall runs East to West with both stretches meeting in the middle of the mountain at a large rocky outcrop known as the Pico Petit. The outcrop is sufficiently steep and high so as to not require any substantial fortification, though there are a series of retaining walls and terraces which create stretches of relatively level ground at their rear (plate 6.2), while also providing paths and viewing platforms.

**The Walls**

Beginning from the northern end of wall section 1 (C8, C7, C6), this wall runs in a NS direction from the edge of the cliff in the north towards the mid section of the mountain where it meets the Pico Petit (Fig. 6.3). The visible remains of this wall are all made from un-hewn stone with few surviving traces of lime mortar (plate 6.5). The interior of the wall appears to have been faced with a layer of plaster, and it is therefore likely that the outside would have been covered as well. There are in fact only three remaining stretches of this wall standing, and their height is no higher than 60cm on the interior, the outside face being substantially higher (1.5-3m) due to the pronounced slope and rough terrain upon which it stands.

It may be assumed from the quantity of collapsed masonry, that originally the wall would not have stood much higher than 1.80m on the on the interior face, and its thickness of about 1.20m would probably not have allowed for the construction of a wall walk or elevated parapet without a substantial wooden backwork of which no traces remain, and which would have been an usual feature in Mallorca.
The northern stretch of curtain wall holds no visible remains of any other architectural features such as towers, crenellations or indeed a gate, though due to the comparatively large size of the site there may have been more than just one access to the Puig de sa Bastida.

At the point at which the northern wall reaches the Pico Petit the terrain becomes very uneven and so steep that from a defensive point of view a continuation of the wall was not necessary. At the top of the Pico Petit, however, there are a few stretches of retaining wall surviving (C2, C3, C4 & C5) which differ quite substantially in terms of the fabric from the northern curtain wall. Though the wall-stretches on the outcrops appear to be in better condition than those on the slope of the mountain this is not necessarily indicative of them being of a later construction date. Instead, this is probably due to the fact that sections C6, C7, C8 and their intermittent spaces were subject to much greater exposure to the elements, whereas the shelter of the rock face appears to have protected the constructions on the Pico Petit, where the walls appear much less eroded and the interior and exterior layers of plaster surviving nearly completely. In particular section C5 appears in good condition, still standing to its original interior height of around 1.2m, with three large masonry merlons forming a low yet well-protected parapet from which the southern approaches to the site could be covered with ease (plate 6.6). This section of wall gives one a glimpse into the original appearance of the rest of the enceinte which has today all but collapsed.

The second large stretch of curtain wall runs from the NW side of the Pico Petit in a westerly direction, towards the cliff-edge of the mountain (C1). We have no clear standing remains from this side of the site, though its outline along the mountainside is clearly visible at various points and the foundations of the southern walls of the cisterns indicate that they had been integrated into a much more massive structure that they would have required (Figs. 6.4, 6.7). It has been difficult to re-trace the entirety of the wall and in many locations erosion has displaced even the foundations of this structure. Indeed, its location can at times only roughly surmised by the presence of large amounts of lime mortar.

The SW wall was made in the same technique as its northern counterpart, being put together by large, un-worked stones and chalky mortar of local production.

The cisterns

The Puig de Sa Bastida counted with a minimum of 6 cisterns, all of which appear to have been built around the same period as they are largely homogenous in their construction technique, dimensions and materials employed. They are all in an advanced state of collapse, with two of them being discernible only from fragments of *opus signinum* strewn across the higher parts of the mountain and therefore impossible to place with certainty. The better preserved examples are located along the
curtain wall (W1, W2), on the SW side of the site and to the north of the Pico Petit (W4). All cisterns are at least partially collapsed, and even the best preserved ones have lost their posterior walls.

W1 is the western-most of the cisterns and is located immediately behind the remains of the curtain wall, originally abutting against it. While it is of a roughly square shape its bottom is of a somewhat irregular section due to the terrain it stands on (plates 6.7, 6.8, Figs. 6.4, 6.5, 6.6). This suggests that the bedrock upon which the cistern is sited was not substantially carved out to increase the volume of the cistern, opting instead to make it longer, rather than deeper. It is difficult to estimate the original height of the cistern as the curtain wall has collapsed and the rear wall has been substantially eroded by the downhill displacement of debris. Today the interior height ranges between 2.2-1.8m which gives the reservoir a volume of around 52m³, though it may originally have been 20-30% larger.

The manufacture of cistern W1 is consistent with the techniques employed at the curtain walls of Sa Bastida in the quality of the stone used and the consistency of the mortar. One feature which is specific to this type of structure, however, is the water proofing plaster employed on the cistern’s interior (plate 6.8). This is an opus signinum type plaster made from crushed ceramic debris, which is thickly daubed onto the interior walls. The thickness of this layer ranges from only about 2cm on the walls to around 10cm on the floor. The compact thickness of this layer has allowed it to survive in many places and fragments of the plaster are to be found strewn across the interior of the site, potentially indicating the existence of further cisterns which are not visible today.

At cistern W1, as at all others, we have no evidence of a covering of any kind, which it is likely to have had considering the water was probably intended for human consumption.

Cistern W2 is located about 4 metres east of W1, also abutting the curtain wall with which it appears to have been bonded. It is of roughly the same shape and dimensions as W2, being slightly larger with a volume of about 65.2m³ (Figs. 6.7, 6.8). Here too the manufacture coincided with the techniques of the curtain wall and that of W1, therefore making them contemporary in construction, and we also find a thick layer of opus signinum lining the interior of the cistern, the bottom of which was partly placed onto the bedrock and also on loose stone bound by the same chalky mortar we find on the walls.
Figure 6.4, Sa Bastida, cistern W1, Plan. Source: Author

Figure 6.5, Sa Bastida, cistern W1, Elevation, Source: Author

Figure 6.6, Sa Bastida, cistern W1, cross section, Source: Author.
Figure 6.7, Sa Bastida, cistern W2, Plan. Source: Author.

Figure 6.8, Sa Bastida, cistern W2, elevation & cross section. Source: Author.
The southern wall of cistern W2, which collapsed as part of the curtain wall, was approximately 1m thick at the base of the cistern. Today there are remains of a later dry stone wall which could never have retained water, suggesting that sometime after the collapse of the curtain wall, the cistern was temporarily used as a shelter, perhaps for livestock.

Immediately to the west of the Pico Petit along the curtain wall we find the remains of a third cistern (W3). Whereas W1 and W2 are of a long and shallow shape, the steep slope of the hillside that W3 is placed on determined that it be rather shorter and significantly deeper than the previous two (plate 6.10). Unfortunately only the rear wall remains but its overall dimensions are not visible as it lies mostly below a deep layer of debris and collapse making it impossible to completely reconstruct this features’ original appearance and dimensions without excavation, though the visible remains clearly indicate a construction date contemporary to W1 and W2.

Further to the north and not associated with the curtain wall of this part of the site is another cistern with a volume of around 54m³ (W4). As with the others, cistern W4 is placed squarely into the hillside and here too we find that its southern and eastern free standing front walls have fallen away, collapsing downhill (plate 6.11, Fig. 6.9). Its original use as a cistern, however, is demonstrated by the copious amounts of opus signinum visible in the NW corner and the floor of the structure. The construction technique shows no use of tapial, instead being made entirely from rough masonry bonded with chalky mortar, just as at W1, W2 and W3. The post-collapse additions and reparations were clearly not made to hold water as the walls were made from loose stones simply piled on top of each other in the simplest of fashions. This suggests that the remains of W4 were later used as a

![Isometric perspective of cistern W4](image-url)
shelter or stables, probably by shepherds and colliers who were active on the hill of Sa Bastida until the 19th century.

While there are no further clearly discernible remains of cisterns at the site, the fact that further up the hill we find remains of opus signinum strewn across the surface may well indicate the existence of at least two more such features at Sa Bastida.

**Other architectural remains**

As briefly outlined above, Aramburu-Zabala claims to have identified a series of structures or hovels, and dated them to the Roman or Late Antique period in accordance with ceramic surface finds from that period (2000, 5). While it is likely that the site was settled around the middle of the first millennium, it is today difficult to discern with any clarity the structures of which Aramburu-Zabala speaks. There are two large gravel fields on either side of the slope of Sa Bastida which may well result from the collapse of several stone built huts. Without detailed excavation, however, these areas of Sa Bastida will yield little more than conjectures.

About 10m to the south of cistern W4 are the remains of a structure of which only the NE corner survives, standing to a height of approximately 90cm. The function of this building is unclear and most of it has collapsed downhill, though it appears quite clearly not to have been a cistern as there are no visible remains of opus signinum anywhere in its vicinity. Nevertheless, its construction technique is the same as the one found at the cisterns, therefore making it contemporary with them while also being the only visible structure of Sa Bastida which is not intended for water storage. A residential function for this structure can at this juncture not be confirmed.

Apart from the clearly medieval remains we find a number of later constructions at the hill of Sa Bastida. The ubiquity of sitjas de carboner (round platforms for the production of charcoal) (plate 6.4) corroborate the picture given to us by Salvator of the highly productive charcoaling industry that worked the slopes of the Sierra de Tramuntana until the late 19th century. This also serves as an indicator that until about a century ago the vegetation of the hill must have consisted largely of holm oak forests rather than the low shrubbery and pine which cover the mountain today.

**Viewshed analysis**

The viewshed analysis of Sa Bastida d’Alaró reveals that the structure was quite clearly not intended for maximum visibility of the surrounding countryside (Fig. 6.10). While a clear view of the village of Alaró is achieved from the mount, the fact that this settlement was probably a much later foundation than the fortification itself renders this fact largely irrelevant.

In terms of interconnectivity, due to its altitude, and not unlike the castle of Alaró, the mount of Sa Bastida also provides a clear view of the Puig de Randa, but it is with the castle of Alaró with
which it is most clearly intervisible. The implications of the proximity between the two sites (3km) has been discussed above, though it appears most likely that the visual link is more the product of chance rather than a that of a selective process. Indeed, the defensive qualities of the Mola de sa Bastida appear to have been the prime motivation for the placement of the fortification on the site, rather than its good visual connection with Alaró.

![Figure 6.10. Sa Bastida, Viewshed. Source: Author](image)

Conclusion

The fortifications of Sa Bastida were quite clearly secondary in importance to the great fortress of Alaró in its vicinity. During later Antiquity it appears the local communities sought refuge on its steep slopes, though, in view of the scarce architectural remains from this period it appears to have been settled on a rather ad hoc basis by small groups, rather than the wholesale resettlement of an entire population. While we know that at the foot of the Mola of Sa Bastida there was a settlement (Beniarri), the complete lack of Islamic finds from this era at Sa Bastida is not necessarily suggestive of the fortress of Alaró fulfilling all the defensive requirements the area. It has been indicated that at Alaró there have also been no clearly identifiable Islamic pottery finds, and yet its occupation in the Islamic period is very much attested by the Islamic documentation (al-Zuhrī, al-Mahzūmī). Furthermore, Pere de Vilaragut’s decision to fortify the site despite its vicinity to Alaró suggests that there was a precedent to his castra et fortitudinem which perhaps he sought to revive. In any case, even the Catalan fortress of Sa Bastida appears never to have had much of a residential function, and while we know of its construction in the 13th century there is definite evidence of any permanent
habitation by its patron, either in the form of pottery or standing buildings other than curtain walls and cisterns. Finally, the fact that at all cisterns there is evidence of only one daubing with *opus signinum* suggests a relatively short period of use for these structures, of perhaps around a hundred years or less.
The Tower of Canyamel/Montsó
(39°40'02"N, 3°24'42"E)

From an architectural point of view, this structure is one of the most interesting in Mallorca as its good state of preservation provides a complete architectural history from the mid 1200s to the present day, and therefore serves to illustrate the evolution of Mallorcan architecture from the Middle Ages onwards. Nevertheless, while documentary evidence indicates that the site held a tower since before the Catalan conquest of 1229 (Lliteras 1970, 6), the current structure is entirely post-conquest and there are no clearly identifiable remains from the Islamic period.

Located in the middle of the wide fertile valley of Canyamel, the fortress forms a visible link between the inland town of Artá and the small port of Canyamel (Fig. 6.11). The choice of location of the tower within the broad landscape may appear rather random at first, though in fact a closer examination reveals that the foundations of the structure are placed on a shallow platform of bedrock protruding from the alluvial soil of the valley. This too is indicative of an Islamic predecessor to the modern tower, as the tabiyya structures built by the Moors in Spain tended to be constructed upon bedrock wherever possible so as to dispense with elaborate foundations and avoiding humidity damaging the rammed earth structure.

The placement of the tower within the valley of Canyamel is also of interest in a broader sense, providing some important insights into the interconnectivity between the fortresses of Mallorca. The peninsula of Capdepera/Artá is the most remote area from the island’s capital and it is
here that one finds a cluster of fortifications, all dating to the Islamic era (Torre de Canyamel, Torre d’en Nunis and the Almudaina de Artá). The exact reasons for this are largely unknown though potential functions of this placement will be discussed in the following chapter.

**History and documentation**

The Tower of Canyamel, also known as the Tower of Montsó and Castle of Canyamel, first appears mentioned in the Repartiment of 1231, where it is granted by King James I to Guillermo de Montsó (Soto 1984, 5; Rosselló 2007b). It is generally assumed that originally the tower which the Montsó family took charge of resembled the *alquería* towers that were dotted around the fertile belt that surrounded the city of Valencia (Jiménez Esteban *et al.* 2009), and it would most likely have been associated with a small hamlet or rural community, and the Arabic codex of the Repartiment does in fact mention a *qarya* Dayharroba, located within what is now the valley of Canyamel (Lliteras 1970). Considering that Dayharroba is likely to mean ‘square house’ or ‘square hamlet’ an association with a tower becomes very probable. Of this *qarya*, however, nothing remains, and today the tower of Canyamel stands in complete isolation almost in the middle of the valley that runs from Artá to Canyamel.

Lliteras states that the Montsó family resided at the site until the end of the 13th century when the tower and its associated lands were given in emphyteusis to the family of a certain Romeo Blanquer and that during this time the first major modifications of the structure took place (Lliteras 1970, 31). Indeed, it is almost certain that the original rammed-earth tower was never intended for permanent residence and that therefore an expansion or modification of the structure had already been carried out during the first half of the 13th century. By the year 1300 the tower appears to already form part of a larger complex of structures dedicated to the agricultural exploitation of the valley of Canyamel, though by the year 1338 a royal inspection of the fortifications of Mallorca by James III determined the tower to be in a ‘deplorable’ state, prompting a major restoration (Lliteras 1970, 37).

With the gradual financial decline of the Blanquer family, who had bought the tower and attached lands in 1306, it passed to the Orpi family who started several failed attempts at growing sugar cane on their dominions in the valley, hence the name Canyamel (lit. honey cane). Throughout the 15th century the tower fell into an ever deeper state of disrepair as the sugarcane production faced complications due to environmental factors and the Orpi family finances suffer. In the year 1519 Joan Prim de Villalonga was granted the tower and dominions of Canyamel by Charles I of Spain (Holy Roman Emperor Charles V) and significant quantities of capital were invested into the agricultural production and into the tower itself.

In order to convert it into a museum and open it to the public the current owners of the Tower of Canyamel, the Morell family, have recently carried out a major restoration of the building in an
attempt to recreate its ‘original’ aspect. This restoration consisted largely in eliminating all interior walls and chambers except those that were deemed structurally essential, or part of the 13th century architecture.

**Architectural analysis**

The tower of Canyamel is a completely square structure, with an exterior side length of 14.5m and an interior area of about 200m². In discussing the wall-fabric and its manufacture Lliteras sees parallels with that of the Almudaina of Artá, which leads him to conclude that both buildings are of Islamic manufacture (Lliteras 1970, 22). While the Islamic origin of either building is largely beyond dispute, it is highly unlikely that their modern fabric dates to that age, as stylistically their masonry construction is uncharacteristic of the post-caliphal period. Furthermore, the Almudaina of Artá, while occupied in the Islamic period, as seen today is of demonstrably post-conquest construction.

Today the tower’s main access is a large doorway positioned on southern end of its eastern face, though this is most likely a later feature. We may assume that originally the tower was entered through an elevated, more difficult to access, entrance which one probably reached via a ladder. The voussoirs and outline of an arched doorway are in fact still visible about 4m up on the same wall (plate 6.12).

A striking feature of the tower of Canyamel is the comparative thinness of its walls, which do not tend to exceed 90cms at ground level. This may well be due to the fact that it was initially not intended to carry heavy stone vaults as the interior floors and ceilings were originally supported by beams (Fig. 6.12). The current cross vaults, which were probably inserted in the course of the restorations of the 16th century, rose in a very steep angle from a low height, therefore putting less stress on the exterior walls by allowing for a more vertical load distribution (plate 6.14).

The entirety of the structure is built from roughly carved masonry bonded with copious amounts of lime mortar. For the most part the wall fabric would not have been visible as the entire building was plastered and whitewashed on the interior and exterior. Certain architectural elements, however, such as window mouldings, merlons, arrowslits and door frames were made from locally quarried compact sandstone and kept uncovered. It has been mentioned that the ground floor has only
one access point at the eastern side, which enters a large square space within which are placed four large pointed arches with support the upper structure and the core of the tower. These arches appear to have originally sprung from the floor up (Fig. 6.12, plate 6.16), creating a somewhat cave-like impression, but giving them a very high load-bearing capability. Today these arches appear significantly smaller as they spring from a vertical section of wall, which were probably inserted to strengthen the entire structure before the insertion of the stone vault in the 16\textsuperscript{th} century. Each of the four walls on the ground floor hold six arrowslits, and while there appear to have been no windows of any kind at ground level, there are visible traces of later openings in the walls which are likely to have served functional purposes during the tower’s more ‘agricultural’ history.

The second floor is accessed via a narrow spiral staircase which is let into the SE corner of the building. The second floor is divided into three longitudinal sections running NS, and which are accessible from 6 arched doorways. These doorways consist of a limestone frame covered by a segmental arch into which is set the opening, which is covered by a round arch. This composition we find also at Santueri and Alaró and is an architectural mainstay of late 13\textsuperscript{th} early 14\textsuperscript{th} century Mallorca (plate 6.15). At this level one finds 5-6 arrowslits let into each wall at floor level. The fact that there are no further arrowslits placed higher on the walls indicates that this level was not originally intended to have interior platforms or galleries subdividing the interior volume for the sake of increasing the usable space. The inner of the three chambers is the product of the supporting walls holds a pair of pointed bay arches which spring directly from the walls (Fig. 6.12 plate 6.14). These arches act as supports for a small tower-like structure placed on the roof of the building (plate 6.17). It is unclear how the roof, and by extension the tower, were originally accessed, as the spiral staircase leading to the second floor does not continue further, though today it is reached via a wooden staircase placed in the NE corner of the eastern chamber. While it is certain that the roof of the tower was originally flat and accessible in order to provide access to the wall-walk and parapet, plans from the early 20\textsuperscript{th} century show a gabled roof leaning on the secondary tower at the centre. This tower, while having all the trappings of a last defensive redoubt placed at the hardest-to-reach point of the entire ensemble is, however, much more likely to have served as a lookout point, as from its roof one has a direct line of sight with the Almudaina of Artá, situated some 3km to the north-west.

The interior of the secondary tower was originally subdivided into two levels as is indicated by a second line of arrowslits looking out onto the roof-terrace of the tower proper. Of this interior partition, which was originally placed on wooden beams, today nothing but the corbels remain. The roof of this tower is accessed via a long ladder which breaks through the ceiling. The entirety of the structure is made from locally available sandstone known as marés. Elements on the interior however, such as the bases of the large arches and the corbels that supported the roof beams are made from limestone blocks similar to those we find at Alaró and Santueri.
One interesting feature of this secondary tower is that if one were to extrapolate its dimensions from the roof level down it would closely resemble the *alquería* towers known from the area around Valencia (Jiménez Esteban et al. 2009). While it is highly unlikely that any part of the fabric visible today dates to the Islamic period there is a possibility that the plan upon which the ‘interior’ tower (Fig. 6.12) stands coincides with that of the original *alquería* tower that preceded it.

**Viewshed analysis**

Lliteras and other authors have mentioned in the past that the main role of the tower of Canyamel was that of coastal watch tower. The tower’s inland location about 3km from the coast notwithstanding, the viewshed analysis reveals quite clearly that the tower was never able to carry out such a function as its maritime horizon is indeed minimal (Fig. 6.13). Instead it becomes clear that its visual radius was focused on the surrounding agricultural lands, especially the valley of Canyamel itself. Furthermore, its altitude allowed it to be visually linked to the Almudaina of Artá, which is not visible from ground level, and is in fact only visible from the very top of the tower. This is relevant in so far as it serves to explain the function of the roof-tower, which was likely employed to relay signals inland towards the Almudaina.

Finally, the fact that its role as a look out post was clearly impaired by its low-land location indicated that this building was in all likelihood originally conceived as an *alquería* tower, with the function of acting as a fortified storage place for a nearby community.
**Conclusion**

The Torre de Canyamel is in its current state a firmly Christian construction, though from its plan and an exploded view it becomes clear that this one tower, is in fact _two_ towers; one placed inside the other. The interior core-tower resembles very closely in its proportions and dimensions the _alquería_ towers of the mainland, and is in fact also comparable to the Tower of Nunís. Archaeological excavations on the interior of the tower are likely to provide the necessary conclusive data in order to confirm the aspect of the original Moorish tower that stood on the site. Furthermore, excavations in the fields surrounding the tower might reveal remains of the Qarya Dahyarroba that the medieval sources state existed there. Due to the fact that the land surrounding the tower has been left largely undisturbed by later developments, long term excavations might make this site one of the most productive to further our understanding of the morphology of Mallorca’s Islamic rural settlements and their material culture.
D. Castell de Moros/ Castell d’es Moro, Deiá
(39°44’40,47”N, 2°38’21,05”E)

This small tower-like fortification is located on the northern side of the Tramuntana range, in the close vicinity of the village of Deiá. While there is an abundance of water in this area the terrain is too rugged as to permit the use of conventional farming techniques. The Moors therefore terraced most of the mountainous slopes in order to level the ground and retain the fertile soil, which also greatly facilitated irrigation. The village of Deiá is located about 2km from the sea on a hill which rises from the slope of the much larger mountains (Fig. 6.14). This location was presumably chosen for reasons of safety, not just from sea-borne raiders but also from rock-fall from the mountains. We know from other villages of Islamic origin in Mallorca (Estellences, Banyalbufar, Valldemosa), and also from the Spanish mainland that they tended to be much more spread out than their Christian counterparts. Thus, while there may well have been an urban nucleus focused around a mosque or market square, the individual dwellings were located further from each other than the modern aspect of the village might lead us to believe. In this sense it would not be surprising if archaeology revealed the Islamic village to have occupied a larger space than the modern village of Deiá despite having a smaller population.

Located about 600m SW from the centre of the village, the Castell de Moros (Cat. Castel of Moors) is not in fact placed on the same hill as the village but on another one only slightly higher, overlooking Deiá and its southern approaches (plate 6.19).

The Castell de Moros itself is placed on a rocky hilltop about 236m ASL, of very difficult access (plate 6.18). A series of masonry steps, partially carved into the rock face lead to the building itself which is accessed through a low doorway framed in a reddish sandstone. The building is of a
simple structure consisting of only a series of walls which enclose the top-most part of the rock it stands on and create a narrow platform on its eastern portion (plate 6.21, Fig. 6.15). The building is made entirely from un-worked masonry and fairly low quality lime mortar. There are no remains of any covering, though a series of putlog holes on the interior wall immediately above the entrance suggest an intermediate second floor or ceiling (plate 6.20) which supported a platform that gave access to a parapet and a feature resembling the remains of a murder hole placed above the entrance. Originally this feature probably consisted of two tiers of superimposed corbels protruding from the outside of the wall from which one could cover the only access to the structure’s interior. The interior of the Castell d’es Moro consists of two levels: the first coinciding with the entrance, which proceeds up a pronounced slope on the left (Fig. 6.16), which then gives access to the second level which appears never to have been covered and consisted mainly of an open viewing platform.

Figure 6.15, Castell de Moros, plan and section line. Source: Author.

The small size and difficult access of the Castell d’es Moro indicate that this structure was never intended as a permanent residence. It is also unlikely to have functioned as a watch tower from which to scan the coast for potential threats as it is located much too far inland and thus the sea-horizon visible is too narrow to have been part of the system of coastal watch towers. The Castell de Moros was likely to also be too small as a temporary refuge or storage facility, which demonstrates that it did not function in the same manner as the alqueria towers of Capdepera or Canyamel. Nevertheless a closer look at the exact placement of the building reveals that is located immediately
above the old path that connected Deiá with the much larger inland village of Valldemosa along a route known as *Cami d’es Teix*, the quickest route from Madīna Mayūrqa. This may serve as proof that this fortification was not intended against at sea-borne attackers, but was instead directed inland, guarding the landward access route to the valley of Deiá.

![Figure 6.16, Castell de Moros, section along N-S line. Source: Author](image)

The questions regarding the age and origin of the Castell d’es Moro are the most complicated to answer. The name of the site quite clearly suggests an occupation during the Islamic period while the masonry construction is more indicative of a Christian-era manufacture. The fortifications of Christian Mallorca, however, are all either state-funded efforts (the system of coastal watch-towers and fortresses stems from the 16th century and were funded by the Spanish crown), whereas the smaller inland fortifications are almost exclusively high status constructions of the landed elite and tended not to have much of a defensive function. The Castell d’es Moro, however, is most certainly not a high-status structure and does not form part of the coastal defence network, clearly giving it a function different from those that are traditionally assumed for the castles of Mallorca. Its origin is therefore likely to predate the Catalan conquest, though it was probably maintained and restored at later dates. Typologically, its placement atop a rocky peak of very difficult access also makes an Islamic origin likely as one can draw clear parallels between this structure and similar Islamic fortresses from the Spanish mainland, such as the castles of Penella, Confrides and Serella, built from the late 11th to the early 13th centuries.
**Viewshed analysis**

The location of the Castell de Moros immediately to the west of the village of Deiá provides the site with a clear view of the surrounding territory and the village itself (Fig. 6.17). In particular towards south and east the fortress has a commanding view of all the roads of access leading to the village, especially the so-called path of Es Teix, which crossing the mountain from the south passes next to the Castell de Moros. As a coastal lookout post the Castell was hardly able to function as the maritime horizon covered by the structure is not particularly ample. Indeed, the maritime perspective is much greater from the inside the village itself that from the Castell de Moros, indicating that its main visual orientation was inland. It does not connect with any other structures in this study and is hence visually isolated, except from the village of Deiá itself.

*Figure 6.17, Castell de Moros, Deiá, viewshed, Source: Author*
E. Palau dels Reis de Mallorca, Sineu
(38°38'30"N, 3°00'33"E)

The so-called Palace of the Kings of Mallorca is likely one of the most enigmatic architectural complexes on the island. Considering its age and importance it is surprising how little attention it has received from the scholarly community, both on the island and abroad.

The site is today a convent inhabited since the mid 16th century by Conceptionist nuns, though its origins appear to date to the early 11th century, constructed by the emir of Dénia Mudjāhid. Little is known about the history of the building, though it appears to have formed part of the Emir’s attempts at extending his control beyond the city of Madīna Mayūrqa far into the island’s hinterland. The fact that Mallorca had a few years of de facto independence from the mainland may have hampered this process, requiring the physical presence of the emir, who was to attain questionable fame in the island’s Moorish history as a highly exploitative ruler, who sought to gather funds and materials for his military adventures in Sardinia.

While there is no evidence, either textual or archaeological, for a continued use of the site after Mudjāhid’s death, there is a possibility that it was used during Abu Bakr’s or Wanur’s integration of the island into the Almoravid Empire after the Pisano-Catalan raid of 1114-1115. It was outlined in Chapter 3 how Abu Bakr had for a while sought to relocate the island’s capital to the interior, in order to make it less vulnerable to sea-borne raids.
The complex of what appears to have been conceived as a rural palace is located in the middle of the modern village of Sineu, Arabic *Sisnan*, at the centre of the island of Mallorca (Fig. 6.18). There is no documentary evidence regarding the building during the Islamic period as neither al-Zuhri nor al-Mahzūmī mentions it in their respective writings. Nor does James I mention it in his chronicle of the conquest of Mallorca, suggesting that the building had no great importance or had in fact fallen into disuse by 1229. We do not know much regarding the fate of the building throughout the 13th century, until James II of Mallorca ordered the construction of a palace of his own on the site of the ‘Palau del Moro’ in 1309 (Camps *et al.* 1998, 179). Considering that James II died in France in 1311 it is unlikely that he ever resided at Sineu, and there is not much evidence that later monarchs of Mallorca made great use of the structure. It seems to have fallen into disrepair with Mallorca’s integration into the kingdom of Aragon in 1343, and by the mid 16th century parts of the structure were used as a school by a certain Sebastià Mulet, who claimed to have owned the site (Rotger 1982, 2), though it clearly remained in royal hands as by 1583 Phillip II of Spain was able to cede it to the Conceptionist nuns who turned it into the monastic centre it is today.

**Architectural analysis**

The building itself is of a roughly square plan with a side length of approximately 50-55m, placed on a slight incline towards the SE (Fig. 6.18). The entire site is enclosed by high walls, the western portion of which (E1) are of clearly Islamic origin as they are constructed entirely from high quality *tabiyya* placed on a thin foundation of roughly hewn ashlars which may in fact be *spolia* from an older structure (plates 6.28, 6.29).

The entire complex is built on a platform of bedrock which, relatively unusual for Mallorca, is made from compact conglomerate rock. This has been partly carved away adding to the overall height of the walls, making the interior floor level about 1-1.5m higher than the exterior street level. To what extent this lowering of the exterior ground level had been carried out during the Islamic period is difficult to determine without knowing the exact ages of the foundations of the buildings that surround the palace. On the NE side of the Palau, however, we find that only a 2m wide channel was carved out of the rock, with the houses on the opposite side standing at the same height as the palace. This channel, which is today a street, contained an arched sand stone gate which was later blocked (plate 6.25). The gate appears to date from James’ 14th century palace, indicating that the open area here designated C3 was already in existence in the 1300s rather than being a later acquisition by the monastery.

The Palau dels Reis is today accessed from the north through either the church entrance (T3), or the entrance of the convent itself (T2). A large part of the monastic complex appears to date to the constructions carried out by James II, and in particular the small courtyard/cloister (C2) and
surrounding gallery carry the clear signature of late 13th early 14th century axe-dressed masonry work while much of the rest of the building, in particular the upper floors, is clearly 16th century.

The majority of the architecture is concentrated on the northern quarter of the site, and also running along its NE-SW central axis. On either side of these buildings, which are difficult to date with accuracy as they are mostly whitewashed, we find large open spaces used as gardens and vegetable patches (C1, C3). The western one of these clearly forms part of the original layout of the site as it is enclosed by the Islamic walls, whereas the larger SE garden might be a later addition as successive reparations appear to have erased all visible rammed-earth remains. It is therefore possible that area C3 and its enclosing wall (E2) were added during James’ construction effort in the early 14th century.

The western enclosure (E1) also saw substantial modification during the construction of James II’s palace as we can still see a long line of limestone corbels protruding from the upper levels of the NW wall (plate 6.24). These appear to have supported either the roof of an abutting structure or a wall-walk along the perimeter of the site. A corbelled wall-walk is, however, somewhat unusual for Mallorca as usually these features tended to be supported by the thickness of the wall itself. The corbels themselves are if the same style and dimensions as those found at Alaró, Santueri, and the Tower or Canyamel, therefore clearly placing them into an early 14th century manufacture.

On the western front of the core of the structure, formed by its northern quarter and containing the cloister mentioned above, there is a large tower integrated centrally into the facade of the building (T1), though standing significantly taller and containing a large gate at its base (plate 6.22). This tower forms part of James’ palace which allows us to draw some parallels with the Palace of the Kings of Mallorca at Perpignan (the official capital of the Kingdom of Mallorca) (plate 6.23), which was completed the same year that the palace of Sineu was begun (1309) and appears to have acted as a model for the slightly smaller palace at Sineu. In conversation with the abbess the author was told that there had been one further tower on the complex’s northern corner (T2) but that this had been demolished in the 16th century due to its bad state of preservation, and that with the spolia from this medieval tower a new bell-tower for the church was constructed (T3). The remaining tower (T1) was heavily restored during the 1980s and fitted with a new roof covering. The interior, however, is still largely in its original state, consisting of two interior floors the lower of which consists of a square chamber with a large window looking towards courtyard C1 (plate 6.26). The top floor of the tower was originally freestanding as we can still see the remains of four large windows with stone-carved window seats on all four sides of the interior looking out onto the gardens and surrounding countryside. During the restoration works of the 1980s a series of wall paintings depicting ships and other maritime scenes (plate 6.27) were discovered indicating that originally this chamber had been richly decorated and hence fulfilled a residential function.
Conclusion

Clearly the Palace of the Kings of Mallorca at Sineu was never intended to function as a fortress or military structure of any kind. Nevertheless its mention in this study is of great relevance as it serves to demonstrate the importance of physical presence of a lord or monarch to assert his power. This clearly appears to hold true for James II as much as it did for Mudjāhid or Abu Bakr, all of whom sought to create a power base in the otherwise completely unimportant village of Sineu. Its significance lay not in the fertility of the surrounding countryside or the size of its population but in the symbolic impact that came with being at the centre of a geographical space, in this case Mallorca. This symbol appears to have been important enough for the above mentioned leaders to create a physical symbol of their presence at this location, even though they may never have in fact lived or resided there for any length of time.
F. Almudaina d’Artá
(39°41’46”N, 3°21’13”E)

The fortress above the town of Artá, known as La Almudaina and therefore likely to be of Arabic origin, forms part of the castral cluster that dominated the far-east of the island of Mallorca during the middle ages. Located on a hill at about 174m ASL at the head of the valley of Canyamel, it is placed within one of the most fertile regions of Mallorca which still today is heavily farmed and highly productive in agricultural terms (Fig. 6.19). A number of studies into the Islamic hydro-archaeology of the region have been carried out in recent years, providing us with a picture of a highly dynamic agricultural space the foundations of which have survived until this day (Kirchner 1995; Argemí Relat 1995).

The name Artá comes from the Arabic, and the area comprised by the ancient Yuz Yartan, the district of Artá, which was the furthest district from Madīna Mayūrqa, and appears to have contained the highest percentage of clanic and tribal Islamic place names (around 46.15%) (Argemí Relat 1995, 259). Indeed the name of the district was derived from the clan of the Ayt Iraten, a Berber sub-group of the tribe of the Zuwawa which Ibn Khaldûn describes as originating from near the modern city of Bougie (Barceló 1995a, 30-31). This further demonstrates the far-from-complete Arabization of these Berber groups which settled the Oriental Isles of al-Andalus and may well serve as an explanation for the near-constant state of suspicion that seemed to exist between the Berberised hinterland and the heavily Arabised cities. Helena Kirchner, following in the footsteps of Miquel Barceló, suggests that the Almudaina of Artá was in fact a hisn in the Peninsular sense: a fortified settlement which acted as the administrative centre of the district and served as a representative location for the central government (Kirchner 1997, 48-49).

Figure 6.19, Topography of Almudaina d’Artá and village, Source: SITIBSA 2008
We have a fair amount of information regarding the settlement pattern of the Artá region as after the conquest of 1229 the Yuz Yartan passed into the King’s portion and as such it was recorded in the Repartiment of 1231. Hence it is clear that while from the 61 alquerías that made up the district there is not a single one attributable directly to the Ayt Iraten, we do have the place name of Almudayna, which coincides with the modern town of Artá and was likely to be the settlement of the group that gave its name to the entire district. The perimeter of the original settlement probably matches the walls of the current fortress, though according to Gili none of the architecture visible today in fact dates to the Islamic period (Gili 1979). Gili, however, does state that there are remains of older walls which he deemed to be of Talaiotic origin (i.e. Mallorcan Bronze Age, ca. 1000-100 BC), but unfortunately he does not specify which ones these might be. In any case, it is probable that the foundations upon which the later medieval walls and towers stand are pre-conquest. This gives us further clues regarding the, as yet, badly understood term Almudaina, which may have stood for a type of walled settlement on an elevated location. In any case, the fortifications of Artá cannot have been very substantial as we know from James I’s chronicle that during his gradual conquest of Mallorca’s hinterland the inhabitants of Artá sought refuge in a nearby network of caves, where supposedly some 2000-3000 people held out for several weeks before being literally smoked out by James’ men and sold into slavery (James I of Aragon 2003, 117-119).

**Architectural analysis**

The Almudaina of Artá is located on a small hill known as the Puig de Sant Salvador on the northern edge of the village. The eastern, southern and northern slopes of the hill are terraced for agricultural purposes whereas its south-western side forms part of the urban make up of the village itself (plate s 6.31, 6.32).

The structure itself is roughly 100m wide from east to west by about 60m from north to south and, while originally it may have had only one entrance facing the village, today the Almudaina can accessed from two points: from the north through an arched gate (plate 6.33) which appears to be of a date similar to that of the church of Sant Salvador and its ancillary buildings (F1, F2) which takes up most of the sites’ interior, and from the south along a grand processual staircase leading from the church of La Transfiguració del Senyor to the sanctuary of Sant Salvador.

The only medieval remains at the site are the walls and towers which enclose the top of the hill, and these have been heavily restored in recent years. A large part of the restorations have consisted in re-pointing the masonry walls with a picadis based yellow plaster, presumably to give the architecture a more ‘aged’ feel. Originally, however, we may assume that the medieval Almudaina was plastered and whitewashed just as all the other castles of Mallorca had been. The walls themselves stand to an average exterior height of around 5-8m and are made from rough un-hewn limestone, while the quoins tend to be made from well carved sandstone. The soft nature of sandstone,
however, suggests that these well preserved quoins are younger than the walls themselves, perhaps also dating to the construction of the sanctuary of Sant Salvador in the 16th century.

The enceinte of the *Almudaina* is defended by a sequence of 8 towers irregularly spaced along the perimeter of the site (Fig. 6.20). Of these towers six are D-shaped and therefore of clearly post-conquest construction, while the two remaining towers (T1, T7) may well form part of the Islamic predecessor to the current building. In particular tower T1 (plate 6.35), though heavily restored and rebuilt shows some of the proportions one would expect from an Islamic fortress and it appears to be integrated into wall rather than attached to it, indicating the masonry walls were built at a later date. The entire curtain wall is surrounded on the interior by a narrow wall walk and crenellated parapet. All the towers except T3 and T4 are crenellated with tall, pointed merlons similar to those of Santueri

Figure 6.20, Almudaina d’Artá, Plan. After Lliteras 1970 with additions by the author

The interior of the site has been heavily modified over the course of the recent restorations, whereby area A1 has been levelled to be turned into a parking lot to be accessed through the northern gate. Unfortunately there are no reports of any archaeological finds recovered from this area, though there is no doubt that specialised excavation at the Almudaina of Artá would yield a great amount of highly relevant data regarding the settlement history of Mallorca.
Gili’s suggestion that the site might be of Talayotic origin is not completely baseless as the valley of Canyamel contains a very high concentration of prehistoric sites, though we have no other examples of fortified hilltop settlements from this period. In view, however, of the apparent move to the high ground during the Late Antique period which we have observed at Santueri and Sa Bastida, it appears likely that the hill of the Almudaina was also first settled and fortified in a meaningful manner during this time.

Considering the agricultural context of the complex, however, and the distance to the Madīna one of the most likely function of the Almudaina is probably that of an agadir or fortified granary along the lines of Almizra or Cabezo. The unclear history of the settlement of Yartan does not specify whether the urban nucleus was in fact located within the enclosure, but in view of James I’s omission of the site from his chronicle and the population’s flight to the nearby caves is suggestive of there not having been a fortified settlement at Yartan. Much rather it suggests that there Almudaina served as a fortified storehouse for the grain produced in the valleys of Canyamel and the plain of Artá.

**Viewshed analysis**

Due to the fact that the Almudaina o Artá is located on a hill, just outside of the village itself, its visual angle comprises nearly 360° of the surrounding territory. In particular towards the south and
west the entirety of the surrounding farmland is clearly visible, including partly the valley of Canyamel towards the SE (Fig. 6.21). While a number of narrow slivers of the sea are visible it was clearly not conceived as a coastal lookout post as for that is it located much too far inland. It does, nevertheless, connect visually with both the Tower of Canyamel and the Tower of Nunís, located to the SE and E respectively. The fact that the Almudaina lies at the centre of what appears to have been a visual network indicates that the in the Islamic period the Almudaina was as a focal location, acting as a hub or centre for the surrounding countryside. This, in turn, may confirm the building of the Almudaina as having acted as a storage location not just for the inhabitants of the village of Artá itself, but also for communities from other nearby settlements.
G. Torre d’en Nunís  
(39°42’16.95”N, 3°26’00.02”E)

Located within the 14th-century castle of Capdepera on the eastern tip of Mallorca, this rammed earth tower is probably one of the oldest standing structures of the island. Today it stands inside the fortress of Capdepera (Fig. 6.22) at about 154m ASL, constructed around 1300 by orders of King James II in order to bring together the local peasantry in one location. The fortress contained some 150 very small dwellings and a church with a large cistern. Next to the church stands the Tower, which in the Repartiment had been granted to Miquel Nunís.

The village of Capdepera probably took its name from the Latin Caput Petri after the rocky peninsula that lies immediately to its east.

Even though Peter Marsilius, James II’s chronicler, had already made clear in the 14th century that the only structures with visible Islamic remains were the three castles Alaró, Santueri, and Castell del Rei as well at the walls of the city of Palma (Marsilio 1984), some authors, such as the Frenchman Frederique Lacroix claimed in 1844 that the castle was of Islamic origin (Lacroix 1844), and this view appears to have held itself even until the early 20th century, as Ludwig Salvator makes the same claim (Salvator 1983). Further demonstrating a 14th century origin for the castle of Capdepera is the fact that in the summer of 1231 James I, on his third trip to Mallorca went to Capdepera in order to
oversee the diplomatic submission of the inhabitants of Menorca does not mention at any point a large Moorish fortress at the site (James I of Aragon 2003, 129-132).

The first mention of the tower itself appears in the Repartiment of 1231, where it is stated that Pere, Pelai and Miquel Nunís, who had all come to Mallorca with James I during the conquest, were to receive a portion of the King’s lands that lay in the area of Capdepera (Morro 2003). We have little information as to what this granting of land meant for the tower, but the fact that it is still known as the Torre d’en Nunís, suggests it became associated with the family.

![Elevations of alquería towers in the Valencia Region. Source: Cantos 2009, 59](image)

In the year 1300 King James II decreed the re-settlement of the inhabitants of the Artá/Capdepera area into two new villages in order to facilitate taxation and protection in the case of pirate raids. One of the new towns was placed on the site of an alquería Benifilia which lay immediately below the Torre d’en Nunís (Morro 2003). It would appear that Benifilia became incorporated into the new fortified settlement which became known by the name of the cape (Capdepera) and was fortified to the point where it was in fact considered a castle rather than just a walled village which meant that it was the king’s private property though under the stewardship of the Nunís family which paid an annual rent for the usufruct of the lands.
Over time the tower became known as Torre d’en Banya and during the mid 19th century, and by orders of the castellan of Capdepera, the tower was shortened and into its square interior was placed a cylindrical windmill.

**Architectural analysis**

While this section is primarily concerned with the Torre d’en Nunis, a short description of the fortress of Capdepera will be necessary to contextualise the site and to illustrate some of the changes that have affected the appearance of the area.

The fortress is of a roughly triangular shape with a side length of approximately 100m, with the base of the triangle being oriented down slope towards the modern village of Capdepera. The main access to the castle is at the south-eastern angle, through an elaborate gate arrangement flanked by a pair of unusual rhomboid wall towers. Their angled aspect is roughly reminiscent of later artillery defences, though in this case they are thin-walled, do not taper inward and their tops are too small to have supported any kind of large ballistic weapon.

A large part of the fortress is built from sandstone blocks which was locally available and therefore cheap. The walls enclosing the site are on average about 5-6m in height and about 1.2m thick. This was, in fact, not thick enough to support a wall walk, so that it had to be added as a floating structure of sandstone slabs which were supported by large corbels set into the enceinte around the entire perimeter of the site.

The interior of the fortress is today largely empty except for the house of the governor (F2) and the Torre d’en Nunís (F4). Recent excavations, however, have revealed that during the 14th century some 150 houses had been crammed into the comparatively small area comprised by the castle’s walls. These appear to be the remains of James II resettlement policy of the early 1300s.

At the northern tip of the castle, which coincides with the summit of the mount one finds the chapel (F3) and a large semi-submerged cistern. Both these structures form part of James’ construction efforts and are not directly associated with the Torre d’en Nunís.

The Torre d’en Nunís has a square plan with a side length of 7.6m and a thickness of about 1m, and is orientated roughly NE-SW with its entrance at the south-eastern side. The wall fabric consists of highly compacted rammed earth of the concrete-like variety placed directly onto the bedrock tellingly without any foundations (plate 6.36). On the exterior faces one can still clearly see the imprinted pattern of the wooden boxes which had formed the casings within which earth and lime had been stamped to form the walls. The corners of the building are made from large blocks of a locally available sandstone and it is not clear whether these for part of the original structure, or were added at a later date. The entire body of the tower tapers inward slightly probably making the original
top of the building about 1m narrower than its base, as from the alquería towers in the Valencia area we know that the proportions of the buildings usually determined that they be three times as high as they were wide (Cantos Carnicer 2009), which would have given the Torre d’en Nunís a height of approximately 21-22m (Fig. 6.23).

The interior, which was originally square with the different floors being supported by beams rather than vaults, is today occupied by the cylindrical body of the windmill which contains a spiral staircase winding up along the circumference of the interior body.

Regarding the original appearance of the Torre d’en Nunís some of the best surviving examples of alquería towers on the mainland may serve as valid examples and the appearance of towers such as the Torre de Mussa (Benifaió), the Torre Bofilla (Bètera) and the Torre de Serra (Llombai) gives us some important clues regarding its original aspect. Therefore it appears certain that the Torre d’en Nunís would originally have been crenellated, with a low parapet. Looking at the arrangement of putlog holes at the upper sections of these towers, Cantos has determined that a majority of them appeared to be topped by wooden hoardings overhanging the parapet (Cantos Carnicer 2009, 54-62). Whether this had been the case at the Torre d’en Nunís is today impossible to determine as the upper two thirds of the buildings are missing, though the relative scarcity of wood in the medieval Balearics makes this an unlikely proposition.

Due to its location it is likely that during the Islamic period the tower had a variety of functions. For one is must have served as an atalaya, a lookout post from which to observe the surrounding countryside and portions of the coast. On the other hand the tower probably also had a defensive function for the local populace, though in this sense it would be fundamental to determine whether the tower was in fact preceded by the foundation of Benifilia or whether people in fact settled around the already existing tower. Archaeological excavation would be certain to clarify this matter, though currently no remains of the alquería have been found within the enclosure of the castle of Capdepera.

**Viewshed analysis**

The Torre d’en Nunís is emplaced at the top of the mount of the castle of Capdepera, providing it with a clear view of the surrounding countryside as well as parts of the coast. As with the Almudaina of Artá and the tower of Canyamel, however, the main visual focus appears to be the inland rather than the sea. While a substantial part of the sea is visible there are other locations nearby which would have provided a much wider angle of visibility than that of the tower of Nunís, which is therefore clearly setup to survey the territory rather than the maritime approaches (Fig. 6.24). This is further demonstrated by the tower’s intervisibility with the Almudaina of Artá, which, as at Canyamel, could
only be seen from the top of the tower. This suggests that both towers were built after the Almudaina, but specifically to connect with it.

Figure 6.24, Torre d'en Nunís, Capdepera, viewshed. Source: Author
H. Puig de n’Escuder, Caimari
(39°46’50"N, 2°53’32"E)

The site known as the Puig de n’Escuder is located on the north-western side of the Tramuntana range on a peak about 1.5km NW of the village of Caimari (Fig. 6.25). The mountain of the Puig de n’Escuder rises to an overall height of 574m ASL and at its summit consists of two peaks separated by a crevasse about 10m wide. Both peaks are accessible along narrow paths from the north and south respectively over steep and difficult terrain, and it is likely that only the northern peak was ever occupied as the terrain and access of the southern peak are simply too rough (plate 6.38). Indeed, the archaeology of the Puig d’en Escuder appears to be concentrated on the northern of the two peaks as no remains are discernable one the southern one.

Unfortunately there appears to be no documentation which might shed some light on the site’s medieval occupation and function, though it may be one of the sites mentioned by James in his Book of Deeds as one of the last redoubts of the Moorish resistance during the years 1230-1231.

While the site has not received much archaeological attention, during the late 90s there was a short examination of the peak by a group of archaeologists surrounding Manuel Calvo, who eventually published an article on the ceramic finds at the site (Calvo et al. 1997).
**Architectural analysis**

In terms of architectural remains the Punta de n’Escuder appears to have been of low status, and is roughly comparable with the site of Sa Bastida near Alaró in that we have no standing remains of dwellings but only of a few dry stone walls (Fig. 6.26).

As mentioned above the site is accessed from the north along a narrow path which climbs the steep slope along a 10m wide gorge in the cliff face (plates 6.39, 6.40) Originally the winding curves of this path appear to have been supported by a series of dry stone retaining walls, but most of these have collapsed downhill, making an accurate reconstruction very complicated. Indeed, erosion and vegetation have all but erased almost every trace of the original path and due to the bad state of the path it is also difficult to determine the exact point of entry into the site as there are no visible remains of a gate or other architecturally defined entrance. Calvo suggests that the entrance was at the top of the gorge, which would be logical considering that it would lead directly to the heart of the site. There is also a possibility that this point had originally been blocked off, and that the entrance was a at a slightly lower point to the west, where a stretch of retaining wall (C1) which may have supported a gate of some kind can still be seen (plate 6.41).

This latter wall, referred to here as C1, has a length of about 6m and a height of 1-2m, and was also made from rough stones bonded with a low-quality chalky mortar into a defensive arrangement designed to close off the other possible entrance to the summit area and provide a platform for defenders at its top. There are no remains of a parapet or crenellations of any kind though it may be assumed that originally the wall was higher than the current ground level as due to the low height it is easily scaled.
The path which enters the site from the north is difficult to distinguish, though there are sections about 25m south of the entrance where it appears to have been levelled by a dry stone retaining wall on the right. This wall is approximately 20m long with an average height on 90cm and is made from stones which appear to have been collected on-site. This wall was used not only to level the ground for the path which runs along its top, but it also created a level platform for further structures, though no tangible remains of these are visible except one possible hut or hovel (F1) (plate 6.42) of which only the foundation outline remains.

One of the most striking, and potentially telling, features of the Puig de n’Escuder is the apparent lack of water storage facilities. There are no visible remains or even fragmentary traces of cisterns, such as they may be found at the Puig de sa Bastida or elsewhere. While it is of course possible that a clearing of the dense vegetation or excavations might reveal their existence, the apparent lack of cisterns may be an indicator for the ad hoc nature of the site, and that water was instead stored in large ceramic vessels, or tinajas.

**Ceramic remains**

By far the most informative of the finds of the Puig de n’Escuder are the ceramic remains, all of which are surface finds and have been dated by Calvo et al. to the Almohad period of the early 12th century (Calvo et al. 1997, 379-382).

The recovered sherds stem mostly from coarsewares and storage jars of various sizes of predominantly local production. Indeed the quality of their manufacture and the clay is often rather low, containing large amounts of organic inclusions and irregular firing of the finished vessels. Calvo et al., however, also recovered a fairly large number of slightly higher quality glazed fragments in the style known as verde y manganeso, consisting of a green base-colour with black brush-stroke patterns which are also clearly datable to the Islamic period. In the course of this study a number of surface finds were recovered from the Puig de n’Escuder, the most readily identifiable and datable of which are the following:


The ceramic assemblage from the Puig de n’Escuder poses some interesting questions regarding the intensity of Almohad influence in Mallorca. Considering that the Almohad period spanned only about 25 years, from 1203-1229 this is a surprising concentration of material that is likely to have taken some time to establish itself among the local potters. It is, therefore, possible to suggest that the ceramic remains recovered from the Puig de n’Escuder stem from one batch of vessels which were all damaged simultaneously perhaps as a result of a forest fire or deliberate destruction rather than being a build-up of material that took several decades or even generations to accumulate. This would also serve as an explanation toward the near-complete lack of Islamic pottery finds at other sites such as Sa Bastida, Alaró and Santueri, that were demonstrably in occupation at the same time as the Puig d’en Escuder, and it consolidates the picture of rural strongholds designed to act as fortified storage sites and short term safe havens rather than being occupied constantly over long periods of time. The large amounts of pottery fragments from the Puig de n’Escuder may in this sense be the product of a terminal event which destroyed the vessels, but it is not proof for a one-time use of the site, as it is likely that the transfer of storage vessels had in previous occasions been carried out successfully, leaving no surface trace of prior occupation.

Figure 6.27, Puig de n’Escuder, viewshed. Source: Author

Viewshed analysis

The location of the Puig de n’Escuder determined that the entirety of its visual radius comprises the interior of the island, with no coastal areas visible with any clarity (Fig. 6.27). As with the Puig de sa Bastida, this site too appears to have been chosen less for its location than for its
difficulty of access and easy defensibility. While the general visible radius of the interior of the island is fairly ample this appears to have been only a fortuitous by-product of the site’s location. It appears not to have been visually connected to any of the other sites in this study, though the Puig de Randa is clearly visible from the Puig de n’Escuder.
I. Torre de Son Múas, Andratx

(39°34′34,59″N, 2°25′27,01″E)

The tower of the so-called Castle of son Mas forms the main focal point of the village of Andratx, located in the far SW of Mallorca. The Castle is itself a more recent construction, likely dating to the 17th century, though heavily restored in a neo-gothic style in the early 1900s (plate 6.46). Today the entire complex forms the town hall of the municipality of Andratx.

Considering that the majority of the architecture of Son Mas is of relatively recent dates this analysis shall concentrate solely on the tower, as this is the oldest part of the building and therefore the most likely to have been the subject of a number of mentions in the primary sources.

In the year 1281 we have the first mention of the ‘Torre de Andratx’ as the residence of one Bernat Ferrer who appears to have owned large tracts of land in the valley of Andratx, cited in the Repartiment as alquería Andarax (Rosselló et al. 1978, 115). What kind of connection, if any, there may have been to the homonymous district of Andarax in the Nazrid kingdom of Granada is unclear, and a potential ethnic link must currently remain hypothetical. It is highly probable that the Tower of Andratx is in fact the one that we now know as the Torre de Son Mas as there are no other candidates in the immediate vicinity. It should, however, be noted that the 5km long valley that stretches from

Figure 6.28, Valley of Andratx, Source: Author/SITIBSA 2005
the village of Andratx in the NE to the port of Andratx in the SW contains a number of sites which
could conceivably be of the same age or older than the tower of Son Mas. The fact that the towers of
Son Orlandis, Son Esteve and Son Fortuny only turn up in the documentation from the late 15th
century onwards makes it impossible to conclusively place their date of construction into the 13th
century or even the Islamic period, though clearly archaeological enquiry would be of help in
determining their age.

Considering that the modern town of Andratx is the successor to the Islamic alquería
Andarax it is highly likely that the tower of Andratx served as a kind of alquería tower as has been
observed at the Torre d’en Nunís and the Torre de Canyamel, and as at Canyamel this one too was
originally probably made from rammed earth, only to be later re-built in stone during the Christian
era.

The dimensions of the tower closely resemble those of the Torre d’en Nunís before its
truncation, with a side length of about 7.2m and an altitude of about 22m. Unlike the tower at
Capdepera, however, the tower or Son Mas does not taper inwardly, and instead rises completely
perpendicularly from the ground to a height of approximately 20m where the machicolations
overhang the wall (plate 6.47). The tower is today integrated into the SW side of the Castillo de Son
Mas, forming part of its upper galleries.

Functionally the tower may have had a role similar to that of the tower of Canyamel in that it
was clearly not used as a coastal watch tower as it stands about 5km inland and the sea is barely
visible. It does, on the other hand, provide a clear view of almost the entire valley of Andratx towards
the SW and that of Sa Coma towards the NE. From a socio-political point of view, however, it is
difficult to argue that the tower was constructed against the political elites of Madīna Mayūrqa as the whole south-west of the island, and with it Andratx, was included in the Ahwaz al-Madīna, the capital district of Mayūrqa. In this context the tower may have functioned in a more representative role. It is worth pointing out, however, that the literature mentions a Alqueriá de sa Torre located in the valley of Sa Coma Fria, to the immediate north of Andratx. While the exact location of this alquería is not clear, the fact that there were other towers in the vicinity of the village suggests that the area was more of a greater relevance than hitherto thought.

**Viewshed analysis**

By being placed at the head of the valley of Andratx the tower of Son Mas has a complete view of the head of the valley, while also providing a full overview of the valley of Sa Coma to the north. The view of the south-western portion of the valley is obstructed by a hill known as Sa Tortuga (lit. the tortoise), which blocks the view of the Port of Andratx. While during the Islamic era the Port of Andratx is likely to have been a very small community of fishermen settled on the northern side of the bay, which is only just visible from the tower of Son Mas (Fig. 6.30). The fact that 17th and 18th century sources mention an almudaina as fortifying this part of the bay (Segura Salado 2003), may in this context be suggestive of an earlier Islamic fortification in this area, though this place name is as yet unsubstantiated. If archaeology were to confirm the existence of a further Islamic fortifications in the valley of Andratx it may be possible to identify a further castral cluster such as that observed in the area of Capdepera. Were this to be correct, then it may be possible to argue for the existence of various micro-networks of fortifications in localised areas, possibly within single valleys, rather than island-spanning networks of coastal defences which were constructed during the 16th and 17th centuries.
J. Puig de Randa
(39°31’38”N, 2°55’33”E)

The mountain known as the Puig de Randa reached a degree of fame during the Middles Ages by being the site of Ramon’s Llull’s epiphany, known today as the ‘Vision of Mt. Randa’ in 1274 (Bonner 1993, 19). According to popular tradition it was also the great mystic and numerologist Ramon Llull who ordered the construction of the first sanctuary at the site, dedicated to the Virgin. The first documentary evidence of a small hermitage at the site dates to the year 1394, though over subsequent centuries it expanded into an important monastic centre known today as the Monasterio de Cura.

Miquel Barceló has placed at the site of Randa an Islamic fortress which he calls the Qastil al-Uyūn (the castle of springs), which he derives from the name of the small hamlet called Castuleyon at the foot of the mountain (Barceló 1988), though there are no material remains of an Islamic fortress at the site. Indeed neither of the two most reliable Islamic sources on Mallorca, al-Zuhrī and al-Mahzūmī, mention the existence of the site, nor does James I in his Book of Deeds.

This complete absence of evidence is of interest in so far as Mt Randa is one of the most important locations of Mallorca from a strategic point of view. It is located about 15 km from the city of Palma in the middle of the plain of Mallorca with an absolutely un-rivalled view of both, the island’s interior and the bay of Palma. Furthermore it is a naturally well-defended location due to the steepness of the mountain, and it has an abundance of water from the nearby springs. In some respects
it could be stated that it is downright irresponsible not to fortify this location, and yet, there is nothing to suggest that it ever was, other than the place name Castuleyon.

![Viewshed Analysis](image)

**Viewshed Analysis**

The viewshed analysis of the Puig de Randa illustrates the extent to which the site may have had the ability to visually dominate the island of Mallorca. With the exception of the more mountainous areas, the entirety of the islands centre, as well as the bay and the city of Palma are completely within the location’s visual radius (Fig. 6.32). It also forms clear visual links with the castle of Santueri in the SE, and the castle of Alaró to the N, and the minor fortresses of Sa Bastida and the Puig de n’Escuder. It is in this sense that the complete lack of visible fortifications from any period in the island’s history is surprising.
K. Castellet d’Esporles  
(39°39’56.51”N 2°33’55.89”E)

Not unlike the Puig de Randa, the Castellet d’Esporles is also the site of a potential Moorish fortification of which, however, no architectural remains survive. Neither is there any textual or archaeological evidence for the existence of a fortification at the site known today as the Roca d’es Castell. Suggestions in this direction are therefore necessarily tenuous and mostly circumstantial. Past research has tended to ignore the site, and no archaeological surveys have been carried out there.

Located about 1km to the west of the village of Esporles it would have stood atop a rocky outcrop of sheer vertical sides on the slope of the mountain at about 440m ASL, overlooking the village and fields below (Fig. 6.33).

The only remains of an architectural nature are a serried of steps carved into the western side of the rock-face (plate 6.49), which give access to the top of the Roca d’es Castell. The top of the rock, which measure approximately 15x20m, is mostly barren and contains no visible traces of either pottery or architecture. This lack of remains may, however, be due to the highly exposed location of the site where wind and rain could easily have displaced all past vestiges (plate 6.50). The most likely usage of this particular site is likely to have similar to that of the Puig de n’Escuder, which acted as an ad hoc refuge and never counted with particularly elaborate artificial defences. Morphologically, however, in terms of size and emplacement its closest relative may have been the Castell de Moros at Deiá, which also stood atop a small rock, within only a few kilometres of the village.
In recent years the eminent Arabist Guillermo Rosselló Bordoy has carried out an in-depth study of the Repartiment of King James I and the testament of his uncle Nynyo Sanç, the so-called Remembrança (Rosselló 2007a). In his study he concentrated on determining the ethnic origins of many of the place names found in these documents in an attempt to reconstruct the ethnic makeup of the island of Mallorca during the Islamic era. The real complexity of his task, as he outlines in his study, is not so much attributing a place name to a particular tribe or clan, but to determine the location of the place itself. Often, as for example in the case of Artá, we know the exact percentages of Arabic, Berber, and Latin names, but are unable to place them in the landscape as the names have since either changed or vanished. Adding to this already difficult task is the fact that many Berber groups adapted their tribal or family names to more Arabic sounding cognates, further blurring the pattern of settlement (Rosselló 2007a, 86).

Rosselló Bordoy has calculated that of the ca. 500 Moorish place names in Mallorca some 26-28 are of an architectural nature (2007a, 72). This has left us with a host of place names containing, for example, the particle burj (tower) in various forms. Hence locations such as Alborratx, Alboraiet, Albortex, Alboroy, Alboraxat and Alborge may hint at the existence of towers at these sites, despite the fact that their location is for the most part unknown. Conversely, there are also a large number of locations still extant today with Arabic names that also suggest the existence of a tower, but where there is no trace of one. In the latter case Rosselló has suggested that perhaps the Moors referred to megalithic monuments from the Talayotic period, which in the Middle Ages still littered the island, as ‘towers’ and that therefore much of the toponymy is fundamentally misleading.

Furthermore there is an alquería Cut Alcastel and Castello near Sineu (Soto 1984, 161), an alquería Castuloxam in the Montuïri area and an alquería Castel and a rahal Alcastellan in the district of Pollença. All these place names contain the clearly Latinate particle Castil in various forms, despite the fact that their names are known from the Arabic codex of the Repartiment (Rosselló 2003; Soto 1984; Soto 1990). It is therefore clear that these are places that have retained their Latin names throughout the Islamic period, and their ubiquity suggests that there may well have been significantly more. It has been noted that a number of the sites in this study experienced increased activity and use during Late Antiquity and during the Byzantine era and, while there is no direct documentary evidence, it is possible that the Justinianic fortification efforts observed in north Africa (Procopius 1940, 129-130; Pringle 1981) extended also to the Balearics. The coinage finds from Santueries certainly corroborate a picture of intensified military presence and heightened activity during the later 6th and early 7th centuries.
One final concern in the defensive makeup of the island of Mallorca is the evident lack of coastal fortifications. The vast majority of Mallorca’s fortifications look inland, the exceptions being the castles of Castell del Rei and Santueri, which are both pre-Islamic and therefore fall into the category of re-used sites, rather than specifically constructed by the Moors to fulfil a function with a maritime orientation. The existence of a potential ribāt at Sa Rápita in the south of the island has yet to be substantiated by excavations. Whether this site was in fact that of an Islamic coastal fortress remains somewhat doubtful as it does not appear in the documentation until 1331, when it is mentioned as a coastal watch tower (Epalza 1998, 664). This makes it unlikely to have been a particularly large or important site during the Moorish period as no mention of it is made by the Islamic sources or the Repartiments.

There are a large number of sites in Mallorca which are not mentioned in the sources but which, if excavated, are more than likely to yield relevant data. It is, in fact, likely that the majority of important estates, known in Mallorca as Possesions, have their roots in the Islamic settlements patterns of the pre-conquest period. It is clear from the Repartiment that the rahals and alquerías of Islamic Mallorca passed directly into Christian hands, but many of them were abandoned as a result of the violent conquest of the island. Considering, however, that the Muslims tended to settle in locations that were directly associated with water sources, it is highly likely if not certain, that their Christian successors gradually re-used those very same sites.
Synthesis and Discussion

Apart from documenting and analysing the known Islamic fortifications of Mallorca and delineating their function within the territory, an important goal of this study is to explain the antagonism between hinterland and city and the consequent lack of the hisn/qarya complex on the island. The results of this enquiry will also help to explain certain aspects of the implementation of this system of territorial control on the Spanish mainland, where the debate as to the actual origins of this system is ongoing. This chapter discusses the self-perception of tribal groups, their identities, and their complicated relationship with authority, and, in so doing, clarify the socio-political framework within which the Mallorcan fortresses functioned. This has been achieved partly by the evaluation of the structures’ visual radius, using viewshed analysis to interpret the choice for a fortifications precise emplacement and demonstrating their clear inland orientation. The discussion of Mallorca’s Islamic administrative setup will allow for a better understanding of the process whereby the Mallorcan territory was integrated into that of the Christian/seigniorial kingdom of Aragon, a point also addressed in this section.

A. The changing roles of the fortresses within their socio-political environment

In general terms the functions of the fortresses of Islamic Mallorca are largely comparable to those of the Iberian mainland in that they were built and maintained to interact with the hinterland of a given polity and, at times, assist in its administration, rather than serving as the high-status residence of a lord or magnate. There were certainly exceptions to this generalising rule such as the frontier fortresses of the Caliphate and Almohads and the coastal ribatat erected during the 10th century against potential North-African attacks (Azuar Ruiz 2004a). The percentage, however, of these latter structures must necessarily be significantly smaller than the hundreds of minor fortifications erected throughout the Andalusian hinterland with the aim of establishing a degree of detachment from the urban state/states that attempted to extend their influence over them. In order to determine the precise functions of these structures, this chapter will present a definitive typology of the Islamic fortresses of Mallorca.

Madīna Mayūrqa/Ciutat de Mallorca

The fortifications of Madīna Mayūrqa owed very little to any Classical or Late Antique predecessors and they may therefore be considered to be among the few original Islamic architectural witnesses of the period. Indeed, not just these two buildings but also much of the urban morphology inside the old
walls had barely changed until the modern day. The wide open spaces and tracts of farmed land that are said to have existed within the walls of the city at the time of the Christian conquest, suggest that it never reached the point of urban saturation observed in other Andalusian cities such as Valencia Cordoba and Seville. This allowed for the maintenance of a relatively open street plan which was kept throughout much of the Christian period until the construction of the new ramparts during the Renaissance period, which saw the closing of some gates and consequent reorganisation of residential quarters intra-muros. Today nothing remains of the Islamic walls and towers which once protected the landward approaches to the city, but the two urban fortresses, the Almudaina palace and the Almudaina of the Gumāra were immediately reused by the Catalans in the months after the conquest and prior to subduing the rest of the island. Architecturally both these structures have retained a significant part of their Islamic heritage, a fact which for the Almudaina palace finds many parallels on the Spanish Mainland. The Aljafería of Zaragoza, Alcazar of Seville and the Alhambra of Granada are just a few of the many examples of urban citadels that were kept in their original Islamic form, acting as residences to Christian courts.

The Castles

Without doubt the first fortresses occupied by the Muslim rulers of Mallorca were the three Roman/Byzantine fortifications of Santuari, Alaró and Castell del Rei. Typologically, these have traditionally been categorised as castillos roqueros or rock castles (B. G. Gelabert et al. 1952; Salvator 1910). This definition, however, refers purely to their placement upon rocky hill tops and provides no further clues as to any functional aspects beyond that of providing simple defensive measures. On the basis of the literary and architectural evidence presented in previous chapters, it is nevertheless possible to argue that, for the most part during the Islamic period these three fortresses were claimed by the wali or Emir of Mallorca, even if there was no castellan or qā‘id present at them. This may be exemplified by the fact that in the months leading up to James I’s attack in the summer of 1229, the fortresses were undefended as al-Mahzūmī’s account states that various groups of Almohads and Andalusians, who had previously fallen out of favour with the wali Abu Yahyā, sought refuge there. Nevertheless, an agreement with them was reached soon after, and the castles were yet again abandoned (al-Mahzūmī 2008, 53). It is clear, therefore, that while those three fortresses were unoccupied for the most time, they were under the state’s nominal control. This was certainly the case during the 3rd Taifa of Mallorca under Abu Yahyā al-Tinmalī, where al-Mahzūmī explicitly states that castellans had to be dispatched to the three castles in order to organise the preparations for the impending Christian invasion (al-Mahzūmī 2008, 54). What is unclear, however, is the question of maintenance. Mainland fortifications were maintained by the tribal collective in whose land the fortress stood. This was enforced by a law known as the sufra (span. Sofra), which determined that the local population was responsible for providing the fortress with water, wood and building
materials throughout the year (Glick 1995b, 26). The extent to which this law was also imposed in Mallorca is unclear as no mention of it is made in the sources, though it is possible to hypothesise that during the 10th century, prior to the end of the Caliphate, this law was enforced, whereas perhaps the waning power of the centre thereafter resulted in the end of the practice.

In military terms the castles were the island’s second line of defence after the city. In terms of their age there is little doubt that the occupation of the sites goes back to the pre-Classical period, but that their first major settlement is dateable to the late Roman era. The first major fortifications are likely to be Byzantine, following Justinian’s attempt at re-establishing control over the western Mediterranean. On the basis of the coinage finds from Santueri it is appears that during the 6th and 7th centuries the fortresses were quite intensively used, acting as lookout posts towards the sea, providing protection for the local populace and potentially also as centres of fiscal control. The geo-political context of the Islamic conquest of 902/903 probably tied them into the defensive perimeter of the soon-to-be established Caliphate, and many of the water storage systems visible at the castles today are likely to date from this early period of Muslim occupation. The highly disruptive nature of the Berber uprisings that led to the sack of Cordoba in 1008 suggest that after the collapse of the Caliphate and the resulting breakdown of the administration, the Mallorcan fortifications lost their connection with the ‘centre’ until reclaimed by the Emir of Dénia Mudjähid. This highly ambitious individual, reputed builder of the Palau dels Reis at Sineu, most likely found a new purpose for the fortresses, using them to enforce his repressive tributary measures on the peasantry. The current state of archaeological research, however, does not fully confirm this scenario, and it is therefore possible that it was, in fact, the rural communities that were in control of the fortresses and that this motivated Mudjähid’s construction of the Palau. The early 12th century appears to have witnessed little activity at the fortresses, though the geographer al-Zuhri and writer of the Kitāb al-Jaghrafiyya, writing sometime in the 1140s, describes Alaró as being the ‘strongest’ fortress he had ever seen (Barceló 1977), suggesting that during the Ghaniyid period the fortress was being regularly maintained, if not expanded. In particular during the late 12th century Ghaniyid ambitions in the Maghreb and the resulting confrontation with the Almohads may have sparked a renewed fortification effort and increased activity as demonstrated by the coins from Santueri. The large concentration of coins at this site dating to the 1180s and 90s suggest a role that went far beyond the basic military function and instead assumed economic tasks related to tax collection.

As stated above, the last 20 years of Islamic Mallorca under the nominally Almohad wali Abu Yahyâ have been chronicled in some detail by al-Mahzūmî, who was mainly concerned with providing an explanation for the ease with which James I of Aragon succeeded in defeating an army which was many times the size of his own, and his successful sack of Madīna Mayūrqâ, a city thought much too well defended by its inhabitants. Ibn Amīra al-Mahzūmî suggests that lack of leadership, internal divisions and the alienation of the rural peasantry brought about the rapid collapse, and he
explicitly states that the walî had to dispatch castellans to the castles to organise the preparations for war, confirming that during the latter Almohad period the castles were not garrisoned or even manned by small forces.

After the Christian conquest by the crown of Aragon the role of the castles was integrated into the re-organisation of the territory, whereby they also acquired a much more military role than in previous ages. This militarization consisted in the strengthening of walls, the construction of towers, outworks, bulwarks and residential quarters of a much more durable nature. Alaró and Castell del Rei appear never to have taken on any major residential or courtly functions, though they were permanently garrisoned from the early 13\textsuperscript{th} to the 16\textsuperscript{th} centuries. Santueri, on the other hand, may have served as a temporary residence to the Count of Roussillon until his death in 1241, though here too a courtly function cannot be attested with any certainty. The Catalan conquest and the establishment of the independent Kingdom of Mallorca brought about the influx and growth of an aristocratic class which set about the construction of new fortresses, gradually withdrawing importance from the old strongholds in the mountains. The programmatic construction of coastal fortresses such as Bellver, Albercutx, Capdepera and others around the year 1300 demonstrate the re-orientation of Mallorca towards the sea during this era and hints at the much greater power of the Christian state over that of the Islamic period.

Mountain Refuges and Towers

The minor fortifications of Mallorca, with the exception of the Puig de Sa Bastida, appear to have been exclusively Islamic in origin. Their erection is the result of the antagonistic relationship between hinterland and city, which had also marked relations between both spheres on the mainland during the Emirate and Caliphate of Cordoba. It is worth distinguishing, however, between the rather haphazard refuges in the mountains such as Puig de n’Escuder and the Castellet d’Esporles, and the much more elaborate alquería towers. Based on the architectural and limited archaeological evidence, the former are clearly the result of ad hoc flights to safety, never in use for prolonged periods of time, not used for permanent habitation and therefore broadly identifiable as a type of simplified Fluchtburgen, whereas the latter follow the model of the north African guelâa, as fortified storage facilities associated with specific settlements, and used as refuges for vulnerable members of the community: women and children. The alquería towers appear to have evolved very little in their function throughout the period, which can be attributed to the relative morphological rigidity of rural Islamic settlements. The continuity of the settlement patterns, conditioned by the dependence on irrigation systems which, once established, changed very little (Kirchner 1995; Barceló \textit{et al.} 1998) and determined that the towers, too, maintained their original form and purpose over many generations.
Finally, one of the most enigmatic of the Islamic fortifications of Mallorca is the Almudaina of Artá, which, due to its size and location, is likely to have served initially as a fortified granary or *agadir*. The exact role of these buildings on the Iberian Peninsula is not entirely clear, but has been discussed widely in the literature (de Meulemeester *et al.* 1992; 2005; Torró *et al.* 2000; Meouak 2001). In broad terms the debate revolves around whether these structures were erected by the farming community to protect the harvest from raiders and excessive taxation, or whether they were, in fact, built by the state in order to facilitate tax collection. If archaeological excavation could provide the final confirmation that the Almudaina of Artá was in fact been an *agadir*, it would be a clear indicator for the detachment of the far east of Mallorca from the Madīna. Its complete absence from documentary sources further compounds the idea that this was not a ‘fortified government facility’ but instead erected by the inhabitants of Artá and the surrounding countryside. While several examples of fortified granaries on the mainland were occasionally converted into fully-fledged fortresses during the Almohad period, such as at Almizra and Cabezo de la Cobertera (Torró *et al.* 2000), it appears that the Almudaina of Artá never went through this process as during the Catalan invasion the local population preferred to seek refuge in the nearby caves, rather than the Almudaina (James I of Aragon 2003, 119-120).

During the Christina era many of these minor fortifications appear to have been forgotten. Whereas those located closer to the coast such as Torre de Canyamel, Torre d’en Nunís or the Castell de Moros continued in use due to the still extant threat of piracy from the Maghreb, the towers in the interior of the island were either abandoned or absorbed into newly built structures completely losing their defensive character of the Moorish age and gradually disappearing from the textual sources.
Juan Gonzalez de Chaves Alemany has carried out the only relatively exhaustive study of the coastal defensive network of Mallorca, most of which was built during the 16th to 17th centuries (Alemany 1986). In particular, the 16th century witnessed the construction of a tight chain of coastal watch towers, usually placed on high cliffs and mountains from which to scan the island’s maritime approaches. They were located in such a manner and in such close proximity as to allow for the quick relaying of messages from any point of the island to Palma, from where appropriate action could then be taken. The prime motivator for the construction of this system of relays was the Ottoman conquest of Tunisia. It was considered highly likely that the Turkish fleet might attempt a landing at Mallorca, from which further operations onto the Spanish mainland could have been carried out with relative ease. The Ottoman threat was largely banished after the battle of Lepanto (1571), only to be succeeded during the late 1600s by the British Royal Navy, which in fact succeeded in conquering Menorca in 1708.

Figure 7.1, Viewshed of the sites of Canyamel (red), Núnis, (blue) and Artá (orange) Source: Author
The role of coastal defence, therefore, must necessarily have been of great importance also during the Middle Ages, and yet there is no evidence of there ever having been any noteworthy coastal installations, either for observation or for defence. Chains of *ribatat* and *menaras* such as were being built in Palestine, Syria, Tunisia and al-Andalus during the 10th century appear not to have existed in Mallorca. Instead, the recycling of ancient, inland fortresses and the gradual construction of village fortifications in the form of isolated towers was the main concern of the islanders. It has been claimed at times that these towers were visually connected and served to protect the coastal approaches to the island (Lliteras 1970). There is currently no textual or archaeological evidence that might serve to substantiate this claim. The towers cited in this context tend to be that of Nunís, Canyamel and the Castell de’s Moro in Deiá. From all three of these structures the sea is visible, though the viewshed analysis carried out in the previous chapter reveals that the portion of sea visible in all three cases is far inferior to the portion of coastline that remains invisible. So if these buildings were not designed to scan the coast, what then does one see from them? Viewshed analysis has determined quite conclusively that they are all placed to provide a complete overview of the agricultural lands surrounding them (Fig. 7.1). In the cases of the towers of Nunís and Canyamel, both provide a complete panorama of their respective valleys, all the way to the Almudaina of Artá, which acted as the hub of the region.

![Figure 7.2, Castell del Rei, viewshed. Source: Author](image-url)
Indeed, the only fortress of Mallorca which can be said with certainty to have had a maritime vector is the Castell del Rei on the northern tip of the island. Chapter 5 briefly hinted at the possibility of a Roman origin of the site, and its proximity to Mallorca’s ancient capital Pollentia appears to substantiate this claim. The valley of Ternelles, on the northern slopes of which the castle is located, was also the source for Pollentia’s main water supply, and it appears that much of the surrounding land was already being farmed during the Classical period. The viewshed analysis of the Castell del Rei reveals that it was situated to scan the northern approaches to the island, while simultaneously protecting the city’s main source of water. There is in fact a narrow gap in the mountains that make up the southern flank of the valley that allows for a view of the modern day village of Alcudia, located in the immediate vicinity of ancient Pollentia (Fig. 7.2). Unfortunately, however, due to the standard deviation of ±4 metres of the ASTER matrix employed here, this does not show up on the digital viewsheds. Photographs, on the other hand, quite clearly demonstrate the visual link between the location of the Castel del Rei and Pollentia, further compounding a Roman origin of the site (plate 5.47).

The distance of approximately 12km between the castle and Pollentia may have made communication by visual signals possible, though there may have been intermediate relays between both points facilitating the transmission of messages. Were it not for the narrow gap which allows for a partial view of the Bay of Alcudia, the Castell del Rei would appear to be totally isolated in a visual sense. Santueri and Alaró both overlook nearly the entirety of the island’s interior and are in principle intervisible. Though with about 50km the distance between the two mountains is too far as to allow for effective communication. The link between the two castles may have been the Puig de Randa, which is located at almost precisely 25km from either site, and also within visual range of the city of Palma. It is therefore surprising that a site with the usefulness of the Puig de Randa holds no visible archaeological remains of either the Roman, Byzantine or Islamic periods. Barceló’s (unsubstantiated) claim that Randa was the location of the Islamic village of Castuleyon may indicate that there was a structure warranting the prefix castil or castul prior to the Islamic conquest. The fact that al-Zuhri fails to mention any castles apart from the three discussed here may therefore indicate that Randa/Castuleyon had either been abandoned long before the 10th century, or that in fact the name is due to a toponymical anomaly and there never was a fortification of any kind at the site. One final reason which may account for the lack of fortification of the Puig de Randa is its topography. Unlike Santueri, Alaró and Castell del Rei, which are located on rocky plateaus of difficult access, the summit of mount Randa is much more easily accessible and would therefore have required substantial construction to fortify.
C. Geography and identity

The link between culture and geography has been acknowledged in anthropology and archaeology since at least the 1960s. Identity and state-formation processes began to be studied as part of the New Archaeology movement from the late 70s onwards, and in particular the archaeologist Colin Renfrew has supplied a number of influential hypotheses on the condition of islands within emerging political systems. Predominant among his theories on this topic was the ‘peer polity interaction’ theory (Renfrew et al. 1986) which relies on the idea that it is the interaction between more or less equivalent societies which ‘stirs them up’ and conditions them to engage into open competition with each other and encourages state formation processes without there necessarily being any outside influence conditioning this drive. It is possible to contend that peer polity interaction, such as may be observed during the formation of the Taifas in 11th century al-Andalus, puts a high degree of stress on individual polities, stress which highlights the heterogeneity of highly fragmentary societies. Simultaneously, however, the fragmentation of al-Andalus into over 30 more or less distinct socio-political units with varying degrees of cohesion encourages the clustering of groups who define themselves as similar in opposition to groups considered different. This is to be observed, for example, in the case of the city of Elvira, where the inhabitants accepted, or even encouraged, the leadership of the Berber general Zawi Ibn Ziri who subsequently founded the hill-top city of Granada by re-settling the inhabitants of Elvira (Fletcher 1994, 81-82). Mudjāhid’s seizure of power in Dénia in 1010 was also not opposed by the region’s inhabitants, perhaps because they expected an increased level of security from their new leader. The entropic momentum gathered by this initially peaceful and voluntary clustering effect eventually gave way to forceful absorption of smaller polities by larger ones once a ruling elite had established itself. In general terms, within tribal states the fluidity of these processes is exacerbated by the comparative lack of cohesion of the society. This approach to state-formation relies to a high degree on the spatial proximity between the various polities, and it is therefore possible to argue that in an island context the concept of competition is determined less by the territorial pressure exercised by neighbouring polities than by a quickening of the identity-forming processes conditioned by the sense of place which comes from the clearly defined territorial entity itself.

In al-Andalus the eventual spilling-over of all mainland powers (Caliphate, Taifa of Dénia, Almoravids, Almohads) onto the island of Mallorca tended to consist in a take-over of the city, but in most cases never establishing full fiscal control over the island’s hinterland. The successive takeovers by new elites led to a horizontal stratification of the Mallorcan rural population by the repeated ousting of the respective previously ruling group. This leaves one with a concept similar to that of the isolierte Stadt, the isolated city (Preucel et al. 1996, 115), a concept derived from ‘location theory’
and Heinrich von Thünen’s study on *The Isolated State* (von Thünen 1921). The ‘isolated state’ was effectively a thought exercise of an ideal world in which a city exploits its hinterland according to precisely constructed schemes and in which the peasantry always strives for a maximisation of profit. Conversely, then, in a society in which economic profit is not the main raison d’être of the peasantry, the city is isolated. Though nominally in control of its hinterland, this type of regime is not capable of creating a lasting link with it and is therefore unable to rely on the continuous economic exploitation of this territory. Interestingly, in Mallorca one finds that both systems become a reality: the island as a political entity is ‘isolated’ from the mainland, and the city, i.e. the state, is ‘isolated’ from the island. This condition remains practically unchanged from the mid-11th century until the conquest by James I of Aragon in 1229. James’ imposition of a seigniorial system, which gave his vassals full ownership of the resources of their allotted lands (Soto et al. 1990) led, together with conversion and emigration, to the gradual erosion of the tribal identity of the Mallorcan population, bringing the entire island under complete royal control.

**Factors leading to Mallorca’s administrational divergence from the Mainland**

Isolation, and therefore identity, is the operative factor in the Mallorcan departure from the territorial system of administration of the Iberian mainland. The successful implementation of the hisn/qarya complex as observed, for example, in the Alpujarra mountains (Cressier 1983; Cressier 1992) or the hinterland of Murcia (Navarro & Jiménez 2007b) relies firstly on a centre with the capability to extend its area of control far beyond its urban confines. Secondly, it requires a rural population actually willing to accept this control. This may serve to illustrate the comparative weakness of the Andalusian Taifa rulers when compared to their Christian counterparts, as in the tribally organised Taifa states power followed along a horizontal axis, rather than the strongly vertical hierarchy characteristic of most Christian states of the period.

Both these factors are inextricably linked into a recursive relationship. In the context of al-Andalus the near-symbiotic bond between city and hinterland that is said by Cressier, Bazzana, Guichard and others to have existed there consists, in highly simplistic terms, of a two-fold arrangement in which the hinterland feeds the city, and the city protects the hinterland. In this centripetal dynamic the hisn becomes the point of inflection between state and territory which provides political cohesion to the polity, and while it may in many cases have been built and maintained by a given rural community, was usually administered by the state.

The operative basis of the hisn/qarya complex as outlined above is not, therefore, the economic exploitation of the peasantry, but the relationships (personal, tribal or ethnic) that exist between both spheres. In this sense the ethnic make-up of the hinterland in relation to the ruling elite
of the city is of fundamental importance, as kinship or a common ethnic identifier are a de facto guarantee of a mutually beneficial relationship. What, then, was so different about Mallorca that this symbiosis was not as successful as elsewhere? The reasons are, it is argued here, of a geographical nature and manifest themselves in two ways:

First: as indicated above, the produce-protection dynamic characteristic of mainland relations between urban and rural communities is only sustainable if both parties perceive this arrangement to be beneficial, or even necessary. In Mallorca, however, it appears that the peasantry interrupted this circular practice by not ‘needing’ the city. As is indicated by the archaeological record, Islamic Mallorca possessed next to no coastal fortifications, demonstrating that the islanders did not consider themselves to be under any imminent external threat. Indeed, the only potential threat emanated from the city itself, further separating the two spheres and deepening the antagonism between them.

Second: The perceived isolation of the island encouraged different socio-cultural developments in its inhabitants, at the core of which lies the process whereby identities are created. On the basis of the historical evidence it can be argued that Mallorca’s inhabitants became culturally independent more quickly than mainland groups did, and that part of this independence expressed itself in the rejection of control by newly arrived elites. The perception of cultural self-sufficiency may also have begun to break down tribal differences among the different groups which settled the island, creating a new meta-identity of ‘Mallorcans’ as expressed by the increased readiness to resist control by new ethnic groups establishing themselves at the centre.

It is also possible to estimate the socio-economic consequences of this putative detachment from the centre. Seeing as among the Mallorcan peasantry von Thünen’s maximisation of profit appears to have been second to a maximisation of independence, though not as one unified body but instead as a set of loosely associated groups which acted by common interest, this helps explain the ease with which the tribes and junūd of Mallorca arranged themselves in aiding James I to conquer the Madīna in the winter of 1229. According to Fried, understanding tribal economies comes down to the ‘simple’ problem of determining if there was a single consistent pattern of organization of otherwise discrete communities into larger aggregates for the achievement of broader productivity, or patterns of productivity that regularly exceeded the local community, or regular patterns of expanded production (Fried 1975, 43). It is therefore possible to suggest that, despite the fact that Mallorca appears to have been an ‘exploded’ polity, the Islamic communities of Alaró, Bunyola, Orient and Coanegra, studied in great detail by Kirchner (Kirchner 1997), indicate that Fried’s first option is the one most likely to apply to the island, as disparate tribal entities literally tied themselves to each other through the construction of interconnected irrigation networks to increase productivity, which in turn translates into a decreased reliance on the centre.
These results, arrived at through the study of the fortifications and landscape of Mallorca, are mirrored in the medieval sources. Ibn Amîra al-Mahzûmî’s account of the events leading up to the Aragonese conquest is constant in its separation of Maḍîna Mayûrqa and the junûd of Mallorca (al-Mahzûmî 2008). He repeatedly delineates a clear division between the urban and rural spheres, a division which manifests itself in the near-total disinterest of the junûd in the welfare of the city. While there is certainly an element of literary retribution to al-Mahzûmî’s attempt to explain Mayûrqa’s demise in general, the blame is placed not so much on the tribal splits that divided the island’s society, but on the incapacity of the centre to unite it.

### Christian conquest of an Islamic island: transformation and adaptation of the territory

The majority of historic research on medieval Mallorca has concentrated on the establishment of a ‘feudal’ state in Mallorca by James I of Aragon, relying largely on the information recorded in the Repartiment and the Remembrança of Nynyo Sanç (Soto et al. 1990; Soto 1990; Cateura Bennàsser 1997; Jover et al. 2002). The use of Islamic sources has been neglected and, in particular Islamic archaeology is practically non-existent. The heavy reliance on the Christian documentation to increase our understanding of the Islamic period is, nevertheless, problematic as it presumes that the conquerors themselves had a clear comprehension of the Islamic administrative set-up of Mallorca, which is unlikely to have been the case.

![Figure 7.3, a tentative reconstruction of the administrative districts as suggested by Barceló (1984).](image-url)
The purpose of the Repartiment and, to a lesser extent, of the Remembrança was to ensure a fair and equal sharing of the lands and villages on the island among the conquerors. The resulting divisions of territory were loosely based on pre-existing Islamic denominations for certain regions or parts of the island, the so-called ajzā (fig 7.3). The continuation of most of these units and their names into the contemporary Mallorcan administrative setup has led some scholars to suggest that the current municipal divisions of Mallorca are largely identical those of the Islamic period, and that the island had then also been divided into clearly outlined administrative districts (Soto et al. 1990; Kirchner 1997; Barceló 1984). This somewhat Eurocentric approach to Islamic Mallorca presupposes the existence of a tightly controlled hinterland along the lines of a hisn/qarya complex which, as this thesis demonstrates, never existed on the island. It may, therefore, be argued that these divisions are a Christian invention designed to facilitate and formalise the fair sharing of the lands among the King and the magnates, based loosely on Islamic place-names of regions and areas, rather than the transference of an Islamic territorial organization. Indeed, authors such as al-Zuhrī and al-Mahzūmī make no mention of any administrative divisions on the island, further confirming that there simply may not have been any highly developed system of territorial administration which the Christians could have adopted 1:1. In this sense it is worth examining a passage from James I’s Book Of Deeds, who phrases it as follows:

And so that those who see this book may know how many regions there are in Majorca, there are fifteen. The first is Andraig, and afterwards there is Santa Ponça, Bunyola, Almeruig and Pollença, these being in the biggest mountains of Majorca, that face Catalonia. And the regions that are found on the plain are these: Montuïri, Canarossa, Inca, Petra, Muro, Felantix, where the castle of Santueri is, Manacor and Artá. And in the district of the city there are fifteen markets; but in the time of the Saracens there were only twelve (James I of Aragon 2003, 96).

Note in the above passage that James I clearly distinguishes between the regions of the mountains and plain, and the district of the city. This distinction is concordant with the Arabic terminology employed when referring to the various regions of Mallorca (ajzā), and does not reflect the meaning of clearly organised administrative districts, but rather broadly defined regions (Barceló 1984, 93-95). Instead it is possible to argue that these divisions were defined by the tribal divisions of the junūd which settled the island’s hinterland.

As briefly outlined above, where one does find an important degree of continuity is in the morphology of many of the island’s rural settlements. The comparative rigidity of organisation hinted at by the set-up of the irrigation systems, is determined by the topography of the terrain and the laws of physics, and thus may be long lasting in their form and function. Changes in these systems are unusual as major expansions or modifications are only possible if the flow rate of the water and the
profile of the terrain permit them. Hence one finds that such villages as Deiá, Banyalbufar, Bunyola and Orient had changed very little since the medieval period, until the introduction of municipal water systems in the 1980s and 90s. Some of these villages and their associated irrigation networks have been examined in detail by Helena Kirchner, who has on her part concluded that these systems speak for a high degree of autonomy of the rural communities that were able to determine the crops they planted, and organised their field systems without governmental involvement (Kirchner 1997). After the Christian conquest the new seigniorial regime determined levels of taxation in relation to the amount of water consumed by a particular farming community or by controlling the mills upon which this community had to rely (Argemi Relat 1995), a concept occasionally referred to as ‘eco-feudalism’ (Soto et al. 1990, 5).

D. Fortification and politics elsewhere: Al-Andalus and the Maghreb

In studying the island of Mallorca this thesis has defended the position that the study of exceptions may at times help to understand certain aspects of the rule by allowing for a reductive approach to the highly intricate complexities of Andalusian societies. The island, while containing all the elements of a given Moorish polity (city, huerta, irrigation agriculture, fortifications, large variety of crops and agricultural practices, multi-ethnic demographics, etc...), lacks the highly formative concept of a ‘frontier territory’ therefore clearly setting it apart from its mainland counterparts. The lack of this frontier is what allowed the birth of a distinct self-perception of the rural communities of Mallorca, which in turn interrupted the mutual and cyclical dynamics between city and hinterland.

Some of the most eminent Spanish Arabists such as Epalza and Rubiera Mata are of the opinion that the spike in castle-building in al-Andalus that began in the 10th century and continued into the 11th and 12th centuries, was the expression of an Incastellamento-type process like the one observed by Toubert in 10th century Latium (Toubert 1973), and as such represents the establishment of a seigniorial regime that ruled and exploited the Andalusian hinterland. In their view the qā'īd was a proprietary lord modelled on the example of his Christian counterparts, and who personally owned the modes and processes of production that lay within his jurisdiction. Viewed from this feudalistic perspective the castle must, of course, take on residential and representative functions which have, however, been difficult to discern from either the textual evidence or the archaeological record on the Spanish mainland, while they are clearly also completely absent in Mallorca. In this sense Mudjâhid’s construction of a palatial complex at Sineu (Palau dels Reis) does not serve to argue for a seigniorial system on the island as this structure was in effect an emiral palace, and not proof in any way of a local qā'īd taking on the trappings of lordly vassalage. Indeed there is very little evidence for urban grandees owning any large holdings of land outside the city. The only type of site that can clearly be
attributed to an urbanite owning land outside the city are the so-called almunias, of which, according to the Repartiment, there are only three on the island and they appear to be located within the immediate vicinity of the city, probably within the huerta (Rosselló 2007a, 54).

Unlike in the medieval Christian kingdoms of northern Europe, in the Islamic world the political elites were a predominantly urban class and not usually landed aristocrats, though they may well stem from rural backgrounds. It is therefore possible to speak of the city as an extension and expression of political power. The fact that in Mallorca the city was unable to enforce a lasting system of hinterland control further indicates that the cooperation of the populace was fundamental to this arrangement and that therefore the hisn/qarya complex was not of a seigniorial nature, a nature which at least in northern Europe seldom had the support of the peasantry. Furthermore, within seigniorial systems cities were by tendency outside of the seigniorial sphere of control like ‘islands in feudal seas’ (Postan 1987, 221), whereas in al-Andalus, according to Epalza, Mata and others, they would have had to be feudal islands in a non-feudal sea.

It is of note that, while practically the entirety of the western Islamic world consisted of tribally organised societies, there appear to have been a multitude of solutions to the challenges of territorial control and administration from the very earliest days of the Islamic conquest onwards. The case of Mallorca has clarified that the hisn/qarya complex is certainly the product of a tribal society, but it does not necessarily serve as a marker for the segmentary status of a given territory. This syllogism is further demonstrated by the complete absence of a hisn/qarya style organisation of the territory in North Africa, despite the fact that the architectural features which characterise it (H isn, Guelàa, Agadir) in fact stem from there. Boone and Benco, who have studied the territorial administration of the western Maghreb and criticized the seigniorial system espoused by Epalza and Rubiera Mata, have determined that the shifting dynamics of North African trade routes had a great effect on the emplacement and growth of urban centres (Benco et al. 1998, 54). While in both, North Africa and al-Andalus, Berbers appear to have been the predominant settlers of the hinterland, the low density of population of the Rift and Atlas Mountains, when compared with al-Andalus, resulted in the evolution of a highly differentiated convention of territorial control from Spain. The comparatively weak infrastructural penetration of the Maghrebian states determined that regional centralization was achieved, to an extent, by means of common denominators or identifiers such as language, religion, ethnicity or tribal allegiances, but mainly by the establishment of a very large settlement in the form of a garrison town (such as Fez or Marrakech) and permitting the existence of only a few peripheral, much smaller, rural settlements. In such a scenario the peripheral hinterland communities may have chosen to recognise these identifiers as the political legitimacy of a central authority, but they would most likely have provided it with little tribute, therefore contributing little material wealth to the city.
In the case of al-Andalus, however, demographic density, better infrastructure and the proximity of the Christian frontier made the north-African system impracticable. Here the *hisan* took on the role of acting as a hinge between the seat of power and the territory, but the function of the structures changed depending on the more specific realities in any given polity, as in Spain the concept of ‘hinterland’ was often synonymous with frontier, -a frontier with another neighbouring polity and its own hinterland. Renfrew (1986) and Knappett (1999, 620) see in the close proximity between polities a source of stress, which encouraged the formation of centralising states that took charge of the protection and economic exploitation of their hinterland. This process, which has been used here to describe the formation of the *Taifa* kingdoms of al-Andalus, was accompanied during the 11th century by an *Incastellamento*-like phenomenon, but while in the Christian context this castle-building was the main physical symptom of the emerging seigniorial class, in the Andalusian context it represented the growing power of the city as the seat of authority and as part of the consolidation of the *Taifas*. The *hisan* must therefore be a phenomenon specific to the hinterland, and perhaps even more specifically, pertaining to the frontier, therefore explaining the lack of true *hisan* in Mallorca.

The fortresses of Mallorca reflect the realities of this divided society like no other architectural example of the period. Indeed, they are the very product of segmentary state, but the post-Caliphate history of the Balearics also highlights the fundamental weakness of tribal polities: while far-flung kinship networks enabled the prompt establishment of highly productive trade systems contributing to the accumulation of great wealth and encouraging the growth of cities, this wealth was not easily translated into actual power. During the 11th, 12th and early 13th centuries, with around 30-40,000 inhabitants, Madīna Mayūrqa was larger, wealthier and more populous than Rome, Paris or London, and yet throughout the period the city was utterly incapable of establishing a functioning mechanism of control with which to dominate and develop its own immediate periphery.

On the mainland too one may observe that the *Taifa* period was in a cultural and financial sense a veritable golden age for al-Andalus. Competition between *Taifa* rulers spurned an enormous artistic development which may be said to have exceeded even that of the Caliphate. Documents from the Cairo Genizah have shown the extent to which long distance trade with Ghana, Sudan, India, Sri Lanka, Indonesia and even China brought immense wealth to the Iberian Peninsula; wealth, however, that usually ended being paid as tribute to the kings of Leon, Castile, Navarre or Aragon. For the tribally organised *Taifa* kingdoms raising and maintaining an army over prolonged periods of time was inhibited less by lack of funds, but by the nature of the allegiances and relationships between individual sheiks, the consequential heterogeneity of the armies and the comparatively short periods of service.

The instrumentalisation of kinship relations as a mechanism of state provided these polities with a horizontal axis of power that stands in diametric opposition of the vertical distribution of
demographic control that defined seigniorial societies. In the absence of an effective political centralism in Moorish Mallorca it is possible in this case speak not just of segmentary society, but also of a segmentary polity as it was neither a ‘chiefdom’ nor a ‘state’ in the traditional Western sense. Discussions regarding the nature of Islamic Spain as a singular polity have in this sense often been going around in circles as it is becoming increasingly clear that al-Andalus itself was neither conceptually nor effectually possible. The Emirate and Caliphate of Cordoba were not states in as much as they were family ventures, not tied to a sense of place which could be shared by all Andalusian subjects alike, but instead identified by the prestige of being an Umayyad. After the end of Umayyad rule some tribal leaders succeeded through ambition, cunning and ruthlessness in associating their name with legitimate power, accumulating large amounts of capital in the fundamental currency of honour, but never enough prestige to sustainably unite the peoples of al-Andalus. Even the otherwise highly successful dynasties of the Almoravids and Almohads can be said to have eventually floundered not so much on the military prowess of the Christians but on their own inability to sustainably bind together the disparate forces of Islamic Spain.
8. Conclusion

Homogeneity was clearly not one of the defining features of Moorish Spain. Ethnic and cultural divisions within Andalusian society exacerbated the fragmentation of an already segmentary social structure which was more often than not held together by sheer force, rather than by a sense of community or place. Instead of military inferiority it was this lack of cohesion which permitted the piecemeal conquest of Islamic territory by the Christian kingdoms of the Peninsula, eventually bringing about the complete disappearance of political al-Andalus after the fall of Granada in 1492. Cultural al-Andalus, however, lived on for some time through the remaining communities of Mudejars, though their fate was soon to follow that of their former states, as repression and emigration eroded the last remnants of this chapter of Iberian history.

Today the last material remains of the eight hundred years of Islam on the Iberian Peninsula are of an architectural nature. Having in many cases stood the test of time these physical reflections of the various societies that made up al-Andalus remain for the most part in the form of their fortresses. In moving beyond the urban palatial alcazar or citadel, often preserved by the Christian conquerors because of their sheer magnificence and grandeur, the unassuming fortifications of the hinterland have provided this thesis with a perspective that deeply contrasts with that of the glittering al-Andalus of the poems and songs. The alquería towers, mountain refuges, and fortified granaries and storehouses of the Andalusian peasantry are nevertheless equally as informative about their constructors as the Alhambra or the Aljafería are about theirs; their sober functionality is not obscured by personal ambition, representation or fashion. Indeed, ego appears to have had had little place in the construction of an alquería tower, which was meant to serve one, or perhaps several small communities. Their architectural simplicity was also not overshadowed by the competitive, peak-shifting character observed among other tower-building communities such as those of medieval Italy, visible at San Gimignano or Tuscania (Pringle 1974). In short, alquería towers were not expressions of power or wealth, but repositories thereof, and the simplicity of their design and apparent lack of decoration may in fact have been part of an attempt to disguise its contents which, as is clear from James I’s account of the conquest of the Tower of Montcada, could be substantial (James I of Aragon 2003, 184). As for the mountain refuges of Mallorca, their role as spontaneously used Fluchtburgen accounted for their architectural minimalism. It is, nevertheless, likely that deeper archaeological enquiry at sites such as Puig d’en Escuder, Sa Bastida and perhaps the Castellet d’Esporles would reveal these structures to be significantly more complex than the surface finds have currently lead us to believe.
Scope for future enquiries

The initially localised character of this study offers a number of areas in which the focus may be broadened significantly. Firstly, the most obvious continuation of this enquiry would be the study of the islands of Ibiza and Menorca. The lack of adequate sources, either textual or archaeological, have made their study a project for the future, though it would be of great interest to determine their respective relation with the island of Mallorca and whether the conclusions outlined here find a reflection elsewhere in the archipelago.

Further potential for an expansion into the study of Islamic islands finds a number of possible locations throughout the Mediterranean. A comparative study between the islands of Mallorca and Sicily may bring forward some fascinating new insights into settlement patterns on islands, and may also provide grounds for discussion on the adaptation of these patterns into Christian/seigniorial states. There is little doubt that the Mallorca of James II was modelled to no small extent on the Sicily of Frederick II of Hohenstaufen, though their differing relations with the papacy and the Moorish past of their respective territories also highlight a number of important differences in their personal vision for the creation of autonomous island kingdoms.

Other sites of great interest in the Mediterranean include the Tunisian island of Djerba and the intermittently Islamic islands of Sardinia, Cyprus and Crete. Djerba in particular offers a number of interesting possibilities as a place at which to examine disparities in the evolution of settlement patterns between the mainland and the island. Its history is comparable to some extent to that of Mallorca in that both were contended by the crown of Aragon and eventually fell to Castile in the 16th century. Despite its proximity to the mainland (2.5km), with which it is in fact connected via the Roman causeway, its study may reveal some interesting finds regarding the choice of Djerba as one of the main north African entrepôts and the place of settlement on of one North Africa’s largest Jewish communities. Djerba, like Sicily, is also very closely situated to the mainland and yet displays some highly distinctive characteristics the study of which may shed some much needed light on the dynamics of Aghlabid, Fatimid and Merinid power-projection and their exploitation of maritime trade.

Moving beyond the Mediterranean, the islands of the Red Sea, many of which have played important roles for centuries as staging post for pilgrims crossing the sea on their way to Mecca and back, but also as the cross roads between the Mediterranean and the Indian ocean and their respective trade networks. Though relatively sparsely settled, the challenges posed by this particular environment are highly likely to have influenced not just settlement patterns and agricultural techniques, but also the cultural developments of their communities.
As a closing remark it may be worth suggesting that the concept of island archaeology does not have to be limited exclusively to islands in the traditional sense. Deserts, for example, can be considered to be analogues of the sea, and the communities which lived and settled within them can be considered islanders in their own right. Throughout much of the Middle Ages the Sahara Desert was criss-crossed by caravan routes bringing the wealth of sub-Saharan Africa to the markets of the Maghreb, where it again embarked on a voyage across the sea. Sites such as Tuat, Timimoun, Ouargla and Regane in Algeria, Tafilalt in Morocco and Zaquila and Koufra in Libya were the entrepôts for the goods to and from the great cities on the Saharan littoral such as Audaghost, Gao, Timbuktu, Sijilmasa, Tlemcen, Marrakech and Cairo. Here too island archaeology and the study of exceptions from the rule may shed some much needed light on the socio-political fabric of the settlements, and here too fortifications are among the best preserved remains.
GLOSSARY

Ajzā: Ar. Plural *Juz*. Territorial part or division.

Al-Baqqār: Ar. The enclosed area of a fortress or tower, usually intended for cattle and livestock.

Albarrana tower: Ar./Sp. a fortification technique of Islamic origin whereby a the body of a wall tower is separated from the wall, connected to it only via a bridge.

Algarrada: Cat. A siege catapult of likely Turkish or Syrian origin.

Aljibe: Span. from the Arab al-jub, a water cistern or reservoir.

Al-jub: Ar. See ‘aljibe’

Almunia: Ar./Sp. A villa-type property usually located within the *huerta* of a city and normally owned by wealthy urbanites.

Al-qā’id: Ar. An administrator with judicial powers, but no religious authority.

Al-qādi: Ar. A judge and religious authority

Al-qary/alqarya: Ar. A small village or hamlet. Sp. alquería

Arrabal: Sp. From the Arabic *al-raval*. Initially the extra-mural quarter of a town, which may eventually become walled as well.

Castillo Roquero: Sp. Fortification emplaced on a rocky outcrop or cliff of difficult access.

Dherb: Ar. Can be either a wall-walk along the parapet of a fortification, or the narrow, sometimes covered, passages which lead to private dwellings in cities.

Emir/Amir: Ar. ‘the one who rules’. Aristocratic title.

Feslsenfeste: Ger. see ‘Castillo Roquero’

Fitna: Ar. A division or rift within the Islamic community. Sometimes translated as ‘civil war’

Fluchtburg: Ger. A fortification used only in times of danger by the local population

Funduq: Ar. An inn or warehouse for goods.

Giudicati: It. derived from the Byzantine magistrate title of *iuidici*
Hisn: Ar. Castle, fortress.

Huerta: Sp. The ‘green belt’ which surrounded and fed many Moorish cities. Most famously the huerta of Valencia.

Jund/Junūd: Ar. A military unit pertaining to a specific tribe or clan.

Marés: Sp. a soft Mallorcan sandstone quarried from a variety of locations with different properties and consistencies.

Mawla/Mawāli: Ar. Patron or protector.

Muwallad/Muwalladun: Ar. Muslims of Iberian descent. Recent converts to Islam

Opus Spicatum: Lat. a construction technique of classical origin whereby the stones are laid in a diagonal fashion, alternating the direction with each course. Named after its herringbone-style appearance.

Picadís: Sp./Cat. a fine-grained sand by-product of sand stone carving and quarrying, often used as an aggregate in mortar and plaster.

Piedra de Santanyi: Sp. a type of sand stone quarried in the vicinity of the town of Santany.

Qānat: Ar. An underground gallery used for water catchment.

Quartera: Cat. A medieval Catalan measurement of volume usually used for grain. Roughly equivalent to 70-80l

Quarterada: Cat. a medieval Catalan measurement of area roughly equivalent to 11.000m²

Rahal/Rafal: Ar. Usually settlements of a single family, smaller than the alquerías.

Repartiment: Cat. Documents which stipulate the portions of land allotted to the conquerors.

Ribā/Ribatat: Ar. An Islamic religious centre with a strong military character, at times used to defend and protect coastal areas and frontier territories.

Safareig: Cat. A large, uncovered reservoir for water collection.

Saluqiyya, Span. Celoquia.: the enclosure wall

Soga y Tizón: Sp. a construction method whereby masonry ashlar are placed alternately in parallel and perpendicularly to each other.

Solidus: Lat. a Roman or Byzantine gold coin
**Tabiyya:** Ar. a construction technique common in North Africa and the Middle East. Consists of rammed earth with varying amounts of aggregate and lime.

**Taifa:** Sp. from the Arabic *Muluk al-Tawaif*, the successor kingdoms that appears in the aftermath of the collapse of the Caliphate of Cordoba.

**Trebuch:** Cat. Trebuchet

**Umma:** Ar. The community of the faithful

**Wali:** Ar. Governor
APPENDIX, plates.

Tables
Plate 4.1. Timeline of the Islamic leaders of Mallorca. Source: Author
Plate 4.2, Coinage finds of Santueri, after Illisch 2005
Photographs
Plate 5.1, Almudaina of Palma and Royal Palace as seen from S. Source: Author

Plate 5.2, Almudaina of the Gumāra, inner gate, Salvator 1882.

Plate 5.3, Almudaina of the Gumāra, inner gate. Source: Author.
Plate 5.4, Alaró as seen from Sa Bastida. Source: Author

Plate 5.5, Alaró, Sector 1, outworks and gate as seen from T2. Source: Author
Plate 5.6, Alaró, Gate tower T1 as seen from W. Source: Author

Plate 5.7, Alaró, gate tower T1 as seen from N. Source: Author
Plate 5.8 Alaró, upper floor of tower T1. Note the corbels and parapet. Source: Author

Plate 5.9, Alaró, cistern W1 as seen from NW. Source: Author
Plate 5.10, Alaró, cistern W1 N wall. Source: Author

Plate 5.11, Alaró, cistern W1, *opus signinum* sealing layer made from ground ceramics. Source: Author
Plate 5.12, Alaró, Sector 2 bulwark and postern as seen from E. Source: Author

Plate 5.13, Alaró, postern F3 as seen from N. Source: Author
Plate 5.14, Alaró, curtain wall F2 as seen from N. Source: Author

Plate 5.15, Alaró, Sector 2 and castle as seen from T4. Source: Author
Plate 5.16, Alaró, interior of cistern W2 as seen from NE

Plate 5.17, Alaró, cistern W2, Exterior as seen from S. Source: Author
Plate 5.18, Alaró, interior of cistern W3 as seen from NE. Source: Author

Plate 5.19, Alaró, vault of cistern W3. Source: Author
Plate 5.20, Alaró, Interior of cistern W4 as seen from S. Source: Author

Plate 5.21, Alaró, cistern and well F5 as seen from N. Source: Author
Plate 5.22, Alaró, cistern and well F4 as seen from N. Source: Author

Plate 5.23, Alaró, cistern W5 as seen from E. Source: Author
Plate 5.24, Alaró, Ermita de Sant Antoni as seen from N. Source: Author

Plate 5.25, Alaró, Ermita de Sant Antoni as seen from W. Source: Author
Plate 5.26, Castell del Rei as seen from E. Source: Author

Plate 5.27, Castell del Rei, spur as seen from SE. Source: Author
Plate 5.28, Castell del Rei, area A1 as seen from interior. Source: Author

Plate 5.29, Castell del Rei, entrance gate ca. 1900. Salvator 1910

Plate 5.30, Castell del Rei, entrance gate 2008. Source: Author
Plate 5.31, Castell del Rei, area A3 and shooting chamber T1 as seen from A2. Source: Author

Plate 5.32, Castell del Rei, stone balls in area A3
Plate 5.33, Castell del Rei, kitchens and oven R2 as seen from R1. Source: Author

Plate 5.34, Castell del Rei, channel feature at passage between areas A2 & A3. Source: Author
Plate 5.35, Castell del Rei, Chambers R4 (foreground) and R3. Note the arched niche giving access to the murder hole which covered the entrance passage below. Source: Author

Plate 5.36, Castell del Rei, chambers R4 and R3 with entrance passage (right). Source: Author
Plate 5.37, Castell del Rei, ‘Latrine’ tower R5 as seen from T1. Source: Author

Plate 5.38, Castell del Rei, great hall R1. Source: Author
Plate 5.39, Castell del Rei, great hall R1, ca. 1915-1920. Source: Biblioteca March, Madrid.

Plate 5.40, Castell del Rei, cistern W1 as seen from S. Source: Author
Plate 5.41, Castell del Rei, interior of cistern W2, west wall. Note the stratification of the various layers of aggregate and mortar, and the springing of the supporting arch. Source: Author

Plate 5.42, Castell del Rei, interior of cistern W2 east wall. Source: Author
Plate 5.43, Castell del Rei, channel F4. Note the inflow (top right) and outflow (bottom left). Source: Author

Plate 5.44, Castell del Rei, ‘Latrine’ tower R5. Note the outflow of drain F3 below. Source: Author
Plate 5.45, Castell del Rei, horizontal aerial photograph of remains of tower T1 and postern F2. Salva 1999c

Plate 5.46, Castell del Rei, steps of postern F2. Note the corbels on the left which originally supported a covering for this passage. Source: Author
Plate 5.47, Castell del Rei, view from the castle toward the Bay of Alcudia. Source: Author

Plate 5.48, Castell del Rei, the valley of Ternelles as seen from the Castle. Source: Author
Plate 5.49, Santueri, vertical aerial photograph. SITIBSA 2008

Plate 5.50, Santueri, Sector 1 as seen from SW. Source: Author
boredom is the ultimate state of enlightenment.

Plate 5.51, Santueri, entrance to area A1. Source: Author

Plate 5.52, Santueri, interior of passage F6. Note the corbels which supported the ceiling prior to the insertion of the barrel vault. Source: Author
boredom is the ultimate state of enlightenment.

Plate 5.53, Santueri, passage F6 looking towards the interior of the fortress. Source: Author

Plate 5.54, Santueri, area A3. Source: Author
Plate 5.55, Santueri, tower T1. Source: Author

Plate 5.56, Santueri, gallery above the entrance with bread oven F4 (foreground), and remains of a vaulted covering attached to Tower T1 (background) Source: Author
Plate 5.57, Santueri, feature F5. Note the successive walls abutting each other. Source: Author

Plate 5.58, Santueri, dome of tower T1. Source: Author
Plate 5.59, Santueri, chambers R3, R4, R5 as seen from NE. Source: Author

Plate 5.60, Santueri, towers T2 & T3 and Chamber R7 as seen from W. Source: Author
Plate 5.61, Santueri, towers T2 & T3. Note the hollowed-out tabiyya casing between the two towers. Source: Author.

Plate 5.62, Santueri, tower T2 as seen from E. Source: Author.
Boredom is the ultimate state of enlightenment.

Plate 5.63, Santueri, cistern W1, looking N. Source: Author

Plate 5.64, Santueri, cistern W1, looking S. Source: Author
boredom is the ultimate state of enlightenment.

Plate 5.65. Santueri, tower T3 (foreground) and T2. Note the tabiyya foundation of T3. Source: Author

Plate 5.66. Santueri, chamber R7, looking S. Source: Author
Plate 5.67, Santueri, structure R7 as seen from W. Source: Author

Plate 5.68, Santueri, cistern W2 as seen from W. Source: Author
Plate 5.69, Santueri, wall F1 as seen from S. Source: Author

Plate 5.70, Santueri, tower T4. Source: Author
Plate 6.1, Sa Bastida d’Alaró, wall segments C7 & C8 as seen from C5. Source: Author

Plate 6.2 Sa Bastida d’Alaró, segment of retaining wall C3. Source: Author
Plate 6.3, Sa Bastida d’Alaró, potential remains of Late Antique dwellings as described by Aramburu-Zabala, 2000.

Plate 6.4, Sa Bastida d’Alaró, coaling platform. Source: Author
Plate 6.5, Sa Bastida d’Alaró, wall segment C8. Source: Author

Plate 6.6, Sa Bastida d’Alaró, wall segment C5, Source: Author
Plate 6.7, Sa Bastida d’Alaró, northern side of cistern W1. Source: Author

Plate 6.8, Sa Bastida d’Alaró. NE corner of cistern W1. Source: Author
Plate 6.9, Sa Bastida d’Alaró, cistern W2, sealing layer of *opus signinum*. Source: Author.

Plate 6.10, Sa Bastida d’Alaró, front view of the remains of cistern W3. Source: Author.
boredom is the ultimate state of enlightenment.

Plate 6.11, Sa Bastida d’Alaró, cistern W4 as seen from S. Source: Author

Plate 6.12, Tower of Canyamel/Montsó as seen from S. Source: Author

Plate 6.14, Tower of Canyamel/Montsó, central bay of the second floor. Source: Author
Plate 6.15, Tower of Canyamel/Montsó, doorway on second floor. Source: Author.

Plate 6.16, Tower of Canyamel/Montsó, ground floor arches. Note the gradual strengthening of the structure by the successive reduction of the arches. Source: Author
Plate 6.17, Tower of Canyamel/Montsó, battlements. Source: Author

Plate 6.18, Castell de Moros as seen from W. Source: Author
Plate 6.19, Deiá as seen from the Castell de Moros. Source: Author

Plate 6.20, Castell de Moros, Deiá, note the putlog holes which originally supported an interior level. Source: Author
Plate 6.21, Castell de Moros, Deiá, Source: Author

Plate 6.22, Palau del Reis de Mallorca, Sineu, tower T1 as seen from C1. Source: Author.
Plate 6.23, Palace of the Kings of Mallorca, Perpignan. Source: Author.

Plate 6.24, Palau del Reis de Mallorca, Sineu, NW wall of courtyard C1. The corbels supported the roof of a disappeared structure which probably dated to the late 13th or early 14th centuries. Source: Author
Plate 6.25, Palau del Reis de Mallorca, Sineu, entrance to the north of courtyard C3. Source: Author

Plate 6.26, Palau del Reis de Mallorca, Sineu, interior of tower T1. Source: Author
Plate 6.27, Palau del Reis de Mallorca, Sineu, wall paintings on the top floor of tower T1. Source: Author

Plate 6.28, Palau del Reis de Mallorca, Sineu, wall E1. Note the rammed earth wall placed on the masonry foundation. Source: Author
Plate 6.29, Palau del Reis de Mallorca, Sineu. Rammed earth wall on masonry foundation. Source: Author.

Plate 6.30, Palau del Reis de Mallorca, Sineu, Carrer del Palau. The street level was carved into the bedrock in a moat-like manner. Source: Author.
Plate 6.31, Almudaina of Artá, Aerial photograph. SITIBSA 2008

Plate 6.32, Almudaina of Artá as seen from E. Source: Author
Plate 6.33, Almudaina of Artá, areas A1 & A2 as seen from tower T1. Source: Author.

Plate 6.34, Almudaina of Artá, Tower T4. Source: Author
Plate 6.35, Almudaina of Artá, area A1 with tower T1. Source: Author

Plate 6.36, Torre d’en Nunís, Capdepera. Source: Author
boredom is the ultimate state of enlightenment.

Plate 6.37, Castel of Capdepera & Torre d’en Nunís as seen from S. Source: Author

Plate 6.38, Puig de N’Escuder as seen from SE. Source: Author
Plate 6.39, Puig de N’Escuder, access path. Source: Author.

Plate 3.40, Puig de N’Escuder, Access as seen from summit. Source: author
boredom is the ultimate state of enlightenment.

Plate 6.41, Puig de N’Escuder, wall section C1. Source: Author

Plate 6.42, Puig de N’Escuder, remains of structure F1. Source: Author
Plate 6.43, Puig de N’Escuder, *Alfabia* style vessel with stamped decorations in a vegetable pattern, Almohad period, ca. 1203-1229. Inv. Nr. ESC02. Source: Author


Plate 6.46, Castle of Son Mas as seen from N. Source: Author
Plate 6.47, Tower of Son Mas. Salvator 1910

Plate 6.48, Castellet d’Esporles as seen from N. Source: Author
Plate 6.49, Castellet d’Esporles. Steps leading to the top. Source: Author

Plate 6.50, Castellet d’Esporles, Summit. Source: Author
Archival Documents
Plate 5.80 ARM Baratillo vol. 1, part 2, 122
Die abbati carmo in July aino iùni. jùni.
Plate 5.90 ARM Prot. P-145, f. 7
Die huius pridie post septembris uno quod secuta fuerit consistere propter laboriosa elemosina ac huiusmodi uti [illegible] Nicolai, tunem munus accepto et condignum quod a medicis sua coniuncto es. Sunt autem mutuo tractu tunc producta, quae in huiusmodi casibus solent esse. Enim quidem haec plura sunt quam secundum

Plate 5.91 ARM Prot. P-145 f.10
Del libre de Dados de 1423.

Castellans
Belleser el Pera Prior de Cartoxer & Valldemor.
Alaro Mons. Jordi Serra als s. Johan.
Pollenca Seny de Todesa.
Santueri Mons Bernat & Camporells.
Palafrugell Seny Fordi Ronda.

Governador Gen.
El Noble Mons. Oló de Freixeda, e per carta del d' Rey
Afonso dada en Nàpolis Mons. Revenquez Johan fo men
en posesió del dit Office a 3. de Maig de 1423. durant la
auència del Propietari

Governador Reyat
Mons Lazaro de Lorcoz per mort de Pera de Canolagila.

Duch de Mila
En aquest any corria la nova que el Duch de Mila e los
Inocens fechen en la Cuitat de Teneda un gran Solari de
naua com de palma armada qui dehe amanazar venir a
las Islas de Mallorq e per ço se feu fortificar son los cas
setos e portar en aquellos muniments de Pedres e Mallorques
e las vísceras necessaries e per portar lenxa al Castell e lle
ver se feu talles molt de puns del dit Castell.
Armada turca

A 23 de Diciembre de 1543 paqua per tonel el holg. espectable S. lo S. Emperador & Cresc. Luch y Capità gen. en lo presente Reque & Matt e son por lo seguidos y pertenieren por la anada feta por manament del Sr. Señor Príncipe, en la Guerra de Alcudia por venir su poche fortificar e no por tenerse contra la armada turca, y e francio vinquen en contra aquellas en la qual anada S. M. 4. días en lo mes de Diciembre propirias, contando 2 u e por lasun die con 8 u e

Lera.

A 10 de febe 1544 paqua por tonel a cabo de vera a.

pósecur 17 8 x 2 3 por lo pres de S. que en los 93 y 94 un de cara blanca a valo de 9 ella 14, la qual se ha tre-mesa al II S. Príncipe, que fonde en Cirió de chuaer, qualde y sorty e stedett e candelas poradas den S. Capo

Segon la C. Arag. fueron memoria en estar de los demás paques, contra tot 19 5 x 14 y 8. E solo es la mixt de la que se custo una tramaera uñer añy

Gastos en fortificar los Càsells

Selvares en aqueus añy costó el măxim per la defen-sa 820 x 14 y 10.

Cantuerc costó 58 x 9 2 8. — Poblencia 48 x 7 2 5.

Peru. costó 9 x 16 2 7.
BIBLIOGRAPHY

Archival Documents

- ARM Prot. ECR 431, f. 109 (unavailable for reprography)
  13th century document dated 1237, citing the donation of land in the vicinity of Alaró to a certain Pere Cerda.

- ARM Prot. ECR 342, f. 140 (plate 5.71)
  13th century document dated 1242, citing the nomination of one Marti Yvanes as castellan of the castle of Alaró, and listing the receipt and payment for building materials for the castle.

- ARM Prot. ECR 343, f. 223 (plate 5.72)
  13th century document dated 1247, citing the nomination of one Aries Yvanes as Castellan and confirming the receipt of s.1000 from the Crown for the maintenance of both, Alaró and Castel del Rei.

- ARM Prot. ECR 345, f. 198 (lost/unavailable for reprography)
  13th century document dated 1252, citing the receipt by a certain Sancho de Sadova, lieutenant of the castellan of Alaró Aries Yvanes, of funds and foodstuffs for the castle.

- ARM Prot. ECR 351, f. 16 (plate 5.73)
  14th century copy of a document dated 1285, citing an oath of allegiance sworn by the brothers Bernat and Frances Ripoll to King James II of Mallorca, promising to defend the castle of Alaró and its castellan Ramon de Palada against the Aragonese.

- ARM Prot. ECR 644, ff. 15v., 23v. 24v. (plate s 5.74-76)
  13th century document from around 1290, citing the nomination of Guillem de Santa Coloma as Castellan of Alaró and confirming the receipt of funds and foodstuffs for the castle.

- ARM RP 3410, f.42 (unavailable for reprography)
  14th century document dated 1325 citing one Arnau Vezega as castellan of Santueri and who resided there together with 9 servants. They earned in total a monthly salary of 12 pounds, 11 sous and 9 dinars between May and November of that year.

- ARM RP 3043, f. 47 (unavailable for reprography)
  14th century document dated 1330 and outlining construction and restorations works carried out at Santueri for a total of £20, s2 and d8.

- ARM RP 3.394, ff. 35, 60 (plate s 5.77-78)
  14th century documents from around 1319 and pertaining to the Llibre de Dades of 1320, citing Ramon de Tornalboix as castellan of Alaró, and listing weapons, construction materials and costs incurred in the restoration and expansion of Alaró.

- ARM RP 3.397, f.140 (plate 5.79)
  14 century document from the Llibre de Dades of 1320, citing the accession of Pere d’Enveig as castellan of Alaró and listing the salaries of the castle’s residents.

- ARM Llibre de Dades 1320
  States that a total of some 140-150m³ of lime were brought to the castle for reparations and expansions.
14th century document dated to around 1311, listing a payment to a certain Pere Garriga for construction works carried out at Alaró (£19, 1s, 1d), and listing also expenses incurred at the Castell del Rei (£7, 11s, 6d) and Santueri (£12, 8s, 9d)

Document referring to Sa Bastida de Alaró and dated 1396. It outlines a disagreement among two tenants over the exact outline of their lands and cites the existence of fortifications on the site.

14th century document from around 1330 citing the Castle of Alaró and mentioning the Torre de la Cova, which is not yet a hermitage.

14th century document dated to around 1343, citing a certain Pere de Conanguell as castellan of the Castel del Rei, and confirming the receipt of trebuchets and large quantities of wood and nails in preparation for a siege of the castle.

16th century copy of a document dated 1406 mentioning the strengthening of the fortresses as a result of a rumour that the Moors were planning a raid on the island.

16th century document from the Llibre de Dades of 1423 listing as castellans Jordi Serra for Alaró, Lucio de Tudela for the Castel del Rei, Bernat de Camporells for Santueri and Jordi Brondo for the Palau dels Reis at Sineu. It also orders the strengthening and stocking up of the castles with munitions and supplies in the face of a potential attack by the Duke of Milan.

16th century document from the Llibre de Dades of 1543-44, citing the strengthening of the Castel del Rei in view of the Ottoman threat.

Historical Sources

Ibn al-Kardabūs, Abd al-Malik. 1986. Historia de Al-Andalus (Kitāb al-Iktifā’), Estudios Árabes e Islámicos. Madrid


Secondary Sources


Guichard, P. 1976b. *Primer Informe sobre las Excavaciones realizadas en Torre Bufilla, Bétera (Valencia)*.


Hitchcock, R. 2009. Vandals in al-Andalus? In University of Exeter: Institute of Arab and Islamic Studies


Pericás, B.D. 1915. *Estratigráfia de la sierra de levante de Mallorca (región de Felanitx)*. Imprenta clásica española.


Soto, R. 1990. Repartimen i “repartiments”: l’ordenació d’un espai de colonització feudal a la Mallorca del segle XIII. In *De al Andalus a la socieda feudal*, Barcelona: CSIC


