This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.
The Conservation of Archaeological Sites in Syria: Ugarit as a Case Study

T. Teba

PhD in Architecture
University of Edinburgh
November 2016
## Contents

**CHAPTER 1**  
**INTRODUCTION**  
1.1 General outline  
1.2 Contextualising the research: Theoretical framework  
1.3 Introducing the case study and the rationale for selection  
1.4 Rationale for the research  
1.5 Methodological approach  
1.6 Thesis outline  

**PART I: THEORETICAL FRAMEWORK**  

**CHAPTER 2**  
**THE CITY OF UGARIT: GENERAL REVIEW**  

**CHAPTER 3**  
**ARCHAEOLOGICAL APPROACHES, PRINCIPLES AND METHODS**  
3.1 Introduction  
3.2 Archaeological approaches: Anthropological Archaeology  
3.2.1 Processual Archaeology  
3.2.2 Post-processual Archaeology  
3.3 Archaeological principles and methods  
3.3.1 Cultural systems theory  
3.3.2 Spatial archaeology  
3.3.3 Cultural evolution principles  
3.4 Summary  

The origin of civilisation  
Full civilisation traits  
Principles of understanding cultural evolution  
Values’ theories and classification  
Thompson’s Rubbish theory  
Values classification  
The role of architecture in understanding archaeology  
The role of material culture  
The role of architecture  

---

iii
CHAPTER 4  CONSERVATION CONCEPTS AND PRINCIPLES

4.1 Introduction ................................................................. 61
4.2 The presence of archaeological site............................... 62
  4.2.1 Related sciences ......................................................... 63
  4.2.2 Derived principles ...................................................... 63
  Stratification ........................................................................ 64
  Restoration of the fragments .................................................. 65
  Memory ................................................................................ 67
  Musealisation ........................................................................ 68
  4.2.3 The Relationship between single buildings and the whole site .......... 70
4.3 Architectural conservation ............................................. 72
  4.3.1 The development of conservation concepts and thoughts .............. 74
  4.3.2 Levels of interaction .................................................... 83
  Regular maintenance .......................................................... 83
  Physical protection and strengthening .................................... 84
  Minor restoration .................................................................. 85
  Critical conservation .......................................................... 85
  Reconstruction and Historicist Reconstruction ....................... 87
  4.3.3 Conservation approaches and principles .......................... 89
  Interpreting, constructing and presenting the past ...................... 89
  Values-based conservation approach .................................... 93
  The concept of cultural routes ............................................... 96
  Critical conservation approaches ......................................... 97
  International conventions .................................................... 99
4.4 Archaeological conservation ........................................... 100
4.5 Conceptual framework for the conservation of Ugarit ............. 105
4.6 Summary ......................................................................... 110

CHAPTER 5  DESIGNING APPROACHES TO CONSERVATION: REVIEW AND ANALYSIS

5.1 Introduction: .................................................................. 113
5.2 Preserving and presenting the historic stratigraphy .................. 114
  5.2.1 Crypta Balbi museum .................................................. 115
5.3 Installing a shelter .................................................................................................................. 120
5.3.1 Protect the fabric ......................................................................................................................... 120
Temple of Apollo Epikourios .................................................................................................. 121
Olmeda Roman Villa ......................................................................................................................... 122
Akrotiri at Thera-Santorini ............................................................................................................. 125
5.3.2 Creating interior environment for in situ museum ................................................................. 126
Chur Museum for the Roman Ruins ................................................................................................. 127
Badalona Roman Museum ................................................................................................................. 128
5.3.3 Reconstruct the original volume ................................................................................................. 132
Villa Romana del Casale .................................................................................................................... 132
The Oratorio dei 40 Martiri ............................................................................................................. 134
Dorchester Roman Town House ....................................................................................................... 136
5.4 Conceptual representation of the volume ..................................................................................... 139
5.4.1 Kolumba Museum, Cologne ....................................................................................................... 139
5.4.2 Koldinghus Castle ..................................................................................................................... 142
5.4.3 The Roman Villa of Veranes ...................................................................................................... 144
5.4.4 Clachtoll Broch ......................................................................................................................... 145
5.5 Conceptual approaches to archaeological sites ............................................................................. 148
5.5.1 Hadrian’s Wall Forts (Vindolanda and Housesteads) ................................................................. 149
5.5.2 Saint-Romain-en-Gal museum and archaeological site .......................................................... 153
5.5.3 Knossos Palace ......................................................................................................................... 156
5.5.4 The Roman Temple of Apollo at Portonaccio ........................................................................ 158
5.5.5 Roman ruins of Empúries (Ampurias), Spain .......................................................................... 160
5.5.6 The Roman ruins of Can Tacó and Iesso, Spain ..................................................................... 164
5.5.7 Archaeological site of Skarkos in Ios, Greece ......................................................................... 167
5.6 Summary ....................................................................................................................................... 169

PART II: THE CITY OF UGARIT, ANALYSIS AND CRITICAL CONSERVATION

CHAPTER 6 THE CONSERVATION OF THE ROYAL AREA IN UGARIT .................................................................. 171

6.1 Introduction .................................................................................................................................... 171
6.2 The Royal Area: Analyses and identifying the cultural values .................................................. 172
6.2.1 Area description ......................................................................................................................... 173
List of Figures

Chapter 1
Figure 1.1: (a) A Google Map illustrating the location of Ugarit. (b) Schematic map of the City of Ugarit. .............................................................................................................. 7
Figure 1.2: The 13th century gate and access system to the City of Ugarit (Yon, 2006). .......................................................................................................................... 8

Chapter 2
Figure 2.1: Google Earth photos for the City of Ugarit, showing the city's location and urban position within the surrounding landscape......................................................... 20
Figure 2.2: Schematic map of the City of Ugarit showing the discovered areas...... 21
Figure 2.3: Sounding SH at the western slope of the Acropolis. (a) Neolithic level. (b) Chalcolithic level, Halaf period (Yon, 2006). ................................................................. 24
Figure 2.4: Cultic facilities at the Acropolis of Ugarit date back to the beginning of the Middle Bronze Age period (Callot and Monchambert, 2011). ............................... 25
Figure 2.5: Historic map for the region dominated by Ugaritic civilisation (Galliano and Calvet, 2004). ................................................................................................. 27
Figure 2.6: Google map illustrates the location of Ugarit with the dominated trade lines. ...................................................................................................................... 28
Figure 2.7: Presents the diversity and richness of Ugarit's material culture. (a) (Curtis, 1985) (b) & (c) (Yon, 2006). (d) The researcher’s in situ observation........ 29
Figure 2.8: The distribution of discovered libraries and archives so far in the City of Ugarit.......................................................................................................................... 30

Chapter 3
Figure 3.1: (a) A static and schematic model of the dynamic equilibrium between the subsystem networks of a single sociocultural system and its total environment system (Clarke, 1968). (b) The interaction between the culture’s subsystems as suggested by Lewis Binford. ................................................................................................. 40
Figure 3.2: The interaction between the culture’s subsystems as suggested by Colin Renfrew (Renfrew and Bahn, 1991). .............................................................. 41
Figure 3.3: Schematic plan of the City of Ugarit that shows the fragmented situation of the site’s areas. ........................................................................................................... 43
Chapter 4

Figure 4.1: (a) Claude Schaeffer’s sounding SH (Yon, 2006). (b) Diagram illustrates the historical stratification of Ugarit as it has been demonstrated in the sounding made by Schaeffer. ..................................................................................................... 65

Figure 4.2: Schematic plan of Ugarit that shows possible connections between fragmented areas. ................................................................. 66

Figure 4.3: Musealisation approach at Villa Romana del Casale outside Piazza Armerina © UNESCO........................................................................................................... 69

Figure 4.4: Examples of different Musealisation projects in archaeological sites. .... 70

Figure 4.5: Knossos Palace, Greece © Theodossopoulos, 2013 ............................. 71

Figure 4.6: Hattusa, the capital of the Hittite Empire in the Late Bronze Age period: (a) the site’s map © UNESCO. (b) Artistic reconstruction of the city © UNESCO. 71

Figure 4.7: Diagram illustrates the hierarchy of heritage protection concepts. ....... 73

Figure 4.8: (a) Example of Stylistic Restoration concept, Notre-Dam Cathedral, Paris. (b) Example of Faithful Restoration concept, Lichfield Cathedral, Staffordshire, England ................................................................. 75

Figure 4.9: Regular Maintenance works at Domus of Criptoportico, Italy, 2013..... 83

Figure 4.10: Different types of physical protection shelters. (a) The Temple of Apollo Epikouros in Figalia, Greece (Odyssey, 2014). (b) Shelter over Ancient Akrotiri, Thera of Santorini, Greece (Eptakili, 2015) ........................................ 84

Figure 4.11: Chur museum for the Roman ruins by Peter Zumthor in Switzerland (Martin, 2013). ................................................................. 84

Figure 4.12: Minor restoration works at Phaistos archaeological site in Crete © Theodossopoulos, 2013 ................................................................. 85

Figure 4.13: Some examples of critical Conservation concept. (a) San Nicolo Regale by Franco Minissi (Vivio, 2011). (b) Crypta Balbi Museum, Rome (Crypta Balbi, 2014) ................................................................. 86

Figure 4.14: Villa Romana del Casale Piazza Armerina © UNESCO ................. 87
Figure 4.15: The Frauenkirche church in Dresden, Germany. (a) The church before reconstruction. (b) The church after reconstruction. (c) The reconstruction of the sandstone dome.

Figure 4.16: Historicist reconstruction of the Minoan palace of Knossos, Crete © Theodossopoulos, 2013.

Figure 4.17: archaeological sites’ presentation forms (Copeland, 2004, p.138: Table 6.1).

Figure 4.18: Flow diagram that presents the sequential stages of the conservation framework of Ugarit.

Figure 4.19: graphical model shows the mechanism of the concept of archaeological conservation.

Chapter 5

Figure 5.1: The Development of Crypta Balbi complex between 2nd and 14th century (Crypta Balbi, 2014).

Figure 5.2: The fabric of different areas in Crypta Balbi (Crypta Balbi, 2014; Letizia-Conforto, 2014).

Figure 5.3: (a) the pathway through the Porticus Minucia ruins. (b) The Crypt portico (Crypta Balbi, 2014; Letizia-Conforto, 2014).

Figure 5.4: The composition between new materials and the original fabric in Crypta Balbi.

Figure 5.5: Crypta Balbi, completing some architectural elements using new materials.

Figure 5.6: Crypta Balbi, the reconstruction of missing elements at the north portico using a steel framework (Crypta Balbi, 2014).

Figure 5.7: Crypta Balbi, examples of the installed pathways (Crypta Balbi, 2014; Letizia-Conforto, 2014).

Figure 5.8: Crypta Balbi, the insertion of new designs (Letizia-Conforto, 2014).

Figure 5.9: Crypta Balbi, the Museum of Medieval Archaeology, the compositions between old and new materials (Letizia-Conforto, 2014).

Figure 5.10: Crypta Balbi, the Museum of Medieval Archaeology, the new design within the original fabric (Letizia-Conforto, 2014).
Figure 5.11: (a) Temple of Apollo Epikourios (1966) (McGill, 2014). (b) View of the temple before the restoration work, 1891© Ministry of Culture and Sports (Odyssey, 2014). ................................................................. 121

Figure 5.12: (a) erection of the canopy in1987 (Jeffreys, 2010). (b) the protective shelter (Odyssey, 2014). ................................................................. 121

Figure 5.13: Temple of Apollo Epicurius, under restoration works © UNESCO. .. 122

Figure 5.14: Olmeda Roman Villa: (a) The Villa’s hypocaust and mosaics (b) Monumental façade and mosaics © Paredes & Pedrosa Arquitectos. ...................... 123

Figure 5.15: Olmeda Roman Villa, the representation of the ruins using original and modern transparent materials © Paredes & Pedrosa Arquitectos. ...................... 123

Figure 5.16: Olmeda Roman Villa: (a) Interior. (b) Exterior © Paredes & Pedrosa Arquitectos. ......................................................................................... 124

Figure 5.17: Olmeda Roman Villa - Musealisation routes © Paredes & Pedrosa Arquitectos. ......................................................................................... 124

Figure 5.18: The town of Akrotiri at Thera, Santorini (Eptakili, 2015).............. 125

Figure 5.19: The town of Akrotiri at Thera - the shelter and musealisation routes (gtp-headlines, 2015)......................................................................................... 126

Figure 5.20: The town of Akrotiri at Thera - some restoration works on the site (Cyclades24.gr, 2015). ......................................................................................... 126

Figure 5.21: Chur Museum for the Roman Ruins. (a) Exterior. (b) Interior (Martin, 2013). ......................................................................................... 127

Figure 5.22: Chur Museum for the Roman Ruins. (a) The museum's access. (b) The connections between pavilions at the same level of the entrance (Martin, 2013).... 128

Figure 5.23: Chur Museum for the Roman Ruins. Interior and musealisation footbridge (Martin, 2013)......................................................................................... 128

Figure 5.24: Badalona Roman Museum, the ruins with the concrete structure above (Guillén, 2014). ......................................................................................... 129

Figure 5.25: Badalona Roman Museum, the interaction between the ruins and the structural elements of the new building in the basement (Guillén, 2014)............. 129

Figure 5.26: Badalona Roman Museum, restoring the original environment (Guillén, 2014)......................................................................................... 130

Figure 5.27: Badalona Roman Museum, Exhibition area (Guillén, 2014). ............ 130
Figure 5.28: Badalona Roman Museum, in situ and visual reconstructions of the space environment (Guillén, 2014). ................................................................. 131
Figure 5.29: Badalona Roman Museum, the ruins of Roman drains with the columns of the new structure (Guillén, 2014). ................................................................. 131
Figure 5.30: Villa Romana del Casale, reconstructing the volume of different parts on the site. ........................................................................................................ 132
Figure 5.31: Villa Romana del Casale. (a) Completing some interior walls © UNESCO. (b) The reconstruction of the Basilica space (Scafaro, 2010). .................. 133
Figure 5.32: Villa Romana del Casale, musealisation routes © UNESCO. .............. 133
Figure 5.33: Villa Romana del Casale, the new proposal for the Basilica spaces © Stefano Brambilla ................................................................................................. 134
Figure 5.34: The Oratorio dei 40 Martiri, 8th century frescos (Del Monti, 2004). .... 135
Figure 5.35: The Oratorio dei 40 Martiri, reconstructing the crossed vault and original volume of the structure (Del Monti, 2004)............................................. 135
Figure 5.36: The Oratorio dei 40 Martiri, the composition between the original structure and new coffered brick and timber vault (Del Monti, 2004). .............. 136
Figure 5.37: The Oratorio dei 40 Martiri, external view of completed project © Wikipedia ................................................................................................................ 136
Figure 5.38: Dorchester Roman Town House. (a) External view. (b) The mosaic flooring © John Stark and Crickmay - Architects in Dorset .................................. 137
Figure 5.39: Dorchester Roman Town House: the new steel framework on top of the original walls © John Stark and Crickmay - Architects in Dorset .............. 137
Figure 5.40: Dorchester Roman Town House. (a) The composition between the original walls and the new intervention. (b) The new roof tiles © John Stark and Crickmay - Architects in Dorset ........................................... 138
Figure 5.41: Dorchester Roman Town House, inside and outside musealisation © John Stark and Crickmay - Architects in Dorset .................................................... 138
Figure 5.42: Kolumba Museum. (a) Zumthor design's diagram. (b) External view (Brady, 2010). ............................................................................................................. 140
Figure 5.43: Kolumba Museum design drawings (Geschichte, 2008). (a) Ground floor. (b) First floor. (c) Second floor. ................................................................. 140
Figure 5.44: Kolumba Museum: Installed musealisation route over the excavation work. (a) plan (Martínez, 2010). (b) View of the interior space, the route and the ruins (Geschichte, 2008). ........................................................................................................ 141

Figure 5.45: Kolumba Museum: internal and external views of the perforated grey brick and the composition with original walls (Zeballos, 2012)............................................................................. 141

Figure 5.46: Kolumba Museum: external and internal views (Zeballos, 2012)...... 142

Figure 5.47: Koldinghus Castle: (a) Air-view before restoration works (Historisk-Atlas, 2015). (b) The castle after restoration project.......................................................... 142

Figure 5.48: Koldinghus Castle, the overall intervention. (a) Schematic diagram © Johannes and IngerExner. (b) Interior view shows the new framework © Wikipedia. .................................................................................................................................. 143

Figure 5.49: Koldinghus Castle, the composition between original structure and the new addition............................................................ 143

Figure 5.50: The Roman Villa of Veranes: general view of the site (Caso de los Cobos, 2009). ........................................................................................................................................ 144

Figure 5.51: The Roman Villa of Veranes: the new intervention over the original reception room (desde-asturias, 2013). ................................................................. 145

Figure 5.52: Clachtoll Broch, architectural and landscape settings © Cristina González-Longo and Dimitris Theodossopoulos.............................................................. 146

Figure 5.53: Clachtoll Broch, physical model for the proposed design showing its composition to the original fabric © Cristina González-Longo and Dimitris Theodossopoulos............................................................................................................. 147

Figure 5.54: Clachtoll Broch, design proposal. (a) Plan. (b) Elevation shows access to higher level and perimeter. (c) Elevation shows access to higher level, perimeter and probable top of the broch © Cristina González-Longo and Dimitris Theodossopoulos................................................................. 147

Figure 5.55: Clachtoll Broch, showing the proposal integration to the ruins in their landscape settings © Cristina González-Longo and Dimitris Theodossopoulos. .... 148

Figure 5.56: Hadrian’s Wall Forts: (a) Housesteads. (b) Vindolanda....................... 149

Figure 5.57: Hadrian’s Wall Forts, Physical models: (a) Housesteads. (b) Vindolanda ........................................................................................................................................ 149

Figure 5.58: Housesteads Fort, the reconstruction of urban settings. ................. 150
Figure 5.59: Housesteads Fort, the ruins of wall’s lookout tower. ............................................... 150
Figure 5.60: Vindolanda Fort, the reconstruction of the sense of Roman landscape. ............................................................................................................................................. 151
Figure 5.61: Vindolanda Fort, the replica reconstruction of wall’s lookout tower. 151
Figure 5.62: Vindolanda Fort, display the after excavation settings opposite to conserved areas to highlight the role and effectiveness of the conservation process on ruins. ........................................................................................................................................ 152
Figure 5.63: Vindolanda Fort, making sense of the ruins. ......................................................... 152
Figure 5.64: Saint-Romain-en-Gal Museum, the contemporary structure. ............................. 153
Figure 5.65: Saint-Romain-en-Gal Museum, the variety of artefacts housed in the contemporary museum. .................................................................................................................................. 153
Figure 5.66: Saint-Romain-en-Gal Museum, simple restoration to highlight the building’s footprint and spaces of different use................................................................. 154
Figure 5.67: Saint-Romain-en-Gal Museum, various restoration works. ............................... 155
Figure 5.68: Saint-Romain-en-Gal Museum, ramps to facilitate the site’s musealisation ......................................................................................................................................................... 155
Figure 5.69: Saint-Romain-en-Gal Museum, examples of temporary and fixed shelters in the site. ......................................................................................................................... 155
Figure 5.70: Saint-Romain-en-Gal Museum, examples of reconstructing the Roman gardening concepts.................................................................................................................. 156
Figure 5.71: Minoan Palace at Knossos, examples of available Frescos © Theodossopoulos, 2013 ................................................................................................................................. 156
Figure 5.72: Minoan Palace at Knossos, various reconstruction works © Theodossopoulos, 2013. (a) The Queen’s Hall with dolphins’ frescos. (b) The south gate. (c) The Bull frescos and characteristics Minoan columns. (d) Royal Chamber. ............................................................................................................................................... 158
Figure 5.73: Minoan Palace at Knossos, some reconstruction at the upper level of the Palace (room and light-well) © Theodossopoulos, 2013 ........................................................................ 158
Figure 5.74: The Roman Temple of Apollo at Portonaccio. (a) Reconstruction model. (b) Ruins after the 1939 restoration works .......................................................................................... 159
Figure 5.75: The Roman Temple of Apollo at Portonaccio, the implemented reconstruction proposal. ....................................................................................................................... 160
Chapter 6

Figure 5.76: Roman city of Empúries, the city's forum © Archaeology Museum of Catalonia................................................................. 161

Figure 5.77: Roman city of Empúries, the city's forum: simple restoration of original fabric and paving © Archaeology Museum of Catalonia.................................................. 162

Figure 5.78: Roman city of Empúries, the city's forum: the reconstruction of the northwest corner of the Cryptoporticus © Archaeology Museum of Catalonia. ..... 162

Figure 5.79: Roman city of Empúries, the city's forum: restoration works at the main temple and the whole forum © Archaeology Museum of Catalonia. ...................... 163

Figure 5.80: The Roman Ruins of Can Tacó: before and after the implementation of the conservation proposal (Aravena, 2013)............................................................... 164

Figure 5.81: The Roman Ruins of Can Tacó: after the implementation of the conservation proposal (Aravena, 2013) ................................................................. 165

Figure 5.82: The Roman Ruins of Can Tacó, the multipurpose space (Aravena, 2013)........................................................................................................................ 166

Figure 5.83: The Roman Ruins of Can Tacó, representing some volumetric aspects (Aravena, 2013)............................................................ 166

Figure 5.84: The Roman Ruins of Iesso, representing the tower’s volume in a light frame © Toni Gironès Architects................................................................. 167

Figure 5.85: Archaeological site of Skarkos, Ios: Preservation and restoration works © Copyright 2002-2015 The Best in Heritage. ......................................................... 168

Figure 5.86: Archaeological site of Skarkos, Ios: the reconstruction of the site morphology and landscape relationships Copyright 2002-2015 The Best in Heritage. ................................................................. 168

Chapter 6

Figure 6.1: Schematic diagram and general aerial view of the City of Ugarit, showing the location of the Royal Area......................................................... 171

Figure 6.2: The Royal Area in Ugarit. ................................................................. 174

Figure 6.3: (a) General aerial view of the Royal Area in Ugarit (Margueron, 2000). (b) The high-quality material of buildings in the New Royal Zone, the entrance of the Royal Palace................................................................. 174

Figure 6.4: The development of building the Royal Palace over two centuries, in alphabetical order from the oldest......................................................... 177
Figure 6.5: Cultural influence on the New Royal Zone................................. 178
Figure 6.6: The monumentality in Ugaritic royal structures (a) Artistic reconstruction of the New Royal Zone including the monumental gate. (b) Artistic reconstruction of the Palace’s garden........................................................................................................ 180
Figure 6.7: The Royal Palace: The Throne with the corresponding courtyard...... 180
Figure 6.8: The Royal Palace: The podium at the Funeral department with the corresponding courtyard................................................................. 180
Figure 6.9: 15th-14th century entrance of the city. (a) (Yon, 2006) (b) In situ observation......................................................................................................................... 181
Figure 6.10: 13th -12th century entrance of the city. (a) (Yon, 2006). (b) In situ observation......................................................................................................................... 181
Figure 6.11: The Royal Palace: The building’s sections and archives.................. 183
Figure 6.12: The North Palace at the Old Royal Zone in Ugarit........................ 184
Figure 6.13: The North Palace, Old Royal Zone in Ugarit................................. 185
Figure 6.14: Some examples of buildings from Hattusa, the capital if Hittites empire (a) © UNESCO (b) (Sey, 1999).......................................................... 187
Figure 6.15: General views at the Royal Palace fabric showing the added capping layers on the walls. (a) The palace original core (zone A) looking east. (b) The Palace’s wall on Palace Street................................................................. 193
Figure 6.16: Examples of fragmented walls at the Royal Area in Ugarit............. 194
Figure 6.17: The Royal Area: Route 1.............................................................. 195
Figure 6.18: The Royal Area: Route 2.............................................................. 197
Figure 6.19: The reconstruction of the urban form: Old Royal Plaza............... 199
Figure 6.20: The reconstruction of the urban form: New Royal Plaza.............. 199
Figure 6.21: Key points in Ugaritic building which might support the new additions when it is necessary................................................................. 199
Figure 6.22: Highlighting the stratification between the North Palace and the New Sanctuary......................................................................................... 200
Figure 6.23: Conservation Proposal for the city gate: plan.............................. 201
Figure 6.24: Conservation Proposal for the city gate: Perspectives.................... 202
Figure 6.25: The postern gate at Ugarit: Current condition.............................. 202
Figure 6.26: New Royal Zone: Presenting the area’s evolution......................... 204
Figure 6.27: Design potential for the installed doors between different zones in the Royal Place and between the palace and other parts of the city. ............................. 204

Chapter 7

Figure 7.1: Schematic diagram of the City of Ugarit showing the location of discovered domestic areas. ........................................................................................................ 208

Figure 7.2: South City area in Ugarit (Callot, 1994). (a) Blocks. (b) Houses. (c) The area’s map showing the two phases before and after the earthquake 1250 BC. ...... 211

Figure 7.3: South City area in 1960 – 1979 (Callot, 1994) ........................................ 211

Figure 7.4: Block VI, South City, shows the architectural and urban settings of full-excavated block. ........................................................................................................ 212

Figure 7.5: The Lower City in Ugarit. ..................................................................... 212

Figure 7.6: Block I, Lower City East. The block map and fabric condition during 1994 (Castel, 2004). ....................................................................................................... 213

Figure 7.7: The City Centre in Ugarit. (a) Map. (b) The area's fabric condition in 1984 (Yon, 1987). ........................................................................................................... 214

Figure 7.8: Residential Quarter in Ugarit ............................................................... 216

Figure 7.9: (a) The Building with the stone vase. (b) Oven House ......................... 216

Figure 7.10: (a) House of Rasapabu. (b) House with the portico. (c) House of Armorer .................................................................................................................... 217

Figure 7.11: House A, Block VI at the South City in Ugarit presenting most of the features of the domestic architecture in Ugarit. The photos present the house in 1979 (Callot, 1983). ............................................................... 218

Figure 7.12: Typological classification of Ugaritic houses by Marguerite Yon and Olivier Callot ........................................................................................................ 219

Figure 7.13: Different types of commercial uses in Ugaritic houses. ................. 220

Figure 7.14: Technical aspects in domestic architecture of Ugarit: foundation (Callot, 1994) .............................................................................................................................. 221

Figure 7.15: Technical aspects in domestic architecture of Ugarit: walls (Callot, 1983) .................................................................................................................... 222

Figure 7.16: Houses forms common in North Syria (McClellan, 1997) .......... 223
Figure 7.17: Alalakh houses form in Ugarit’s domestic architecture. (a) House of Alabaster Vessels, Residential Quarter. (a) House A, Block I of the South City. (c) House of Armorer, Residential Quarter. .............................................................. 224

Figure 7.18: Front Room form in Ugarit's domestic architecture. (A) House of Rasapabu, Residential Quarter. (b) Adjacent House Residential Quarter. ............... 224

Figure 7.19: Central Room form in Ugarit’s domestic architecture. (a) House B, block IV, South City. (b) House A, block VI, South City. (c) House with a Portico, Residential Quarter .......................................................... 224

Figure 7.20: (a) House B, City Centre. (b) House B, Lowe City East ......... 225

Figure 7.21: (a) Hall-Room form in Ugarit. (b) Hall-Room form in Hattusa. .......... 226

Figure 7.22: The use of the light well in Ugarit's domestic architecture. (a) Block I, South City. (b) House C, block XIV, South City. (c) House B, block II, South City. .................................................................................. 226

Figure 7.23: The concept of courtyard in Ugarit's domestic architecture. (a) House A, block VI, South City. (b) House A, block X, South City. (c) House B, block X, South City. .................................................................................. 227

Figure 7.24: Egyptian influence in Ugarit's domestic architecture, the central room with column. (a) House G, block XIV, South City, Ugarit. (b) House C, block XIV, South City, Ugarit. (c) House from Tell Al-Amarna workmen village, Egypt ......... 227

Figure 7.25: Similarities in domestic architectural aspect between Ugarit in Syria and Akrotiri, Thera in Crete (Palyvou et al., 2007). ...................................................... 228

Figure 7.26: Division of houses after the earthquake 1250 BC. (a) House B&C, City Centre. (b) Joint well in House of Rapanu. (c) The subdivision of House of Rapanu, Residential Quarter ........................................................................................................ 231

Figure 7.27: Block I, Lower City East, an example of archaeological stratification during Middle and Late Bronze Age periods .................................................. 232

Figure 7.28: The development of house form and space regularity of the domestic architecture in Ugarit. (a) House C, block XIII, South City. (b) House A, block V, South City. (c) House C, block XIV, South City. .................................................. 233

Figure 7.29: The development of the courtyard concept in the domestic architecture of Ugarit. (a) House B, City Centre. (b) House A, City Centre. ......................... 234
Figure 7.30: The development of the courtyard concept in the domestic architecture of Ugarit. (a) House A, block X, South City. (b) House A, block VI, South City. (c) House with a Portico, Residential Quarter.

Figure 7.31: The role of the courtyard in segregating the house and organising the functions. (a) House of Rapanu, Residential Quarter. (b) House B, block X, South City.

Figure 7.32: Example of Ugaritic houses access (Staircase with a vestibule). (a) House A, City Centre. (b) House B, City Centre. (c) House A block V, South City.

Figure 7.33: Examples of single access houses in Ugarit. (a) House B, block II, South City. (b) House B, block VI, South City. (c) Adjacent House, Residential Quarter.

Figure 7.34: Examples of double-access houses in Ugarit. (a) House B, Lower City East. (b) House A, block V, South City. (c) House C, block XIV, South City.

Figure 7.35: Examples of multiple-access houses in Ugarit and the effects of the number of access on the house organisation, internal and external circulation. (a) Triple House, City Centre. (b) House C, block VI, South City. (c) House B, block X, South City.

Figure 7.36: The development of house organisation and space perception in Ugaritic houses. (a) House A, block VI, South City. (b) House A, block V, South City. (c) House F, block XIII, South City.

Figure 7.37: Architectural developments in Ugaritic Houses: House B, block X, South City.

Figure 7.38: Architectural developments in Ugaritic Houses. House C, block VI, South City.

Figure 7.39: The concept of Semi-public open space. (a) In Tell El-Amarna, Egypt. (b) In Ugarit, Syria.

Figure 7.40: The evolution in the concept of semi-public open space in Ugarit after 1250 BC.

Figure 7.41: Urban development: the creation of the Public Plaza in the South City.
Figure 7.42: The development of People’s attitudes towards new urban elements in the South City. (a) House A, block X. (b) House C, block VI. (c) House B, block X. .................................................................................................................................. 245
Figure 7.43: Artistic reconstruction of House B, block X, South City (Callot, 1994). .................................................................................................................................. 246
Figure 7.44: Examples of Residential blocks from different domestic areas in Ugarit. (a) Block XIV, South City. (b) House of Rapanu, Residential Quarter (c) Northern block, City Centre. ................................................................................................... 247
Figure 7.45: The division of domestic areas into residential blocks. (a) Residential Quarter. (b) City Centre. (c) South City .................................................................................................. 248
Figure 7.46: Houses, blocks and urban elements in the South City of Ugarit. ....... 250
Figure 7.47: Houses, blocks and other urban elements in the Residential Quarter of Ugarit .................................................................................................................................. 249
Figure 7.48: Rapanu House, Residential Area: the Diagram shows the level of spaces’ integration, social interaction and hierarchy by applying Access Analysis method..................................................................................................................... 253
Figure 7.49: House B, block X South City: the Diagram shows the level of spaces’ integration, social interaction and hierarchy by applying Access Analysis method. ..................................................................................................................... 254
Figure 7.50: The Diagrams show the level of spaces’ integration, social interaction and hierarchy by applying Access Analysis method. (a) House A, block VI, South City. (b) House B, City Centre. (c) House B, Lower City East. ............................................................................................................. 255
Figure 7.51: The concept of privacy at an urban level. The hierarchy of open spaces connected to block VI of the South City. ..................................................................................................... 256
Figure 7.52: Tomb distribution in the domestic areas of Ugarit. .............................................................................................................................. 258
Figure 7.53: Tomb 103, Acropolis Area (Yon, 1987) .............................................................................................................................. 260
Figure 7.54: Tomb 101, Acropolis Area (Yon, 1987) .............................................................................................................................. 261
Figure 7.55: Tomb 50, the Queen Mother House, Old Royal Zone (Pitard, 1994; Schaeffer, 1939). .................................................................................................................................. 261
Figure 7.56: Tomb 202, the North Residence Residential Quarter Area. .............................................................................................................................. 262
Figure 7.57: Tombs’ location (a) House A, Block V, South City (b) House of Rasapabu, Residential Quarter (c) House A, Block VI, South City. .............................................................................................................................. 262
Figure 7.58: Tomb 202, the North Residence, Residential Quarter. .............................................................................................................................. 264
Figure 7.59: Tomb 1068, the City Centre (Yon, 1987) .................................................. 265
Figure 7.60: Chamber’s Doors. (a) North Residence. (b) House of Rapanu. (c) House of the Armorer. (d) House of Alabaster Vessels. ................................................................. 265
Figure 7.61: Tomb 56 and 57, the Lower City West: (a) detailed drawings (Schaeffer, 1939a). (b) Location .............................................................................................................. 267
Figure 7.62: Tomb 56 and 57, the Lower City West in 1983 © J.-F. Salles: Mission of Ras Shamra-Ugarit ......................................................................................................................... 267
Figure 7.63: (a) House of the High Priest (South) (Yon, 1987). (b) House of the High Priest (North) ......................................................................................................................... 269
Figure 7.64: Tomb 1068, the City Centre: (a) Detailed drawings (Yon, 1987). (b) Location ................................................................................................................................. 270
Figure 7.65: Tomb 1068, the City Centre (Yon, 1987) ..................................................... 271
Figure 7.66: Tomb 50, Queen Mother House, Old Royal Zone ........................................ 272
Figure 7.67: House of Rapanu’s Tomb, Residential Quarter. (a) Plan. (b) The interior space of tomb R2 .................................................................................................................. 272
Figure 7.68: Highlighting the division of the residential block and its relationship to the public urban element, the street. (a) House of Rapanu, Residential Quarter. (b) Block VI, South City .................................................................................................................. 277
Figure 7.69: Virtual Reconstruction of the proposal for House of Rapanu, Residential Quarter ......................................................................................................................... 277
Figure 7.70: Reconstruct the original urban environment. Virtual reconstruction .......... 278
Figure 7.71: Reconstruct the access structure. Virtual reconstruction ............................. 279
Figure 7.72: Using different pavements to highlight the different functions in Ugaritic houses. (a) House C, block XIV, South City. (b) House B, City Centre. (c) House A, block VI, South City. (d) House B, block X, South City ........................................................................ 280
Figure 7.73: The reconstruction approach of the funeral department access: House of Rasapabu, Residential Quarter ........................................................................................................ 283
Figure 7.74: The reconstruction approach of the funeral department access: House of Rasapabu, Residential Quarter ........................................................................................................ 283
Figure 7.75: the reconstruction of the tomb’s moveable slabs. (b) Various Middle and Late Bronze Age tombs in Ugarit showing the available original slab used to reconstruct the tombs ................................................................................................................. 284
Figure 7.76: Rectifying the structural errors in the western wall and the ground of tomb 1068, House B, City Centre.......................................................... 285
Figure 7.77: Virtual reconstruction of the two tombs in House of Rapanu, Residential Quarter.................................................................................................................. 286
Figure 7.78: The Residential Quarter map showing the public facilities around the Public Plaza.................................................................................................................. 288
Figure 7.79: Virtual reconstruction of the Public Plaza proposal, showing the reconstructed facades with original fabric................................................................. 288
Figure 7.80: The Building with the Stone Vase: the conditions of the ruins in 2013........................................................................................................................................ 289
Figure 7.81: Virtual reconstruction of the conservation proposal for the Building with the Stone Vase........................................................................................................ 289
Figure 7.82: House of Rapanu: virtual reconstruction of the conservation proposal reflecting original light-shadow (open-closed spaces) experience and highlighting the role of the courtyard inside the house................................................................. 291
Figure 7.83: House of Rapanu: virtual reconstruction of the conservation proposal of the funeral section........................................................................................................... 292
Figure 7.84: Conservation Proposal of the Sanctuary of Rhytons, City Centre: virtual model.................................................................................................................. 293
Figure 7.85: Representing the structural elements in the northern block of the City Centre: virtual reconstruction................................................................. 295
Figure 7.86: Conservation proposal for the Lower City......................................................... 297
Figure 7.87: The reconstruction of original sloped routes in Housesteads Roman Fort on Hadrian’s Wall........................................................................................................ 298
Figure 7.88: Highlighting urban elements and their relationships in South City, Ugarit.......................................................................................................................... 300
Figure 7.89: Conservation proposal for the Public Plaza at the South City.......................... 301
Figure 7.90: Conservation Proposal to present the hierarchy of urban open spaces in domestic architecture at the South City of Ugarit............................................. 302
Figure 7.91: Proposed intervention for semi-public spaces................................................ 304
Figure 7.92: Conservation proposal of the semi-public spaces in South City. (a) Plan. (b) Semi-public space in block XIII: virtual reconstruction. (c) Semi-public space in block XIV: virtual reconstruction. .......................................................... 305
Figure 7.93: Virtual reconstruction of the conservation proposal for the semi-public space in block XIII. .......................................................... 306
Figure 7.94: Virtual reconstruction of the conservation proposal for the semi-public space in block XIV. .......................................................... 306
Figure 7.95: Virtual reconstruction of the conservation proposal for House B, block XIV, South City......................................................... 307
Figure 7.96: Proposal to differentiate between the two phases (before and after the earthquake) in Ugaritic houses in the South City. (a) Houses D&C, block VI. (b) Houses A&B, block X ......................................................... 308
Figure 7.97: Reconstruction proposal for House B, block X, South City: Virtual model. ........................................................................... 310
Figure 7.98: Reconstruction proposal for House B, block X, South City: Virtual model. ........................................................................... 311

Chapter 8

Figure 8.1: The difference between Syrian and Mesopotamian temples. (a) Temple P2, Ebla, Syria (Matthiae, 1997). (b) Eye Temple’ in Tell Brak, Mesopotamia (Weiss, 1983). .......................................................... 317
Figure 8.2: Various forms of Syrian temples during the Bronze Age period. (a) Dagan Temple, Mari (Parrot, 1974). (b) Temple P2, Ebla (Matthiae, 1997). (c) Main temples in Emar (Beyer, 1982). (d) Level IB Temple, Alalakh (Fink, 2010). (e) Baal Temple, Ugarit (Callot and Monchambert, 2011). .......................................................... 318
Figure 8.3: Examples of Local sanctuaries. (a) Temple B2, Ebla (Matthiae, 1997). (b) Sanctuary of Rhytons, City Centre, Ugarit (Yon, 2006). (c) The New Sanctuary, Old Royal Zone, Ugarit (Callot, 2013a). .......................................................... 319
Figure 8.4: The Acropolis area, Ugarit. ........................................................................ 320
Figure 8.5: Local sanctuaries in Ugarit. (a) Sanctuary of Rhytons, City Centre. (b) The New Sanctuary, Old Royal Zone. (c) Royal Sanctuary, New Royal Zone. ...... 321
Figure 8.6: A computer model of Ugarit's topography showing the location of the Acropolis and its morphological settings (Calvet and Yon, 2008, p.27-36). .......... 322
Figure 8.7: General section of Ugarit showing the city's topography and the morphological settings of the Acropolis area (Callot and Monchambert, 2011). ................................................................. 322
Figure 8.8: Temple of Baal: Successive analyses (Callot and Monchambert, 2011) (a) 1988-2005. (b) 1979. (c) 1949. (d) 1933. ................................................................. 323
Figure 8.9: Proposed streets network of Ugarit by Olivier Callot (Yon, 2006). ....... 324
Figure 8.10: (a) The relationship between the Temple of Baal and Lower City. (b) The remains of the street connecting the Temple of Baal to the Lower City (Callot and Monchambert, 2011). ................................................................. 325
Figure 8.11: Aerial picture of the Acropolis area in Ugarit (National Museum in Latakia). ................................................................. 325
Figure 8.12: Temple of Baal, Ugarit. (a) Callot’s survey 1988-2005 (Callot and Monchambert, 2011). (b) Schematic plan of the Temple showing its main sections (Callot and Monchambert, 2011). ................................................................. 327
Figure 8.13: Temple of Baal, Ugarit. (a) The temple’s plan. (b) North Hall, the Most Holy Place in 1930s. (c) North Hall and South Hall in 1930s (Callot and Monchambert, 2011). ................................................................. 329
Figure 8.14: Temple of Baal, Ugarit: the temple’s conditions in 1930s (Callot and Monchambert, 2011). (a) External altar. (b) The temple’s ante and corner. (c) The temple’s Most Holy Place: the northeast corner. ................................................................. 330
Figure 8.15: Temple of Baal: Proposed sections (Callot and Monchambert, 2011). 330
Figure 8.16: Examples of architectural models found in Emar’s temples and other Euphrates areas (Callot and Monchambert, 2011; Muller, 2002). ................................................................. 331
Figure 8.17: Temple of Baal, Ugarit. Schematic diagram for the foundations system (Callot and Monchambert, 2011). ................................................................. 332
Figure 8.18: Temple of Baal, Ugarit: Section drawings from Callot’s analysis 1988-2005, which show the foundations and walls construction (Callot and Monchambert, 2011). ................................................................. 333
Figure 8.19: Temple of Baal, Ugarit: Elevation drawings from Callot’s analysis 1988-2005 which show the foundations and walls construction (Callot and Monchambert, 2011). ................................................................. 333
Figure 8.20: Walls’ plaster discovered in the Royal Palace, Ugarit (Galliano and Calvet, 2004, p.22-27) ................................................................. 334
Figure 8.21: Temple of Baal, Ugarit: Structural and aesthetic settings of the intersection points and corners (Callot and Monchambert, 2011) ........................................... 335

Figure 8.22: Temple of Dagan, Ugarit. (a) Callot's survey 1988-2005 (Callot and Monchambert, 2011). (b) Schematic plan of the Tempe showing its main sections. ................................................................................................................................. 336

Figure 8.23: Temple of Dagan, Ugarit (Callot and Monchambert, 2011). Highlighting the building bases on (a) Callot's survey 1988-2005. (b) Foundation plan ............ 337

Figure 8.24: Temple of Dagan, Ugarit: Plans drawings (a) Ground floor. (b) First floor. ........................................................................................................................................ 339

Figure 8.25: Temple of Dagan, Ugarit: proposed sections (Callot and Monchambert, 2011) ........................................................................................................................ 339

Figure 8.26: Stone troughs found in the southeast courtyard of the Temple of Dagan, Ugarit (Callot and Monchambert, 2011) ................................................................. 339

Figure 8.27: Section drawing in the Temple of Dagan showing the northern wall structure (Callot and Monchambert, 2011). ................................................................. 340

Figure 8.28: Section drawing in the Temple of Dagan showing the structure of the joint wall between the two main halls (Callot and Monchambert, 2011) .............. 340

Figure 8.29: The glaze added to the western wall of the Temple of Dagan (Callot and Monchambert, 2011) ...................................................................................... 340

Figure 8.30: Comparison between the two temples’ architectural and spatial principles. (a) Temple of Baal (Callot and Monchambert, 2011). (b) Temple of Dagan (Callot and Monchambert, 2011) ................................................................. 341

Figure 8.31: Temple of Resheph (the Temple Obelisks), Byblos, Lebanon (Callot and Monchambert, 2011) ...................................................................................... 342

Figure 8.32: Schematic plan showing the location and some details of block VIII, South City, Ugarit. ......................................................................................................... 348

Figure 8.33: Sanctuary of Rhytons, City Centre. (a) Level 1 Middle Bronze Age or beginning of Late Bronze Age. (b) Level 2 Late Bronze Age period (Mallet, 1987). ................................................................................................................................. 350

Figure 8.34: Sanctuary of Rhytons, City Centre. (a) The sanctuary’s compartments. (b) the relationship between the sanctuary and its industrial unit (Callot, 1987).... 350
Figure 8.35: Sanctuary of Rhytons, City Centre. (a) Plan. (b) The ruins condition in 1981 (Mallet, 1987) .................................................................................................................. 351
Figure 8.36: (a) Sanctuary of Rhytons, Ugarit. (b) Temple of the Ingot god at Enkomi, Cyprus (Yon, 2009) .................................................................................................. 352
Figure 8.37: Architectural plan of the New Sanctuary, Old Royal Zone .................................. 353
Figure 8.38: New Sanctuary, Old Royal Zone: The ruins conditions in May 2013. 355
Figure 8.39: New Sanctuary, Old Royal Zone: The ruins of the entrance B and the main hall, May 2013 .................................................................................................................................. 355
Figure 8.40: The presence of the basalt seat and trough in the residential unit, May 2013 .......................................................................................................................... 356
Figure 8.41: The composition of external walls of the main hall, May 2013 ........ 356
Figure 8.42: Architectural plan of the overlapping between the New Sanctuary and the North Palace .................................................................................................................. 357
Figure 8.43: Royal Sanctuary, New Royal Zone: Architectural plan and ruins conditions in May 2013 .................................................................................................................. 358
Figure 8.44: (a) Sanctuary of Rhytons, City Centre. (b) New Sanctuary, Old Royal Zone .......................................................................................................................... 360
Figure 8.45: The location of the New Sanctuary and Royal Sanctuary in the Royal Area of Ugarit ................................................................. 361
Figure 8.46: Detailed plan for the conservation proposal of the Temple of Dagan. 364
Figure 8.47: Virtual reconstruction of the conservation proposal for the southeast courtyard in the Temple of Dagan ............................................................. 365
Figure 8.48: Virtual reconstruction of the conservation proposal for the temple's ruins .......................................................................................................................... 366
Figure 8.49: The installed mesh on the temple's ruins, highlighting specific arrangements of the first phase .................................................................................. 367
Figure 8.50: Virtual reconstruction of the proposed route above the ruins of the temple .......................................................................................................................... 368
Figure 8.51: Virtual reconstruction of the conservation proposal for the temple's volume .......................................................................................................................... 369
Figure 8.52: Virtual reconstruction of the complete conservation proposal for the Temple of Dagan ............................................................................................................. 369
Figure 8.53: The Temple of Baal, virtual reconstruction of the proposal for the temple’s enclosure. ................................................................................................... 370
Figure 8.54: Architectural plan of the conservation proposal for the Temple of Baal. .................................................................................................................................. 371
Figure 8.55: Possible detail drawings for the enclosure’s posts and bases. ............. 371
Figure 8.56: Virtual reconstruction of the conservation proposal for the main gate of the temple’s enclosure. ............................................................................................. 372
Figure 8.57: The reconstruction proposal for the western street that connects the temple to the Lower City. ....................................................................................................... 373
Figure 8.58: The reconstruction proposal for the eastern street that connects the temple to the Lower City. ......................................................................................................... 373
Figure 8.59: The reconstruction proposal for the Library Street that connects the temple to the Royal Place and the rest of the city to the west. ................................. 374
Figure 8.60: The reconstruction proposal for the temple’s courtyards and external altar. .................................................................................................................................. 375
Figure 8.61: Architectural plan of the temple showing the location of the glazed-steel structures and their role in organising the movement between the temple’s spaces. ........................................................................................................ 376
Figure 8.62: The reconstruction proposal for the main building of the Temple of Baal. .................................................................................................................................. 377
Figure 8.63: Plan drawing of the reconstruction proposal for the main building of the Temple of Baal. ......................................................................................................... 378
Figure 8.64: Section drawings of the reconstruction proposal for the main building of the Temple of Baal. ............................................................................................. 379
Figure 8.65: The reconstruction proposal for the main building of the Temple of Baal. .................................................................................................................................. 380
Figure 8.66: The reconstruction proposal for the Temple of Baal. .......................... 380
Figure 8.67: Plan drawing of the reconstruction proposal for the first floor in the main building of the Temple of Baal. ................................................................. 381
Figure 8.68: The reconstruction proposal for the Temple of Baal with its northwest annex. ........................................................................................................ 383
Figure 8.69: Conservation proposal for the New Sanctuary: plan and virtual reconstruction......................................................................................................................................................... 385
Figure 8.70: Conservation proposal for Sanctuary of Rhytons: plan and virtual reconstruction........................................................................................................................................................................ 386
Figure 8.71: The conservation proposal for the New Sanctuary showing the building’s stratification and highlighting its overlapping with the southwest part of the North Palace. ......................................................................................................................................................... 387
Figure 8.72: The conservation proposal for the New Sanctuary that highlights the proposed courtyard and the overlapping between the building and the North Palace. ........................................................................................................................................................................ 388
Figure 8.73: The conservation proposal for the New Sanctuary that highlights the proposed courtyard and the overlapping between the building and the North Palace. ........................................................................................................................................................................ 388

**Chapter 9**

Figure 9.1: The City of Ugarit: its location and relationship to the two harbours (Calvet and Yon, 2008). ........................................................................................................................................................................ 401
Figure 9.2: general section of Ugarit that shows the its topography (Callot and Monchambert, 2011). ........................................................................................................................................................................ 402
Figure 9.3: The City of Ugarit’s relationships to the surrounding suburbs (Galliano and Calvet, 2004, p.3). ........................................................................................................................................................................ 402
Figure 9.4: The City of Ugarit: morphological and topographical settings (Calvet and Yon, 2008, p.27-36). ........................................................................................................................................................................ 403
Figure 9.5: Map showing the location of Ugarit within the Mediterranean trade network © The National Museum in Latakia. ...................................................................................................................................... 404
Figure 9.6: (a) Google map of the site of the city. (b) The ruins of the 15th century tower and postern gate. ........................................................................................................................................................................ 405
Figure 9.7: (a) The 13th century monumental gate (Yon, 2006). (b) The ruins of the city’s western access. ........................................................................................................................................................................ 405
Figure 9.8: (a) A pier of bridge/dam on Nahr ed-Delbeh River to the south of the city (Al-Maqdissi et al., 2010; Yon, 2006). (b) An artistic reconstruction of the bridge by Olivier Callot (Calvet and Geyer, 1992). ......................................................................................................................................................... 406
Figure 9.9: The Main Street area, Ugarit (Al-Maqdissi et al., 2007)........................................................................................................ 407
Figure 9.10: The relationship between the stone base, Main Street and the Public plaza on the city’s map.................................................................408
Figure 9.11: General map of the City of Ugarit’s plan showing possible accesses to the city. ..................................................................................................................... 409
Figure 9.12: Conceptual street network of the City of Ugarit proposed by Olivier Callot (Yon, 2006)........................................................................................................ 410
Figure 9.13: Possible connections between City Centre, South City and the South Acropolis Slope in the City of Ugarit (Yon and Callot, 1997). ................................. 411
Figure 9.14: The direct relationship between the main temples and the palace expressed on the city plan. ................................................................................. 413
Figure 9.15: Google Map shows the location of Royal Area and the main temples on the city and the relationship between the city and its two harbours........................ 413
Figure 9.16: Simulation of social interaction among open spaces in the City of Ugarit (Kontolaimos, 2013) (a) Agent-based analysis. (b) All-Line analysis.................... 415
Figure 9.17: Urban development forms in Ugarit. (a) 19th-16th century (b) 16th 13th century BC......................................................................................................................... 417
Figure 9.18: General sections of the city that show the development of the city’s morphology between 20th and 13th century BC. the source of the original section is (Callot and Monchambert, 2011) and then edited by the author......................... 418
Figure 9.19: The New Royal Zone in Ugarit. ................................................................................. 419
Figure 9.20: The city’s western gate during 13th century BC (Yon, 2006).................. 420
Figure 9.21: The developments of the Old Royal Zone over the ruins of the North Palace. .................................................................................................................. 421
Figure 9.22: The development of House B, block X, South City. ......................... 422
Figure 9.23: The City of Hattusa, Bogazköy, Turkey © UNESCO........................ 423
Figure 9.24: The City of Ebla, Syria (Source: http://www.ebla.it) ..................... 424
Figure 9.25: Enkomi, Cyprus (Source: The British Museum) ............................. 424
Figure 9.26: The possible zones of Ugarit according to inhabitants and functions distribution. ............................................................................................................. 426
Figure 9.27: The reconstruction of the city’s western gate..................................... 429
Figure 9.28: The City of Ugarit: the site's context................................................. 429

xxx
Figure 9.29: The reconstruction of the city’s western gate: exploring the site’s territorial relationships.  ................................................................................................................................. 430

Figure 9.30: The city's general map: the proposed route that links between the palace and the temples. ................................................................................................................................. 431

Figure 9.31: Presenting the difference in urban patterns accordingly with the dominant urban structure. (a) Acropolis area. (b) Residential Quarter. ............................................ 432

Figure 9.32: Proposed route C on the city map. ................................................................................................................................. 433

Figure 9.33: Proposed interventions that show the four forms of urban development. (a) The reconstruction of the city’s gate. (b) Conservation proposal for the main temples. (c) The presentation of the overlapping between the New Sanctuary and the ruins of the North Palace. (d) Reconstruction proposal for House B, block X in the South City. ........................................................................................................................................... 434

Figure 9.34: Proposed routes A, B, C & D on the city's map. ........................................ 435

Figure 9.35: Various pedestrian movement patterns in Ugarit. (a) City Centre. (b) Residential Quarter. (c) South City. ................................................................................................................................. 436

Figure 9.36: Presenting the evolutionary aspects between (a) Sanctuary of Rhytons, City Centre. (b) The New Sanctuary, Old Royal Zone. ................................................................................................................................. 436

Figure 9.37: (a) Houses in the Lower City (Castel, 2004). (b) Houses in the South City. ........................................................................................................................................... 437

Figure 9.38: (a) Main Street area. (b) The New House. ............................................ 438

Figure 9.39: Tomb 50 in Queen Mother House, Old Royal Zone. ............................ 438

Figure 9.40: Tomb 202 in the North Residence, Residential Quarter. ...................... 439

Figure 9.41: Tombs 56 & 57, Lower City. .............................................................. 439

Figure 9.42: Tomb 103 in the House of High Priest, Acropolis area. ....................... 440

Figure 9.43: Tomb 1068 in House B, City Centre. ............................................... 440

Figure 9.44: Tomb R2 in House of Rapanu, Residential Quarter. ........................... 440

Figure 9.45: Routes A, B, C, D, E1& E2 on the city’s map ...................................... 442

Figure 9.46: Proposed design for the hypothetical parts of installed routes in the City of Ugarit. ........................................................................................................................................... 443

**Chapter 10**

Figure 10.1: Proposed interventions are represented on the overall map of the City of Ugarit. ........................................................................................................................................... 455
Appendix 1

Figure 0.1: House with a Portico, Residential Quarter. ........................................... 463
Figure 0.2: House of Scholar, Residential Quarter. ............................................... 463
Figure 0.3: House of Rasapabu, Residential Quarter. ......................................... 464
Figure 0.4: Adjacent House, Residential Quarter. .............................................. 464
Figure 0.5: House of Rapanu, Residential Quarter. ............................................ 465
Figure 0.6: House D, Lower City. ....................................................................... 466
Figure 0.7: House A, Lower City. ....................................................................... 466
Figure 0.8: House B, Lower City. ....................................................................... 466
Figure 0.9: Triple House, City Centre. ............................................................... 467
Figure 0.10: House A, City Centre. ................................................................. 467
Figure 0.11: House B, City Centre. ................................................................. 467
Figure 0.12: House C, City Centre. ................................................................. 468
Figure 0.13: House C, block XIV, South City. ..................................................... 468
Figure 0.14: House A, block II, South City. ......................................................... 468
Figure 0.15: House G, block XIII, South City. ...................................................... 469
Figure 0.16: House A, block VI, South City. ......................................................... 469
Figure 0.17: House A, block V, South City. ......................................................... 470
Figure 0.18: Block I, South City. ................................................................. 470
Figure 0.19: House C, block VI, South City. ......................................................... 471
Figure 0.20: House C, block X, South City. ......................................................... 471
Figure 0.21: House A, block X, South City. ......................................................... 472
Figure 0.22: House B, block X, South City .......................................................... 473

Appendix 2

Figure 0.23: Discovered temple at Ariha, North Syria, from 7th millennium BC
(Cauvin, 1972). ........................................................................................................ 475
Figure 0.24: Discovered temple at Tell Aswad Northeast Syria, 5th millennium BC
(Mohasin, 1986). ..................................................................................................... 476
Figure 0.25: Discovered temple at Aredo site in Mesopotamia, from 4th millennium
BC (Mohasin, 1986). .......................................................................................... 477
Figure 0.26: Discovered temple at Tell Kanas in Northeast Syria (a) North Temple. (b) South Temple. (c) East Temple (Mohasin, 1986). ................................. 477
Figure 0.27: The difference between Syrian and Mesopotamian temples. (a) Temple P2, Ebla (Matthiae, 1997). (b) Eye Temple’ in Tell Brak, Mesopotamia (Weiss, 1983). ........................................................................................................................................478

Figure 0.28: Early and Middle Bronze Age Antes Temples in Syria. (a) Temple D in Ebla (Matthiae, 1997). (b) Temples at Tell Chuera (Orthmann, 1990). (c) Temples in Tell Halawa (Werner, 1994). ........................................................................................................................................479

Figure 0.29: (a) Temple P2, Ebla (Matthiae, 1997). (b) Sanctuaries of Baal and Astarte, Emar (Beyer, 1982). ........................................................................................................................................480

Figure 0.30: Discovered temples at Emar (Margueron and Boutte, 1995; Beyer, 1982). ........................................................................................................................................480

Figure 0.31: Discovered Temples at Alalakh (Fink, 2010). (a) Level III Temple. (b) Level I Temple. (c) Level IA Temple. (d) Level IB Temple. ........................................................................................................................................481

Figure 0.32: (a) Temple B2, Ebla (Matthiae, 1997). Dagan Temple Mari (Parrot, 1974). The Red Mass Temple (Parrot, 1974)........................................................................................................................................481

Figure 0.33: Various forms of Syrian temples during the Bronze Age period. (a) Dagan Temple, Mari (Parrot, 1974). (b) Temple P2, Ebla (Matthiae, 1997). (c) Main temples in Emar (Beyer, 1982). (d) Level IB Temple, Alalakh (Fink, 2010). (e) Baal Temple, Ugarit (Callot and Monchambert, 2011)........................................................................................................................................482
Preface

My interest lies in the combination of the disciplines of archaeology, history, construction history, architecture and conservation, to enhance the understanding of prehistoric or historic structures and their cultural values. In this PhD study, I am intending to propose a conservation intervention framework for Ugarit’s Bronze Age archaeological site. As an architect, I am keen on reading the prehistoric ruins of Ugarit through archaeological architectural lens and using my architectural design background to establish a communication interface between the ruins and the visitors. In other words, I believe that any ruin has the ability to speak loudly about its history and people if the architect provides the suitable approach to protect and present its values to the public. In addition to my architecture and design background, completing an MSc in architectural conservation provided me with experience in conservation techniques, building surveys and analysis, as well as conceptualising conservation approaches through critical analysis of the building’s history, architecture and archaeology. These skills are, I consider, crucial for promoting the rule of the ruins in representing their civilization’s history and achievements. Therefore, I am eager to apply my experience and skills to “revive” the heritage site of Ugarit by enhancing the ruins communication with the public through a musealisation inquiry.
Acknowledgements

There are a number of different individuals, groups and organisations whom I would like to thank for their support during the various stages of my PhD study. The most numerous group are the staff of Edinburgh School of Architecture and Landscape Architecture ESALA, in particular the teaching staff of the MSc in Architectural Conservation, who always contributed by constructive comments on different stages of my research. Also, I would like to express my deep gratitude and sincere thanks to Dr. Dimitris Theodossopoulos, who supervised this PhD and provided continual support and suggestions throughout the extended period of research, providing a good sounding board, great encouragement and extensive feedback on drafts from the first stage of the PhD to the last days of writing up period.

I would like also to thank the academic staff in School of History, Classics and Archaeology of the University of Edinburgh, in particular Prof Jim Crow my second supervisor and Prof Ian Ralston, who have provided me with an invaluable knowledge in archaeological theories and methods.

Also, I would like to thanks all staff of the “Maison de l'Orient et de la Méditerranée” centre in Lyon, France for their help in having access to the most of Ugarit’s archaeological reports and publications. I am in particular grateful to Ms Valérie Matoïan, Mr Olivier Callot and Mr Yves Calvet for talking time to discuss various issues around the City of Ugarit and its conservation framework. Also, I am very grateful to all staff of the National Museum of Latakia and general directorate of Antiquities and Museums in Damascus, Syria who played an essential role in facilitating easy access to the site and their archives throughout the fieldtrip.

I take special pleasure in acknowledging the British Council as an organisation and staff, particularly Mr Timothy Stobbs, who have provided a great support to make this PhD reach this stage, not to forget my home university, Al-Baath University in Homs, Syria by which I have been delegated here to the UK to carry on in my postgraduate studies (MSc and PhD) at the University of Edinburgh. Also, major thanks for academic and administrative staff of the University of Edinburgh for their great support; in fact, I have spent 5 years in great academic and social environment.
I am most grateful to Dr Tarek Housam Aldeen who has been encouraging and inspiring me since 2002, when I was an undergraduate architecture student; his invaluable support can never ever be forgotten. Thanks also to my dear friend Dr Lina Fadel for all support; she never stopped believing that my work will be of a great significance for Ugarit as an archaeological site and also for Syria as a country full of rich and diverse heritage related to different periods of the human history.

None of this would have been possible without the support of my family, who have put up with me throughout the PhD process and encouraged me to believe in my research. Major thanks to my international (Dimitra, Stella, Lucia, John, Graham, Elengo, Jill, Sabere, Fabrizio etc.) and Syrian friends (Ammar, Osama, Suzzane, Dana, Mohammad, Dima, Alaa and Reem) whose continuous encouragement has been essential to deliver this research. Of course, this would have not been possible without the support of my best friend Najah Battikh who has lost many weekends listening to my PhD adventure; thank you for your unstinting patience and encouragement.

Tarek
Abstract

The conservation of cultural heritage responds to the necessities of understanding the site’s history, developments and key values. Archaeological heritage comprises tangible and intangible evidence so conservation operates equally on the two main domains, archaeology and architecture, which are inseparable and feed each other. Moreover, urban dimension is essentially included where the cultural heritage presents interesting urban settings linked to the architectural and cultural values. This thesis addresses all these important issues with the aim to identify, preserve and present the cultural values of archaeological sites in Syria, which are exceptionally rich in representing most of the Western ancient civilisations. The thesis focuses on the City of Ugarit, the capital of an important Bronze Age civilisation.

The thesis aims to establish a poignant conservation concept on different scales, ranging from micro single architectural unit, the house, to the macro scale of the entire city. The study probes the ways of employing archaeology and architecture to produce conservation principles and architectural approaches for identifying, preserving and presenting the site’s cultural values. These procedures expose tangible and intangible values of the city, facilitate strong engagement of the visitors with the archaeological ruins, and simultaneously protect the original fabric from the visitation flux.

The study is built upon understanding Ugarit’s archaeology, architecture and even social aspects, combining them in the analysis of each key area (Royal quarters, Domestic areas and Temples) to form well-founded interpretations and prioritise values. The proposal eventually combines all studied areas in a comprehensive narrative, which feeds the urban proposal for the whole city. In understanding the very rich and complex sites in Ugarit, a combination of in situ surveys, systematic recording, extensive analysis of literature and archaeological reports, and architectural reading of the fabric are carried out. This framework is a coherent base for the architectural intervention choices, which attempt to balance preservation implications and new materiality. Building virtual models of the proposed interventions enables the test of volumes, materiality, choices and the overall architectural experience. These models present the proposed interventions together with the original ruins. Therefore, the models are a great vehicle to transmit the reality of the conservation proposal and enhance its perception.


Chapter 1  Introduction

Conservation is the art of making sense of what material culture still exists and linking its tangible and intangible significance to contemporary values and debates. The conservation of archaeological sites is also the process which gives silent ruins a voice and the ability to speak about the history and the people of the place. It enhances the potential authenticity of the ruins and aims to release embedded architectural and urban experiences. Grasping the intrinsic values of ruins reframes the knowledge of these structures and facilitates the exploration of architectural interventions that enhance the communication of these structures with their physical and social context. Conserving archaeological sites should critically balance between their original and contemporary values to guarantee the achievement of a sensible reading in the present time and maintaining of their links to both ancient people and modern communities. Consequently, the fabric of an archaeological site is not frozen anymore; architectural conservation makes the fabric communicate.

1.1 General outline

The present thesis is a critical investigation into the employment of Archaeology and Architecture in the conservation process. The research focuses on archaeological sites in Syria and advocates the importance of applying an interdisciplinary approach with the aim of establishing an effective conservation framework through which the extremely rich heritage in Syria can be conserved and presented. This study explores links between Archaeology, Architecture and Conservation to infer the cultural values of the City of Ugarit, a very important Bronze Age site. This is crucial for understanding the city’s rich fabric, history as well as other embedded important social and cultural aspects.

Thus, the main aim of the present study is to employ concepts from archaeology and architecture for the identification and presenting of the cultural valuable aspects seen in the ruins of Ugarit. The study intends to adopt an interdisciplinary approach that combines archaeology, architecture and conservation to establish a poignant conservation concept on the different scales and (hi)stories of Ugarit, ranging from
micro single architectural units, the architecturally developed houses, to the macro scale of the entire city, which encapsulates the achievements of an advanced society.

The conservation concept attempts to expose tangible and intangible values as well as facilitate the visitors’ engagement with and the protection of the ruins. In other words, the study plans to materialise the extracted valuable aspects and the theoretical discussion and analysis onto the original fabric of Ugarit to enhance the ruins’ communication to the public and prepare a conservation strategy which will constitute a strong basis for the design phase; a virtual representation approach will be adopted in order to examine the outcomes of proposed interventions.

1.2 Contextualising the research: Theoretical framework

Conservation primarily concerns human cultural heritage and aims to protect it from damage or loss (Matero, 2006; Orbasli, 2008). The concept of conservation becomes an effective way to reconstruct cultural identity and the sense of place through structured historic narratives and interpretations (Matero, 2006). Respecting the original cultural heritage including its aesthetic, historic and physical integrity is an ultimate principle that governs conservation process as advised in many international conventions (e.g. AIC 1979: code I, IIA; UNESCO 1978: article 1, 3 & 9; Australia ICOMOS 1988: article 2 & 3). Therefore, this discipline incorporates different measures and is applied to physical and anthropological heritage (Orbasli, 2008); it requires a high level of moral responsibility and experience (Matero, 2006).

The conservation of archaeological sites is a more complex process; it is not only about the physical remains that are represented in a specific urban and architectural fabric. It is also the legacy of the old civilization that had created this fabric as well as the reflection of the culture history and achievements from the past (Carbonara, 1996). Cultural heritage comprises two types of ingredients: known (buildings, remains and collections) and unknown ones or what is referred to as intangible cultural heritage which includes buried layers, the civilization’s history, cultural system and people’s achievements (Berducou, 1996). In this sense, the overall value is perceived as a result of full integration between the physical values of remains and
their intangible values, namely ‘cultural property’ \(^1\) (Berducou, 1996; Orbasli, 2008). The conservation of archaeological sites requires identifying these values and understanding how they are represented in the physical fabric. Thus, dual requirements need to be considered; archaeological site is both a place and a document. Consequently, conservation in this particular sense comprises all measures which are carried out to preserve the physical fabric and its historic settings, information and authenticity and to retain them for future generations.

Since each step depends on the results of the previous one, research work throughout the conservation process is fundamental to avoid overlooking and compromising any cultural significance. Thus, conservation involves six main steps: identification, investigation, assessment, formal proclamation, determination and classification of the values, and preparation and implementation of the conservation proposal (Agnew \textit{et al.}, 2002). In situ conservation of archaeological sites is strongly preferred unless there are natural threats that cannot be controlled on the site. The main aim is to recover the cultural significance of the place and contextualise the produced interpretations of the ruins. In situ conservation makes for a better appreciation of the fabric in its original settings, which highly contributes to visitors’ perception, even evoking the nostalgia of the past period.

The coming of Christianity required adaptation and reuse of some of the Roman buildings. This period marks the first known restoration and repair practice which was developed afterwards in different directions. For example, classical period buildings were restored in the Renaissance; that points out the emergence of people’s interest in past architecture. With regard to ruins, eighteenth century conservation approaches advocated the picturesque context in which archaeological ruins were incorporated into the landscape schemes of the time. In the meantime, the restoration conflict between stylistic restoration and faithful conservation had contributed to the consideration of more comprehensive theories and frameworks which should be used for the conservation of archaeological ruins and historic structures.

\(^1\) Cultural property (Bene culturale) is the tangible evidence of cultural heritage related not only to the archaeological sites, physical remains, artefacts and holy places, but also discuss the civilizations’ traditional customs, origin, settings and achievements. This concept, which has appeared a few decades ago, describes monuments, buildings and sites that are conferred a unique historic, artistic or ethological significance by the local society (Berducou, 1996).
The first developed restoration theory was in Italy; it was followed by a stream of critical approaches and thoughts, especially after the Second World War. These approaches focused on the conservation of the tangible and intangible significance of historic structures and ruins; they were derived from the anti-restoration movement which was based on the belief that respecting the cultural heritage does not necessarily mean to imitate the original fabric (Orbasli, 2008). The variety of approaches in this early period is represented by projects from all over the world, such as Knossos Palace in Crete, Alte Pinakothek (after WW2) in Munich, Koldinghus Castle in Denmark, Arch of Titus in Rome, and the Stoa of Attalos in Athens. These approaches constituted the architectural attitudes and a resource for various levels of interventions that were applied to historic buildings and ruins, taking into account meanings established through archaeological and architectural analyses and interpretations.

Therefore, conservation advocates greater integration between disciplines in order to establish stronger communication between the (remaining) physical fabric and its environmental, social and landscape context. Architecture, Archaeology, Anthropology, Social Sciences, Materials and Technology are sometimes involved according to the characteristics of the studied heritage in order to promote the understanding of intangible values before carrying out in situ interventions. Therefore, the use of interdisciplinary approaches becomes essential in handling archaeological sites where the physical fabric epitomises information about the political, economic and cultural systems as well as people’s ritual and social aspects and traditions. An intervention can be considered as the interface between the ruins and the visitors. Therefore, the modern definition of conservation has been explored to consider material, well-being, cultural property and condition of an existing fabric.

Conservation has been established as an international concern evoked by the emergence of different organisations such as ICOMOS and the World Heritage Convention which was launched by the UNESCO in 1972. Many international charters have been formulated and developed, often based on one another (e.g. Sixth International Congress of Architects (Madrid Conference) 1904, Athens 1931, Venice 1964, Burra 1979 &1999 and Nara charter 1994). Also, the development of
UNESCO’s World Heritage Convention (Rodwell, 2012) has played a key role in controlling the in situ impacts of conservation approaches. The international concern became more pronounced and focused on heritage that holds cultural significance, while some other interesting approaches have paid more attention to archaeological sites, embedding the ancient people’s social and cultural aspects. The conservation of these sites is primarily based on total appreciation of the existing and authentic ruins (Matero, 1993). For that, conservation processes should avoid using unproven technology and advise on the use of compatible materials and technology with the ruins based on their conditions and cultural and historic settings. On the other hand, employing new technologies is necessary in special cases and, thus, this requires in-depth research to be carried out in order to avoid negative implications for the ruins.

An archaeological site holds various values; each group of its users (e.g. archaeologists, architects, tourists, students, public community, etc.) assigns different values according to the users’ interest in the ruins. Identified values of the archaeological site have a great impact on the direction that the conservation process takes. Therefore, it is essential to adopt a comprehensive approach that enables decision-making, flexible enough to adapt as the values emerge. Consequently, the conservation procedures that facilitate the use of the site map the assigned values onto the fabric, and in the meantime protect elements of the site that are associated with its cultural significance. In order to achieve such an effective approach, the first step is to understand the type and traits of heritage that need to be conserved. Since the studied heritage in this research is Ugarit, a major early historic archaeological site in Syria, it is very important to understand the values of the site, what its presence means in terms of conservation, and how it specifically directs the conservation process.

1.3 Introducing the case study and the rationale for selection

Ugarit is a Bronze Age archaeological site located at the northwest of Syria, about seven miles north of the modern city of Latakia. It is a very important archaeological site in Syria owing to the innovation of the first Alphabet and Alphabetic writing system 14th century BC, its long and continuous history and the great achievements which the Ugaritic civilization had in the past. This site was discovered by the
French archaeologist Claude Schaeffer in 1928. The importance of Ugarit comes from its long history as well as its location. Although the creation of the city started around 3000 BC, Ugarit’s history goes back to the Neolithic period 8000 BC, as Schaeffer’s archaeological soundings confirm (Curtis, 1985; Marchegay, 2008; Schaeffer, 1935; Yon, 2006). Regarding Ugarit’s location (figure 1.1a), it was highly strategic as it dominated the inland trade route between Egypt and Asia Minor, based on a good relationship with some important cities such as Ebla (east), Alalakh (north), Qatna and Byblos (south). Ugarit was also an important stop on the overseas trade routes between the east (Persia and India) and the west (Greece and Cyprus) (Yon, 2000).

The site is chronologically located between historic and prehistoric periods and the excavation works had revealed a very rich material culture. The most important event in Ugarit’s history (the innovation of the first Alphabet and Alphabetic writing system in the 14th century BC) resulted in a huge amount of records that were not only administrative archives: some scribes explain in detail Ugaritic people’s social, cultural and ritual aspects (Pardée, 2000); some texts highlight people’s achievements and the development of their cultural and political systems (Curtis, 1985; Yon, 2006). Excavation works carried out between 1929 and 2011, which were suspended owing to the crisis in Syria, brought to light a rich fabric that comprises royal, domestic, religious and funeral structures (figure 1.1b); in some areas, the discoveries reveal urban forms and principles too. The diverse discovered fabric in the city is a strong witness to all types of evolution that Ugaritic civilization had had between 2000 and 1185 BC; these include the development of Ugaritic people’s architectural and urban experience and their attitudes towards their city.

Ugarit is very rich with links between archaeology and design. These links obviously show how architects can use archaeology to conserve and present archaeological ruins and their values. In addition, Ugarit has an architectural potential represented by the imposing remains and the way its people perceived their architectural and urban spaces. The development of the city’s architecture and urban landscape as measured by its inhabitants reflects directly Ugaritic people’s perception of urban design ideas, without imitating forms of other surrounding cities. For example, the
last development, i.e. the gate’s tower and fortification (figure 1.2), shows the mature military interest and political and economic evolution in Ugarit.

![Map of Ugarit](image)

Figure 1.1: (a) A Google Map illustrating the location of Ugarit. (b) Schematic map of the City of Ugarit.
1.4 Rationale for the research

Many archaeological researches and historical and architectural surveys have been conducted on the City of Ugarit, which produced comprehensive records. However, there have been only fragmentary attempts at the conservation of the site, mostly due to non-complete excavation work there. These attempts were mainly represented by minor maintenance and protection of the fabric, which was occasionally destructive as it was done without prior research. Therefore, there is a lack in structured attempts to protect the ruins and expose the hidden aspects by conceptual and creative design approaches. This crystallises the fundamental gap that this research is trying to address and fill.

The importance of this research comes from the great significance of this site for Syrian as well as international history, in specific the Ugaritic civilization and its considerable contribution (the first Alphabet and Alphabetic writing system) to science and art. Additionally, this site comprises various types of buildings (temples, houses, public buildings and the Royal Palace) which use a special type of stone architecture that was not popular with the surrounding civilizations in Syria. This research will identify the society’s aspirations regarding these buildings and uses and
how they are expressed in the ruins, and promote their understanding of on-site use. Since not many texts have been translated and there is only little available information about the people’s governmental and ritual behaviour in the city, the influence of people’s rituals on the city’s architecture will be explored through the analysis of archaeological reports as well as in situ architectural analysis and observation of the fabric. This will constitute a good threshold of this research area in Ugaritic studies, so it would be possible to develop it further when the right information comes to light through texts translation or future discoveries in the city. Also, this study aims to enhance the appreciation of archaeology by different user groups and highlight the elements associated with each area of cultural significance; it is also essential to identify the main threats and risks that compromise the site’s protection and management. Owing to the lack, in conservation approaches, of standards and strategies in Syria, I believe that considerable experience can be drawn from this research and the analysis of similar sites in Syria, such as Ebla, Tell Qarqur, Nagar, Carchemish, and kadesh (Qadesh); it can create the foundation stone for establishing modern conservation standards and strategies which would guide the conservation process through the rich and diverse heritage in Syria. The conservation proposal of Ugarit can be of a high educational value for different teaching and learning stages as well as academic and professional disciplines inside and outside Syria. In addition, I insist on the great role that the site can play in enhancing tourism in Syria and promoting Syrian archaeological sites to both tourists and Syrian people.

Keeping the above in mind, in addition to the main aim, this research has the following objectives to sequentially accomplish throughout the thesis:

1. To contextualise the site within the archaeological and architectural conservation sphere and establish a suitable interdisciplinary framework for its conservation and presentation strategy;
2. To enhance the understanding of the site’s archaeological terms regarding its evolution and stratigraphy and highlight the diverse evolutionary aspects in the City of Ugarit;
3. To enhance the understanding of the mechanism through which the identified values are transmitted to the visitors using conceptual interventions, and how that is related to the values and debates of modern Syrian communities;
4. To facilitate the architectural and urban reading of the site and enable a better perception of space on different scales in the city;
5. To identify the outstanding artistic, historical and cultural values of the site and the civilization that built the city;
6. To activate the educational role of the site and provide conservation guidance to balance the potential of the site as a generator of economic benefits;
7. Materialise the conservation analysis and extracted values on the original ruins as also propose appropriate conceptual interventions in key buildings (houses, temples and palaces) and on an urban scale which will improve the preservation and presentation of Ugarit’s architectural and urban fabric.

1.5 Methodological approach

The interdisciplinary approach of this thesis requires a balance between the sciences of archaeology, architecture and conservation. Archaeological approaches and methods are chosen in accordance with the civilization legacy, to guide the reading and interpretation of archaeological reports on the city’s fabric and understand the site’s architecture, values and conservation potentials. Understanding the archaeology of the site is done through a combination between Processual and post-processual archaeological principles, which uncover both tangible and intangible values of the site. Adopting principles from the two approaches is crucial for combining objective and subjective readings of the city’s archaeological and excavation reports. This combination is essential for avoiding the adopting of a pure scientific conservation approach to the fabric which compromises much of the site’s cultural significance. Also, in situ architectural analyses and observations support the archaeological readings and feed the discussion with a good overview of the city’s architectural and urban principles. The architectural and urban fabric of Ugarit is rich and a reliable source of the civilization’s history and principles. It is also the primary element in the conservation process through which the identified values will be presented. Perceiving these values is the first step before starting to conduct a conservation discourse. The present thesis will be divided into three main parts, and
the development of the conceptual framework for the conservation of Ugarit will be discussed in more detail in Part I, particularly in Chapter 4.

The study consists of nine chapters that are grouped in the three main parts which provide a comprehensive understanding that manifests itself in a conservation and presentation proposal. In part I, the aim is to embark on building a coherent framework of archaeological, architectural and conservation approaches and principles; specific aspects will be chosen and discussed in further detail in accordance with the site’s characteristics. Afterwards, the site will be read and analysed carefully in Part II, which includes Chapter 6 to 8, in order to refine its values: historic stratification, political, architectural and urban evolutionary aspects, holding the origin and notable developments of specific cults (e.g. the cult of ancestors). Suitable conservation procedures and architectural interventions will be proposed in many of the discovered areas of the city in order to protect the authentic fabric, map the cultural values onto the ruins, and facilitate the site’s accessibility. Intervention techniques and materiality are chosen to avoid loads on or disruption of the original ruins. The theoretical discussion and analysis, extracted values as well as proposed conservation strategy and architectural interventions will be materialised onto the original fabric of each area using a virtual representation approach; diagrammatic virtual models which examine the outcomes of proposed interventions and conservation principles will be produced. This study does not intend to produce or emphasise fixed designs for the conservation of Ugarit. The main aim is to avoid limiting architects’ creativity at the design stage, the next stage of this research. Rather, the study will establish principles that provide architects with a rich basis to develop creative and sensitive designs for appropriate preserving and presenting of the site’s original fabric and cultural significance. Part III, which include Chapter 9 and 10, will offer a comprehensive urban discussion based on the discovered areas with the aim of connecting the fragmented proposal and establishing a constant narrative on a city scale. The thesis will be outlined in more detail in the following sections.
1.6 Thesis outline

Following the introduction, the theoretical framework Part I will start with Chapter 2 which gives an overview of the City of Ugarit, its importance, history, discovery and excavation works between 1929 and 2011. Also, the chapter in question will give a good overview of Ugarit’s social, landscape and urban context at present. Archaeological approaches and methods, which are derived from processual and post-processual archaeological concepts, will be discussed in Chapter 3. The main aim is to build an understanding of these concepts which are essential for interpreting the ruins’ past. Adopting principles from these two approaches governs the reading of archaeological reports and links the included objective and subjective knowledge in a sensible interpretation. In addition, understanding archaeological approaches highly contributes to the architect reader’s knowledge, who may not have any relevant background. Moreover, such principles inspire the reading of the archaeological and excavation reports with an architectural explanation in mind. It has to be stressed that these approaches and methods are not applied to collect new data; understanding them simply allows an architect to build a comprehensive interpretation of the site’s past and identify and prioritise the cultural values. One exception, the Space Syntax approach (Access Analysis), will be used for a qualitative analysis of the social interaction in Ugaritic houses.

Chapter 4 plays a complementary, albeit essential, role in establishing an appropriate theoretical context for the site within the wide basis of conservation concepts and principles. It will discuss the specific type of archaeological heritage and its effects on the conservation process, related sciences and conservation principles. Both terms of architectural and archaeological conservation will be discussed highlighting their main contribution alongside the development of architectural conservation and resulting level of interaction. Thereafter, this chapter will form specific conservation approaches to Ugarit, and justify their choice and contribution; the chapter will produce a detailed model of the proposed conservation framework for Ugarit and the successive steps taken to implement preservation and presentation of the fabric’s cultural values. Critical judgment is considered crucial for avoiding the compromising of the authentic ruins and their tangible and intangible significance.
Part I of the thesis is completed with Chapter 5 which reviews and analyses diverse design approaches to conservation, which involve various levels of architectural interventions. Examples will be chosen based on the conservation approaches discussed in Chapter 4; some examples will cover stratification approach and installing shelter over the ruins in order to protect the ruins, reconstruct the original interior environment or represent the original volume. Also, conceptual approaches of conservation will be discussed in this chapter, like the representation of the volume, scale or spatial experiences. Since this study focuses on archaeological sites, the chapter will address the diversity of conceptual approaches through the study of seven archaeological sites from different countries and historic periods. Reviewed projects in this chapter will constitute an inspirational element that feeds proposed interventions on different scales in the City of Ugarit.

The second part of the thesis comprises three chapters and is devoted mainly to analysing and establishing conservation proposals for the main discovered areas of the City of Ugarit (e.g. Royal Area, domestic areas and the Acropolis). This is developed through detailed micro and macro analyses. In-depth reading of excavation and archaeological reports as well as in situ architectural surveys and analyses of the ruins have been carried out towards establishing a coherent interpretation of the architectural and urban fabric.

Chapter 6 reviews the Royal Area of Ugarit in terms of architectural and urban evolutionary aspects as representations of political and economic events of the Ugaritic civilization. The chapter analyses the area’s architecture, urban principles, location and consequences of the unique alphabetic writing system. A series of routes is proposed to present the evolutionary aspects in spatial resolution and highlight the relationship between public and private spaces. The chapter also explores the effects of Ugaritic people’s rituals and political attitudes on the architectural principles and arrangement of the palace based on the reading of archaeological reports, available original texts as well as the new architectural analyses and observations carried out in 2013. Some interventions are suggested, based on critical conservation thoughts. The main entrance of the city is tidied up with some architectural installations to present the development in architectural and urban concepts between the Old and New Royal
Zones. Also, the city gate is reconstructed for volumetric representation and management purposes.

The next chapter (Chapter 7) transfers the focus into the public life of the city and analyses the domestic architecture and its integrated parts (e.g. funeral architecture). Four discovered domestic areas in the city, Residential Quarter, South City, Lower City and City Centre, are included in this chapter. These areas appear to be exemplary in the development of sophisticated urban style and domestic architectural principles and techniques during the Late Bronze Age period. Also, the excavated ruins of these areas are indispensable storytellers of people’s cultural, social and professional life during the Bronze Age. Therefore, one aspect that the chapter focuses on is the interpretation and presentation of the narrative of daily life; this interpretation is crucial for the visitors’ understanding of urban life and Ugaritic people’s appreciation of their own city at that time. The proposal discussed intends to conceptually conserve and present the most valuable architectural, urban, social and cultural aspects in these domestic areas, with total respect for the authentic fabric.

The cosmopolitan character of the city is highlighted as the main consequence of its location and its strong political and economic relationships with the surrounding and overseas cultures. The constant evolution of domestic architecture, especially changes after the 1250 BC earthquake and the people’s strong engagement with their city becomes evident from the fabric stratigraphy. The significant remains, which maintain many original Late Bronze Age concepts, permit an interesting reflection of Ugaritic people’s social life. The concept of privacy is a very important focus that sheds light on Ugaritic people’s persistence for reasonable spaces and hierarchy in their houses. Unique aspects like the cult of ancestors and the associated funeral architecture are also highlighted in the conservation proposal.

General conservation procedures, as applied to all areas, are proposed; however, poignant architectural interventions are considered in each area to preserve and present evolutionary aspects, highlight the fabric stratigraphy and enhance visitors’ experience and recognition of all embedded cultural and spatial settings. Conceptual reconstructions are considered for the volume or the interior environment of that time.
to enhance the educational and artistic values of the ruins, but without confusing the evidence of the authentic structures.

The last chapter in part II (Chapter 8) is devoted to the religious architecture in Ugarit, including the gigantic temples on the Acropolis as well as other local sanctuaries that are distributed in different areas of the city. Analysing the main temples (Temple of Baal and Temple of Dagan) at the Acropolis shows that their architectural principles were not derived from one specific culture, and that alternative, unique architectural concepts were established alongside the development of the city over eight centuries, benefiting from its multiscale relationships which exceeded the land borders. Based on the architectural analysis and some ritual texts and myths found in the city, the chapter investigates the various ways in which people’s rituals and specific cults had affected the architectural principles, arrangement and geometry of these temples. The analysis unveils interesting similarities between the two temples and, therefore, the missing or unclear features of one temple were interpreted based on their existence in the other. Also, the stratifications of the temples confirm the long history of habitation in the city. The temples’ design concept, construction techniques and urban settings are discussed in this chapter, showing the surprisingly unique planning skills which Ugaritic people had since 19th century BC. Moreover, the chapter reviews the three local sanctuaries discovered in Ugarit: the Sanctuary of Rhytons, the New Sanctuary and the Royal Sanctuary. The analysis of local sanctuaries shows further Ugaritic architectural and urban planning skills and also the evolution in attitudes towards those buildings between 1600 and 1250 BC. A series of poignant architectural interventions is proposed to facilitate the reading of the temples’ architecture, urban settings, stratifications, and monumental character. The main hall of Local sanctuaries is highlighted using conceptual approaches; the relationship between the main hall and the sanctuary’s subsidiaries is clearly presented.

The last part of the thesis (Part III) is dedicated to establishing a comprehensive proposal on the city’s scale and connect between the proposals of fragmented areas in a consistent narrative. The first, Chapter 9, introduces suitable theoretical framework, through which the urban structure of the City of Ugarit will be reviewed
and interpreted, using a profound understanding of the city’s origin, structures and evolution. Interpreting the urban structure will be carried out considering the perspectives of ancient people and modern approaches, through analysing the image of the city and its representations in the ruins. The final conservation proposal of the city will collate the diverse proposals for the discovered, but fragmented, areas and the connections between them in order to formulate coherent narratives in spatial resolution and guide the visitors to gain original urban, architectural and archaeological experience. Specific routes and conceptual reconstructions will be installed on the site for this purpose.

Chapter 10 concludes the thesis with a discussion of the outcomes and possible future research that would enhance the understanding of the city in the future. The possible implications of future archaeological excavation in Ugarit will be highlighted. Also, the possible future developments of the conservation framework and virtual modelling approach, employed in this PhD study, will be drawn upon.
PART I: THEORETICAL FRAMEWORK
Chapter 2  The City of Ugarit: General Review

A forgotten city for more than 3000 years, Ugarit had reached an important position among the strong powers of the Middle East during the Late Bronze Age period (e.g. Hittites, Egyptians and Mitanni). Despite being positioned in an area characterised by conflicting powers seeking domination over the strategic location of the Mediterranean sea-line of Syria, Ugaritic people were still able, over a period of time, to establish unique characteristics that differentiated their city and cultural system from surrounding civilisations. The outcome was a combination of an advanced political system, solid social relationships and unique architectural and urban aspects. Therefore, Ugarit is considered to be a unique archaeological site in Syria and distinguished from all surrounding sites by its developed architectural principles and techniques (stone and timber structures), the cult of ancestors and its associated stunning stone-vaulted tombs underground as well as its unique urban composition, not to forget the innovation of the first alphabet and alphabetic writing system and their contribution to the city’s life and external relationship.

The City of Ugarit was accidentally discovered in 1928 when a local peasant found a large vaulted chamber while he was ploughing his field. This event had motivated Rene Dussaud and Claude Schaeffer, French archaeologists, to excavate the surrounding area. They discovered a Late Bronze Age settlement, clearly a port. In fact, Dussaud and Schaeffer unearthed the site of Minet el-Beida (the White Harbour) which, the two scholars believed, functioned as a harbour for a bigger city. Therefore, they started looking for that city. It was in 1929 when they discovered a hill (Tell) located 800 meters to the east of the excavated harbour. It is Tell Ras Shamra (the fennel hill) under which the capital City of Ugarit had sat for more than 3000 years (Curtis, 1985; Saadé, 1979; Yon, 2006).

The City of Ugarit is located 7 miles to the north of the modern City of Latakia and about 800 meters to the east of the Mediterranean sea-line (figure 2.1a). Excavated ruins sit on top of Tell Ras Shamra the top point of which rises 20 meter above the surrounding plain fields. Consequently, the site today, and also in ancient times, was well recognised within the plain landscape and seen from the seaside (figure 2.1b). The Tell was protected by a strong rampart whose excavated west part shows high
design and construction quality. Two rivers surrounding the site of the city constitute additional natural fortifications and fertilise the surrounding field. The contemporary surrounding landscape still includes farms with some contemporary houses (a village) that offer some facilities for people visiting the site. The site today is fortified with a contemporary fence. Thus, it is not considered to be part of a continuous landscape; all surrounding areas have new contemporary uses regardless of the existence of the site. Also, the extended negligence with no attempt to preserve the city or establish a comprehensive conservation strategy has disconnected the site from its surrounding physical, social and cultural context. This constitutes a very important trigger that has brought about interest in Ugarit in order to preserve the fabric, articulate its embedded values and create strong links to the Syrian community.

Figure 2.1: Google Earth photos for the City of Ugarit, showing the city's location and urban position within the surrounding landscape.

Excavation works over the last 85 years have brought to light eleven different areas whose function and architectural quality are varied (figure 2.2). Although only 30% of the site has been excavated so far, discovered areas give clues about the overall organisation of the city. The buildings unearthed in Ugarit include palaces, temples, sanctuaries, houses and some public buildings. The Royal Area (figure 2.2:1) occupies the western part of the site and comprises Old and New Royal Zones. Four residential areas were excavated to the east and south of the Royal Area; they are Residential Quarter (figure 2.2:2), House of Yabninu (figure 2.2:3), House of Urtenu (figure 2.2:11) and the New House (figure 2.2:4). Since houses from the four areas share the same characteristics and high architectural quality, it is believed that the
whole zone that accommodates the four scattered areas would constitute a Residential Quarter that adjoined the Royal Area and may have been inhabited by people who worked in commerce and international trade.

Modest domestic areas were discovered to the east, such as the City Centre (figure 2.2:5), South City (figure 2.2:7), South Acropolis Slope (figure 2.2:9) and Lower City (figure 2.2:10). These areas share the same architectural features of the Residential Quarter’s houses, but with less elaborate materiality and architectural techniques. Owing to the development of the city over time, new principles and techniques were involved in some of these areas, the South City in particular. The Acropolis (figure 2.2:8), the oldest part of the city, occupies the highest point of the Tell and centralises the aforementioned domestic areas.

![Figure 2.2: Schematic map of the City of Ugarit showing the discovered areas.](image)

Recently (1995-2013), three main discoveries were made on the site, which highly contributed to the understanding of the city’s overall structure. The latest one is the so-called the New House (figure 2.2:4) which is still under analysis and
documentation work nowadays. The other two discoveries are the Main Street area (figure 2.2:8) and the pier of the bridge/dam (figure 2.2:12) that most probably spanned over Nahr ed-Delbeh (ed-Delbeh River) to the south of the city.

Most of the discovered areas will be involved in the analysis of the present research for various reasons. For example, the Royal Area is quite important for reflecting the evolution that took place in the civilization’s cultural and political systems, besides the exceptional architectural approaches and principles that shed useful light on the city’s regional and international relationships at that time. Domestic areas (Residential Quarter, City Centre, Lowe City and South City) are being involved for their authentic representation of inhabitants’ social, cultural and professional life. These areas embody substantial knowledge regarding the architectural and urban experience and planning skills of the Ugaritic people, and the development of these skills over time between 19th and 12th century BC. The people’s attitudes towards the organisation of their urban environment are also an important criterion according to which the above domestic areas have been chosen for the analysis and conservation proposal. The South Acropolis Slope is the only domestic area that is not analysed in detail for it was not accessible due to dense vegetation and its fragile condition. However, the houses of this area show similar architectural principles that are represented in other domestic areas, like the Lower City and the South City. The Acropolis area has also been deeply investigated including the two gigantic temples that were discovered on the highest point of the Tell. This area is considered to have been the start point of the city, and the existence of the two temples promotes additional significance to the Acropolis as an urban artefact around which the City of Ugarit started and developed before building the palace; thus, this area held the city power for a long time. One of the most pronounced contributions of the Acropolis area is that its findings further confirm the long history of habitation on the site, thought to date back to the beginning of the 2nd millennium BC. Other discovered areas in the city (e.g. Main Street area, House of Urtenu, House of Yabninu, the New House) show the same approaches and values that are represented in the Residential Quarter. These areas will be incorporated in the urban reading and analysis of the city in the last part of this thesis.
Several archaeologists carried out the successive excavation works over a long period of time: Claude Schaeffer (1929-1971), Henri de Contenson (1971-1973), Jean-Claude Margueron (1975-1976) and Marguerite Yon (1978-1998). In 1999, excavation work was carried out by a Franco-Syrian team which was headed by the French archaeologist Yves Calvet until 2010 after which Valérie Matoïan took over the direction of the mission. Excavation works have been suspended in Ugarit since 2011, the year that marked the beginning of the Syrian crisis. The Syrian side, however, continued the analyses and documentation works of the last excavated structure on the site, the New House, a big house to the south of the Royal Palace.

Ugarit had undergone intensive and large-scale excavation works between 1929 and 1978, which resulted in many misleading interpretations as well as poor preservation conditions for some areas which were caused by the lack of documentation and preservation after the excavation works. From 1978, work on the site focused on less excavation and more documentation, analysis and maintenance of the excavated fabric. The mission to the site had concentrated more on validating Schaeffer’s interpretation through in-depth analyses, and amending some of these interpretations where necessary. Also, the mission carried out some preservation works on the fabric in order to facilitate further analyses and readings. Therefore, although Schaeffer’s publications are considered valuable to this research, the newer archaeological reports will be more beneficial and so utilised and analysed further as they comprise more up-to-date interpretations and analyses of the fabric.

Concerning the history of the site, Schaeffer carried out two soundings in the Acropolis area, the highest and oldest part of the site (Curtis, 1985; Marchegay, 2008; Schaeffer, 1935; Yon, 2006). He confirmed that the origin of the site dates back to the Neolithic period 8000 - 6500 BC. Thus, Schaeffer divided the long history of the site into six main phases, a period spanning from Neolithic to Late Bronze Age period 1185 BC, the year marking the final destruction and disappearance of the City of Ugarit. (See section 4.2.2: Stratification).

The oldest known period of the site is corresponding to the time of sedentarisation in Syria and Palestine, or that is referred to as the Neolithic period, which lasted from 8000 to 5250 BC. The site started as a small village for a group of farmers and had
several developments in breeding domestic animals and building quadrangular houses in stone (figure 2.3a). The site kept developing general characteristics of a modest civilisation; however, by 5300 BC, a sociocultural disturbance was caused by new arrivals to the area from the east. Those arrivals caused a profound cultural upheaval and, therefore, the inhabited area of the site was diminished and injected by principles from the Halaf civilisation in the Mesopotamia. The architecture of this period is more diversified (figure 2.3b) and shows more interest in breeding domestic animals. The following period, linked to Ubaid civilisation, also shows similar characteristics and links to the Mesopotamia cultures. Using copper characterises this period. In general, archaeological investigations clearly manifested that Halaf and Ubaid periods (5250-3000 BC) were less prosperous for the inhabitants of Ras Shamra (Curtis, 1985; Saadé, 1979; Yon, 2006).

The urban origins of Ugarit dates back to around 3000 BC, Early Bronze Age period, when the site started to see notable developments and gain a truly urban character. This period witnesses a great development in metallurgy and the use of bronze in manufacturing several artefacts (axes, needles, and some jewellery). It is believed that the name of Ugarit had been assigned to the site during this period; the first evidence of Ugarit’s name, which dates back to 2400 BC, was found in Ebla (Matthiae, 1997). Like many other places in the Levant, Ugarit was completely abandoned around 2200 BC, for almost two centuries. This transitional period coincided with the collapse of the surrounding powers, for instance Akkadians in Mesopotamia and the Old Kingdom in Egypt (Akkermans and Schwartz, 2003;
Klengel, 1992; Yon, 2006). Life in the city started again in the beginning of the Middle Bronze Age period with the new arrivals from in-land Syria, Amorites people, who settled in the Acropolis and then expanded over the whole site. The discovered cultic facilities to the east of the Temple of Dagan (figure 2.4), which were most probably used before erecting the two great temples, date to the 20th or early 19th century BC. During the Middle Bronze Age (1900-1600 BC), the site had undergone a substantial urban development around the Acropolis and the urban fabric had ultimately covered the whole site and been fortified.

Figure 2.4: Cultic facilities at the Acropolis of Ugarit date back to the beginning of the Middle Bronze Age period (Callot and Monchambert, 2011).

The development of the socio-political system in Ugarit contributed to the building of the Royal Area by the end of the Middle Bronze Age or beginning of Late Bronze Age period. Consequently, building the Royal Area changed the form of urban development of the site as the civilisation started to have a more complex political and cultural system. As a result, the city became a capital city for relatively small, but powerful, civilisation, which had many suburbs around the main City of Ugarit (figure 2.5). Thus, evolution, in both vertical and horizontal patterns, was seen in Ugarit; it is considered one of the main cultural values of the city, which had contributed to various advanced aspects characterising the city and establishing its differences from the surrounding cultures. A catastrophic earthquake struck Ugarit again during the 13th century BC and destroyed many parts of the city. Olivier Callot could date this earthquake back to 1250 BC (Callot, 1986a; Mallet, 1987) through detailed analysis that he carried out on the North Palace and the New Sanctuary in
the Old Royal Zone. Ugaritic people had rebuilt most of the city’s parts which suffered from the earthquake consequences, until the final destruction of the city and its civilisation in 1185 BC. Like other Mediterranean sites, it is believed that Ugarit was either destroyed by the Sea People, a second earthquake or both. The huge amount of archaeological and excavation reports provide a strong basis for building appropriate interpretations and inferring the cultural values of the site and its fabric. Unfortunately, the archaeological mission has not yet focused on the rituals of Ugaritic people; few reports\(^2\) (Almant, 2008; Bordreuil, 2000a; Merrillees, 1986; Rowe, 2002; Vita, 1999; Vita and Pardee, 2009) were produced regarding the Ugaritic people political structure, governance, social life, traditions and rituals. Therefore, this research will acknowledge some of these rituals and how they affected design approaches, particularly in the Royal Palace and the Temples, based on the architectural analyses and available material. These articulations will not be used as primary elements for building the conservation approaches; however, the proposal will take them into account but with an emphasis on their hypothetical nature, until they are confirmed by future analysis and excavation work.

\(^2\) Mythological texts were found in Ugarit: e.g. The Legend of Keret (See appendix 3) and The Palace of Baal (See appendix 4)
The City of Ugarit occupied a highly strategic location (figure 2.6) which dominated the inland trade route between Egypt and Asia Minor as well as the external trade routes linking the east (Persia and India) and the west (Greece and Cyprus) (Malbran-Labat, 2000; Yon, 2000; 2006). This location promoted the city trade (Woolley, 1946) which contributed strongly to the civilisation’s economy and the development of its political and sociocultural systems. It is believed that the strategic location did not only enable Ugarit to establish a unique homogeneity with its surrounding cultures, but also exchange key social and cultural characteristics that further highlight the city as a navigation point within the surrounding political and
cultural sphere. The location of the city between two rivers also allowed Ugaritic people to depend on their surplus which derived from farming production and commerce in order to develop their city and cultural system. Farming was the first and main provider for the city given the large fertile and well-irrigated lands that Ugarit had dominated and their closeness to the sea (less than a kilometre).

![Map of Ugarit](image)

**Figure 2.6: Google map illustrates the location of Ugarit with the dominated trade lines.**

The site is chronologically located between historic and prehistoric periods. The excavation works, which were started by the French archaeologist Claude Schaeffer in 1928, revealed a very rich material culture (Figure 2.7). The most important event, marked by the invention in the 14th century BC of the first ever Alphabet and Alphabetic writing system, which resulted in a huge amount of records that provided not only administrative documents but also details of how Ugaritic people had lived and what they achieved. Thousands of tablets were found everywhere in the city, which comprehensively documented all aspects of the city’s life during the last two centuries of the city’s existence. This innovation confers a particular importance on Ugarit for being a Bronze Age city which did not only have its own writing and educational systems, but was also open to teaching and using other writing systems.
The discovered tablets show a wide diversity and insist on Ugarit’s multicultural characteristics. Six systems of writing were used in scribing these tablets: (Syllabic, Akkado-Babylonian, Alphabetical Ugaritic, Cypro-Minoan scripts, Hittites hieroglyph, and Egyptian hieroglyph). Also, they were written in Eight different languages: (Sumerian, Akkadian, Babylonian, Hurrian, Ugaritic, Egyptian hieroglyph, Hittites hieroglyph, and Cypro-Minoan). This reflects the peaceful growth of the city as a result of being an integral part of the commercial international network of the period and assimilating the use of the new alphabet and alphabetic writing system into the social processes of the city-state. This integration had resulted in very rich archives which were not only limited to the Royal Area. Many libraries were found in private houses (figure 2.8), which include economic, political, religious, ritual and social texts, in addition to some dictionaries between Ugaritic and other languages.

To sum up, the City of Ugarit has delivered a rich and impressive material culture that enabled the understanding of the city’s political, social and cultural system. The city’s urban and architectural fabric comprises a comprehensive knowledge about Ugaritic people’s social, cultural and artistic attitudes and the strong course of the city’s evolution over time. These aspects will be comprehensively identified, preserved and presented in each excavated area on the site through detailed analyses of the site’s archaeological reports and architectural and urban fabric. Thus, excavated areas of the site will be analysed throughout the three main chapters which respectively present the analysis of the Royal Area, domestic architecture and religious buildings, to establish a suitable conservation proposal for each case based on identified values.
Figure 2.8: The distribution of discovered libraries and archives so far in the City of Ugarit.
3.1 Introduction

Archaeology is a multi-disciplinary concept that combines science and humanities, evident in the multi-layered approach that archaeologists adopt through their work (Renfrew and Bahn, 1991). The relationship between human behaviour and material culture is the core subject of archaeology (Gamble, 2001). Therefore, in addition to the scientific evidence, understanding the social context of any object is essential to formulating a coherent interpretation of its past. In this sense, archaeologists adopt different methods in order to achieve a better interpretation and good understanding of human kind, history of artefacts and people, in addition to the artefacts’ age and chemical properties (Greene, 2003; Renfrew and Bahn, 1991). Archaeological and architectural studies seek to collect the remaining information about past civilisations. This information is provided by excavated objects, monuments or sites (Greene, 2003). Describing and interpreting the excavated material are the main task, an archaeological concern. This task is very important for revealing the values carried by archaeological objects. Archaeologists consider these objects, whatever their form (artefact, building or site), as a source of people’s history, developments and life connections (Gamble, 2001).

By investigating the excavated materials, archaeology studies not only the physical objects but also the people, past environment and context, civilisations’ developments and evolution as well as the power of these items (Gamble, 2001). This information, particularly when it comes to the archaeological site, is obtained using different practices such as excavation, surveying, recording, and applying various dating methods with the aim of identifying the chronological order of the retrieved item or building. These methods result in the archaeological data, the basic database, which will be interpreted and explained to give all the information embedded in the excavated and analysed objects (Greene, 2003; Renfrew and Bahn, 1991). Many types of archaeology have appeared in this field, addressing different issues in archaeological discoveries. Clive Gamble boils them down under two main paradigms of doing archaeology: culture-historical and anthropological archaeology.
(Gamble, 2001), where the latter’s approaches are very useful in interpreting the cultural system and history of Ugarit through existing material culture.

The chronological location of Ugarit between history and prehistory enriches the material culture of the city. This material culture incorporates a huge amount of records which provide a detailed description of the civilisation system and ancient indigenous people’s life. Based on this, a scientific archaeological approach is a plausible choice for studying the process of the civilisation’s system. Anthropological archaeology, particularly the processual approach, strongly helps in defining and understanding past Ugaritic system and cultural processes. Occasionally, processual archaeology falls short of handling some archaeological entities; henceforth, it is very important to move on to adopting a more advanced archaeological approach, the so-called post-processual (interpretive) archaeology, in some areas of the site’s history and people’s achievements. These two archaeological approaches adopt some archaeological methods, important to finalise the study and unveil the embedded information. Culture systems theory, spatial archaeology and cultural evolution approaches are the most important archaeological methods, whose notions are believed to support the architectural reading of the site in order to detect additional characteristics of Ugaritic civilisation.

This research which focuses on the architectural conservation of archaeological ruins will not apply any of these archaeological approaches and methods to collect new data. It will rather use their main notions and aspects in reframing the architectural readings and interpretations of these ruins, based on detailed analyses of the ruins and relevant archaeological reports. Archaeological work in Ugarit has not yet been finalised and different interpretations still need to be produced on varying scales. Therefore, these archaeological approaches and methods will enable the author, an architect, to appreciate the ruins and their archaeological report. This will lead to identifying the outstanding archaeological and cultural aspects that the ruins hold, which will, in turn, promote the site’s interpretations and its conservation proposal.
### 3.2 Archaeological approaches: Anthropological Archaeology

Anthropological Archaeology came to light in the 20th century as a response to the past collector stereotype that archaeologists had. It mainly came to change this picture of culture-historical archaeologists and stress good understanding of the past through analysing the context and written resources. Anthropological paradigm comprises five types of archaeology (Processual, Post-processual, Neo-Darwinian, Marxist and Feminist); however, for studying civilization system and its architectural ruins, processual and post-processual approaches are considered to be the most important and widely used ones. The main effect of these two approaches is encouraging archaeologists to be theoretical; the influence of the social theories that anthropology provided has been great in recognising extra perspectives in any archaeological objects (Gamble, 2001).

#### 3.2.1 Processual Archaeology

The reaction to culture-historical archaeology, for relying on common senses and generalisations, was first recorded in a paper entitled “Method and Theory in American Archaeology” and written by Gordon Willey and Phillip Phillips in 1958. This work is considered the root of the formally-known new archaeology (processual archaeology). Willey and Phillips link archaeology to anthropology and assigns to them the same goals (Willey and Phillips, 1962). These goals were to answer questions not only about humans, but also the human society and how to maintain the conveyed information by any object, even after it is included in the archaeological records (Trigger, 1989). The first official appearance of this archaeological approach was in Lewis Binford’s paper “Archaeology as Anthropology” in 1962. In this paper, Binford emphasises the importance of adaptation and change in past cultural systems as the main aspects for new (processual) archaeology. He also points out that processualism’s core subject is the process of these cultural systems (Binford, 1962; 1965). Kevin Greene supports these thoughts in his book “Archaeology: an Introduction”; he believes that “hypothesis-testing”, “law”, “system”, “process” and “explanation” are the most important key words in the processual archaeological approach (Greene, 2003).
The main addressed subjects of this approach are to study ancient ways of life and how past cultures have been developed and changed (Renfrew, 1990). Also, new (processual) archaeology aims to understand how past cultural systems operated by analysing the objects and their context (Gamble, 2001). Additionally, Environmental reconstruction is a very important principle in this new archaeology. Colin Renfrew, a keen British archaeologist, is interested in tracking past culture’s process, technologies and changes in social organisation (Renfrew, 1990). Other famous archaeologists (e.g. Lewis Binford, David Clarke and Kent Flannery) had also followed the processual approach (Trigger, 1990).

Processual archaeology adapts middle level theories that indicate similarities and differences in any particular sets of data using scientific tools. One of the best examples is Binford’s Middle Range Theory which attempts to create strong relationships between excavated objects “dead facts” and invisible and dynamic past people’s behaviour that created the objects (Trigger, 1990). Thus, since the key aim is to apprehend and reconstruct past cultural process, Processual archaeologists intend to understand the culture’s system through investigating its archaeological remains (Renfrew, 1990). Additionally, their aim is to find the catalysts that created artefacts and cultural changes (Gamble, 2001). This understanding is acquired by applying advanced analytical tools and scientific methods (Renfrew, 1990). Lewis Binford’s approaches, ethno-historical information, logical positivism, quantitative method and hypothetico-deductive model, are considered new methodological approaches that have been introduced to the processual research field as a result of the lack in analysing frameworks.

The processual approach has two “internal and external” influences. From within the culture, it infers past human behaviour from archaeological remains while externally, it tracks the development and changes occurring to that behaviour (Gamble, 2001). Archaeologists recognise the importance of processual archaeology in improving archaeological records and descriptions. Greene (2003) insists on the benefit of this improvement, especially in reconstructing the process of social systems, which requires high-quality data.
In terms of archaeological sites, the principles of the processual approach are useful in establishing a stronger foundation for reading and interpreting archaeological reports on site formation process. This reading depends on discovered ruins, objects, texts as well as the knowledge from the site’s context. Additionally, the processual approach adopts very advanced excavation techniques for the discovery and analysis of archaeological sites. For that, understanding its principles will be rewarding to the modernised future excavation and analysis works through adopting the nomothetic instead of traditional particularistic approach (Greene, 2003).

Although the processual approach is a scientific and efficient way to understand how past people behaved, critiques of its notion have not been lacking. The most recognised critique addresses mainly adopting the scientific principles, sometimes represented in repeatable experiments which may not be suitable for different types of object. Also, it focuses on proving the hypothesis, already known, and not contributing anything new to knowledge. Objectivity and reliability are among the criticised aspects of processual approach, particularly in case of investigating or informing about heritage’s variability. Going into too much detail, rather than developing a more holistic approach to the structure of the cultural system, and the lack in human agency have also been criticised. Furthermore, answering the questions of how and why decisions are made is still not clear using processual approaches (Gamble, 2001). Subsequently, the processual approach cannot separately complete a comprehensive reconstruction of past cultural systems. Thus, it is very important to consult a more advanced archaeological approach (e.g. post-processual “interpretive” archaeology) to enhance the processual model at some point, especially when contextualising the reconstructed past is taking place.

3.2.2 Post-processual Archaeology

Past cultures were not only systems and processes; they were also people’s thoughts and everyday lives. Processual archaeology shows an inability to deal with these segments for it is mainly concerned with large processes in cultural systems. For that particular reason and in order to form a comprehensive understanding of those people’s live and the development of their achievements over time, it is important to move on to discussing post-processual archaeological approaches which emphasise
Reading archaeological data via post-processual principles promotes the conservation procedures to be carried out through a comprehensive rather than only a scientific conservation approach.

The post-processual approach has appeared originally in the United Kingdom during the early 1980s as a critique of the objectivity which characterises processual approaches. It raised many questions concerning what processualists have done and why (Gamble, 2001; Johnson, 2011). Four main theorists have followed this concept in the UK: Ian Hodder, Daniel Miller, Christopher Tilley and Peter Ucko. They had been influenced by anthropological concepts such as Marxist Anthropology in France and Sociocultural Anthropology in the United State (Johnson, 1999; 2011; Trigger, 2007). Post-processual archaeology differs from the processual approach in that it asks questions rather than just supply answers or approve already existing ones. Also, Post-processualists have sought to build their own theoretical context rather than borrow theories from other disciplines for archaeological explanation, as is usually the case in Processual archaeology. Post-processualists believe that there are many political and intellectual movements which were created in the past that could not be seen in the processualists’ detailed observation of the object or the site (Greene, 2003).

Post-processual (interpretive) approach is about justifying the conservation and protection of the past and identifying the main aim of this conservation. The Indigenous people is considered one of the most stimulating aspects of conservation; Post-processualists believe that indigenous people are the real owners of the excavated past (Gamble, 2001). Furthermore, Interpretive archaeologists are concerned with the issue of investigating the relationships between palpable and impalpable issues in archaeology, such as “object and subject”, “norm and individual”, “process and structure”, “material and ideal” and so on, seeking by doing so to pioneer in the areas that have been rarely examined (Greene, 2003).

There are many archaeological principles that have been tackled by post-processualists, such as structuralism, human agency and neo-Marxism (Johnson, 1999). The Structuralist approach, taken from anthropology, has been adopted by
post-processualists, particularly Ian Hodder (1984), to understand ancient societies. Hodder had used this approach to deliver his idea about the symbolism of Neolithic European houses and tombs (Hodder, 1984). Also, the post-processual approach recognises the individual in the cultural process, an aspect lost in previous archaeological types (culture-historical and processual archaeology). It emphasises the independent human act within the cultural system, for each human manipulates the cultural role in accordance with his/her interests (Johnson, 1999). Most post-processualists have been influenced by Anthony Giddens’s concepts, especially his structuration theory, and Karl Marx’s thoughts, in constructing their own explanations of ancient societies (Johnson, 1999; Thomas, 2000; Trigger, 2007).

Unlike processual archaeology, the post-processual approach highlights the importance of subjectivity in archaeology and points out that any archaeological explanation is congruous with responsible archaeologists’ ideas and thoughts. Therefore, there are different possible interpretations of the past (Trigger, 2007). In this sense, post-processualists emphasise that reconstructing the past has to be compatible with local people’s ambition and culture (Gamble, 2001). Moreover, post-processualists have combined the materialistic point of view in processual archaeology with the idealistic one in culture-historical archaeology to interpret past societies. This approach is clearly explained in Johnson’s (1999) study of the idea of landscape in past societies. Johnson clarifies that neither a materialistic nor an idealistic point of view can separately provide a good explanation of the idea of landscape in ancient societies. The materialist-idealist unity is the suitable approach, he believes (Johnson, 1999).

Ian Hodder, one of the most prominent post-processualists, has utilised his work to establish the foundations of post-processual archaeology, the so-called post-processualism’s platform for 1980s, on which all post-processual archaeologists have continued to build their work. Hodder concluded that the important role of material culture is to understand the society’s organisation process and the social relationships inside it. This understanding has been built upon the issues of verifying knowledge, refuting the weak points of interpretation, and particularly understanding the owners of the studied past (Gamble, 2001). Hodder’s (1987) greatest contribution to post-
processual archaeology is his advocacy of the Contextual approach. He depended mainly on his ethnographic studies to explain the importance of placing objects in their context and functioning network in order to fully understand the conveyed meanings (Greene, 2003). The most important example of that is Hodder’s work on the Neolithic site of Catalhüyük in central Anatolia. The aims of this project were to conserve the site, contextualise objects, buildings and the whole site, as well as present it to the public (Hodder, 1987). Subsequently, post-processual archaeology has been simplified by five main elements: symbolism, material culture, hermeneutics, narrative and social theory, which all together build the main skeleton of post-processual thoughts and projects (Gamble, 2001).

3.3 Archaeological principles and methods

It has been seen that archaeological approaches are applied for the understanding of past cultures’ life style and system; however, these approaches fall short of providing information that reflects full knowledge and understanding of the investigated archaeology and its people.

In his book “New Perspectives in Archaeology”, Lewis Binford, a famous processualist, stresses the importance of methodologies and theoretical framework for overcoming the limitation in information derived from archaeological records. He maintains that this deficiency is not due to poor material culture but the lacking appropriate methodologies (Binford, 1968; Gamble, 2001). Therefore, various archaeological methods and principles are applied to collect data, analyse them and establish a suitable theoretical framework. These methods are chosen in accordance with the types and values of archaeological remains. In this study, the main focus is a Bronze Age archaeological site which comprises archaeological remains, records, as well as cultural systems. Therefore, the main methods and principles explored will be culture systems theory, spatial archaeology, cultural evolution theories, value theories and the role of architecture in understanding archaeology. Most of these methods will not be used to collect new archaeological data. Rather, they will be useful for situating the analysis of the archaeological excavation reports within a new framework on which the site’s interpretation and conservation plan will be built. One exceptional method, namely Space Syntax approach (Access analysis), will be
applied on domestic architecture in the site, which adds new data regarding the social interaction level in the interior spaces of Ugaritic houses.

### 3.3.1 Cultural systems theory

The origin of this approach goes back to 1940s when systems theory was adopted for the study of the interaction between society and its environment. This project had been accomplished based on archaeological and environmental data. Feedback from this observation indicates the interactive nature of creating changes in the culture system. In the early 1960s, and as archaeologists, processualists in particular, became more fascinated by scientific approaches; they had embraced this method, but only from their own scientific point of view. Therefore, they criticised traditional methods used before. They also encouraged using scientific methodologies in observing culture subsystems interacting and testing hypothesis within the archaeological remains (Greene, 2003). Many archaeologists, such as Kent Flannery, Lewis Binford, Colin Renfrew and David Clarke, followed this theory in their work.

The notion of this theory works on dividing the culture’s system into secondary components (subsystems). This breaking down facilitates the understanding of interrelationships between the culture’s subsystems and helps in observing and predicting the outcomes of these relations (Gamble, 2001). David Clarke supports this method in his book “Analytical Archaeology”, published in 1968. Clarke considers that culture’s system comprises five main elements (subsystems) interacting with each other, on the one hand (as a single socio-cultural system), and with the surrounding external effects (the environmental system), on the other (figure 3.1a). The detailed observation of these internal and external interactions enhances the perception of the culture’s system and values (Clarke, 1968). Clarke’s systematic approach has a strong influence on defining the fundamental entities and indicating the developments of higher cultural processes. Furthermore, through analytical methodologies, Clarke intended to characterise diachronic patterns and processes of the cultural system (Bintliff et al., 2004; Clarke, 1968). Binford also breaks down culture’s system into three subsystems (ideo-technic, technomic, and socio-technic), based on population and surplus as essential triggers for the establishment and development of the culture system (figure 3.1b). (Renfrew and Bahn, 1991).
Figure 3.1: (a) A static and schematic model of the dynamic equilibrium between the subsystem networks of a single sociocultural system and its total environment system (Clarke, 1968). (b) The interaction between the culture’s subsystems as suggested by Lewis Binford.

Culture systems theory is a very important method in processual archaeology for it helps us understand how elements inside any culture interact. This method allows scholars to investigate any culture putting aside their cultural biases in order not to affect their explanations. Kent Flannery defends this method and uses it to understand the Mesoamerican cultures (Flannery, 1968). It is worth mentioning that although systems theory works very well in describing how culture subsystems interact, it falls short of answering the why and how questions about that interaction.

Systems theory is dedicated not only to understanding cultural changes, but also the emergence of civilisation. Some archaeologists consider culture as a system in itself and try to understand its origin as a result of the relationship between its components. British archaeologist Colin Renfrew, for instance, adapts the systematic approach to describe the civilisation origin. In this approach, the size of population and production appears among the system’s parameters. Renfrew suggests splitting up a culture system into six subsystems; each one represents a special activity (figure 3.2). He dedicates special importance to interferences between the subsystems themselves and the correlations between pairs in any study (Renfrew and Bahn, 1991).

Reviewing this theory does not imply the application of its components in the study of Ugarit’s cultural system. Rather, knowledge of these components is essential for the architect seeking to place Ugarit within its context and identify the nature of its
cultural system. This will be helpful in the architectural reading and interpretation of the ruins. The observation of internal and external interactions provides archaeologists with important information about cultural dynamics of the ancient people. Considering this information in the architectural reading of Ugarit will be valuable for building and justifying the evolutionary aspects which took place in the city. Thus, the inference of this hidden information sometimes implies the understanding of specific analytical approaches that can sufficiently extract data and transfer them into narrative illustrations. The spatial archaeological method can competently play this role and, therefore, it is important for the architect to understand the notions of this approach.

![Figure 3.2: The interaction between the culture's subsystems as suggested by Colin Renfrew (Renfrew and Bahn, 1991).](image)

### 3.3.2 Spatial archaeology

Interpreting the social and historical dynamics of past civilisations is the main cultural goal that all archaeologists seek to achieve. Understanding spatial relationships is a prerequisite in this domain. In this sense, the spatial archaeological approach works on retrieving all hidden information by studying archaeological spatial relationships within the site and between the site and its surrounding context. Clarke and Ashmore are the most important archaeologists who patronise the spatial archaeological approach (Clarke, 1977). The term ‘Spatial Analysis’ has been clearly
explained in the international workshop on landscape and spatial analysis in archaeology “Debating Spatial Archaeology”, held in Santander, Spain, on 8 and 9 June 2012. This debate led to recognising many scientific approaches included in spatial archaeology, such as landscape archaeology, spatial statistics and cognitive archaeology. It has pointed out that spatial archaeology generally provides information on the meanings of space, reasons for spatial variables and the ways of space is interpreted and perceived.

In his 1977 book, “Spatial Archaeology”, Clarke, identifies the three-scale levels with which spatial archaeology deals. He shows that archaeologists deal with objects, structures and contexts in their attempts to retrieve all scattered cultural information among its archaeological remains. Micro, semi-micro and macro scales, as well as the interaction between them, formalise the spatial approach framework on which archaeologists build their interpretation. Identifying the spatial scale of study and its principal elements is considered as a very important step for judging the relationships between these elements in an appropriate manner (Clarke, 1977).

Ashmore supports Clarke’s perspectives and emphasises the importance of a multilevel analysis, of the culture’s remains, from individual to regional aspects, in order to perceive system of ancient societies. She also points out that architecture and built environment are spatial studies and investigating them produces only a two-dimensional view. This view needs to be crystallised and 3-dimensioned by other aspects of the spatial approach (Ashmore, 2002).

The “Debating Spatial Archaeology” workshop discussed the spatial analysis approach which concerns geographic data and works on the outcomes cartography. It has been pointed out that this approach depends on advanced recording methods and analysing tools for the acquisition of the required data. Computer programs were also part of discussion in terms of how they are involved in spatial archaeological approach. For instance, it has been approved that GIS “Geographical Information System” plays an important role in developing the spatial analysis approach. It works on interpreting all collected data and maps via a fixed framework. The most serious issue to be highlighted then was that the contribution of GIS program has equal economic or relational significance for all spaces. The suggested solution was to
consider the influence of spatial analysis results, interpretation and methodology when GIS is used to analyse geographic and cartographic data. Consequently, spaces will be categorised according to their significance; some spaces might not have any.

Figure 3.3: Schematic plan of the City of Ugarit that shows the fragmented situation of the site’s areas.

Understanding these principles will be useful in building the architectural interpretations of Ugarit’s ruins on different scales. Considering the principles of spatial analysis in studying the ruins of Ugarit’s domestic areas will highly contribute to the understanding of ancient people’s perception of space. Also, it will highlight specific attitudes which Ugaritic people had towards the organisation of their spaces in the house or at the neighbourhood level. Moreover, appreciating the main aspects of the regional level of spatial analysis will facilitate the urban interpretation of the relationship between the site and its surrounding as well as between the fragmented areas on the site (figure 3.3). Highlighting the relationships and the urban dynamics between the fragmented areas in Ugarit will be based on the understanding of spatial relationships between these areas and the role of each area in the overall political,
economic and cultural system of the City of Ugarit. This will feed the urban conservation plan with useful knowledge that helps in linking all areas in a plausible urban narrative.

### 3.3.3 Cultural evolution principles

The concept of evolution is mainly represented by a set of developments and changes occurring to a culture over its successive generations, resulting in a rise in cultural diversity and achievements. This complex cultural process results in various contributions to the civilisation’s political, economic and social systems. Therefore, uncovering this process mainly requires the interaction between three types of principles concerning the civilisation’s origin, traits and cultural evolution. These principles are useful to produce significant evolutionary data in archaeology; however, for architecture, apprehending these principles is essential for promoting the recognition of evolutionary aspects in archaeological reports and ruins. It also constitutes a proper framework for representing the civilisation and people’s shifts in architectural perspectives.

#### The origin of civilisation

Many scholars (Carneiro, 1994; Wittfogel, 1957) have given a great significance to the starting point of any civilisation for the understanding of its cultural system. Most of them admitted that population and production growth are essential parameters and the main triggers for creating the basic organisation of any civilised society; however, each scholar has their own perspective. For example, Karl Wittfogel, a German-American historian, insists on the importance of irrigation and hydraulic organisation, together forming a starting point for any civilisation. He considers these two triggers essential, the first for increasing production and the second for controlling and managing the surplus wisely (Wittfogel, 1957).

Ester Boserup, a Danish agricultural economist, backs up this idea in her model and creates strong connections between the increases in production and population growth. In her book “The Conditions of Agricultural Growth” she emphasises the need for great administrative efficiency to produce advanced farming methods in order to keep in line with population growth and its consequences. This administrative unit, she mentions, is the basic component in a civilisation’s control
organisation, as it is developed in a hierarchical way to produce a centralised decision making process (Boserup, 2005).

In the same vein, Robert Carneiro, a prominent American anthropologist, holds a different view and follows an environmental circumscriptive approach. Based on the state formation in Peru, he builds his own model which insists on the importance of surrounding environmental constraints and the role of warfare in generating any civilisation. What distinguishes Carneiro’s model is that it puts population growth together with the “circumscription” principle in the aim of developing a strong leadership for the civilised society (Carneiro, 1994; Renfrew and Bahn, 1991).

![Flow diagram of Carneiro's model for the rise of complex societies (Renfrew and Bahn, 1991).](image)

On the other hand, some scholars regard culture as a system in itself and attribute its origin to the relationship between its components. Igor Diakonoff (Russian historian), for example, ascribes the origin of civilisation to the differentiations that occurred within the society as a result of class conflict and increased wealth. Also, as mentioned before (see section 3.3.1), Colin Renfrew has the same tendency towards culture’s origin as he assigns generative roles between culture’s subsystems.
Searching for Ugarit’s origin and stratifications, Schaeffer conducted two big soundings at the Acropolis area. The earliest sounding dates back to 1935 and is located between the two main temples (Schaeffer, 1935), whereas the second sounding SH was conducted between 1962 and 1976 at the western slope of the Acropolis. The result of these two soundings demonstrate that the history of the site dates back to the Neolithic period 8000-6500 BC when the site had been started as a village, synchronous with the beginning of the sedentarisation period in Syria and Palestine (Curtis, 1985; Yon, 2006). The city, however, expanded well beyond this original nucleus at the Acropolis, and the Royal Area (15th -13th century BC) is a witness of the firm establishment of political and cultural values. The existence of this area was paramount for creating new advanced principle in Ugaritic cultural system, so much so that during the Late Bronze Age period had achieved the status of full civilisation. Thus, the notions regarding the origin of civilisation are quite useful, not only to highlight the start point and cultural dynamic of complex society but also to enhance the understanding of the urban evolutionary aspects and the changes in the city’s morphology in accordance with shifts on the cultural system. Therefore, the traits of the ‘full civilisation’ will be further explored in the following section, given that they are central to the understanding of the political status of Ugarit in the last phase of its history.

Full civilisation traits
Full civilisation traits have been defined by many scholars from different backgrounds (Childe, 1950; Flannery, 1972a). Through various researches, scholars asserted that these traits are formed and stimulated by the development of surplus, population growth and warfare. These three triggers eventually increase the complexity of the institutions, the diversity of workforces and city’s structure. They consequently chart the timeline of a civilisation or state. Gordon Childe and Kent Flannery’s thoughts on the full civilisation are highly relevant in this study for they summarise the full civilisation traits, describing their roles and contribution to developments in cultural systems. Both scholars pointed out the intimate relationship between all these traits and how they all work together to increase the complexity of the socio-political institution seeking the fully civilised and highly complex character. Studying the Middle Eastern and Mesoamerican civilisations by Childe
and Flannery, respectively, had resulted in ten main traits that characterise the full civilisation and advanced cultural system. Writing, kingship, long distance trade, society classification, science, craft and art are the most important traits the mutual interaction of which results in further characteristics.

These traits result from comparing Childe’s (1950) urban revolution theory with Flannery’s (1972a) thoughts about highly complex socio-political institutions. Both scholars refer to the big density of the socio-political institution and the people willing to be organised around a centralised organisation, a fundamental core for any civilised society that controls and manages its resources. This has been named by the two scholars as a ruling class which in Ugarit consists of the royal family, their government officials and heads of clans’ councils. The existence of those people, who had administrated the society’s economy and policy, is clearly manifested in key buildings in the areas under examination. This highlights the society’s classification in this civilisation and the separate duties of each class.

Although political aspects are the most important considerations for both scholars, they additionally shed light on the significance of management plan for the civilisation’s production. They believe that a good management plays a key role in promoting the society to higher levels by producing more features such as art, advanced technology, crafting and industries. These features are also essential traits that characterise the full civilisation. This opens a window into the exchanging systems with neighbouring civilisations and indicates the importance of long trade routes in promoting economic resources and characterising the full-civilised society; Ugarit’s strategic location strongly promoted this characteristic. In this context, both scholars believe that writing revolutionises the society’s life, be it political, economic or social. It strongly develops all life sectors and remarks an essential trait for a full civilisation, so to speak. Writing or recording systems, considered unique in Ugarit due to the innovation of the first alphabet and alphabetic writing system, also contribute to creating more essential traits such as advanced science, codified law, clear transactions and influential political system (Childe, 1950; Flannery, 1972a).

In that regard, Ugarit is characterised by the presence of specialist manufacturers and skills. This approach not only allows the emergence of civilisation to be grasped, but
also makes possible the discernment of cultural changes into the civilisation’s system. Consequently, probing the traits and definitions of civilisation is highly relevant to a comprehensive conception of its cultural system’s changes and placing the case study within its socio-political context. These traits allow, first of all, the classification of whether Ugarit is a full civilisation or not, and, secondly, a better interpretation of the material culture by establishing correlations between these traits as well as between them and the existing fabric. The architectural analyses and observations of the ruins in Ugarit will consider mapping these traits onto the architectural and urban fabric of the city in order to present the consequences of these traits to the civilisation’s political, economic and cultural systems. To enhance the reading of the city’s fabric through this principle, it is quite vital to obtain good understanding of the concepts, types and main principles of the cultural evolutionary process, which the following section discusses.

**Principles of understanding cultural evolution**

The existence and evolution of a central control institution in any society bring more development to other life aspects, due to the wise control of the resources. According to (Flannery, 1972a; Johnson, 1973; Spencer, 1979), political evolution is represented by all changes regulating the control system, processing information, and making and implementing decisions. Political evolution is logically accompanied with economic and urban evolution, due to the increase in production and prevalence of the dominant regime. This fact has been emphasised by many archaeologists and anthropologists (Childe, 1950; Fried, 1967; Sahlins, 1960). In order to highlight and explain these cultural evolutionary aspects, Childe, Sanders, Parsons and Santley assert the importance of multiple data, i.e. regional survey, site survey and archaeological excavation data (Childe, 1950; Sanders et al., 1979). This principle constitutes a very strong trigger whereby the in situ architectural and urban analyses as well as the analysis of archaeological reports of Ugarit will be organised, and makes possible a thorough understanding of the city’s architectural, urban and cultural settings.

For studying culture’s evolution, two main approaches are adopted: processualism and selectionism, with regards to developments in human history and associated...
cultural change. Both approaches focus on cultural evolution, but each of them has its autonomous point of view and self-governing rules. Also, it is crucial to identify the scale of the study, which varies between micro and macro, and the discussion framework (Spencer, 1997). Although the selectionism approach seemed to be ascendant in the beginning of 1990s (Teltser, 1995), it was not preferred by many scholars who studied cultural evolution, especially the followers of processual archaeology. Processual scholars rejected this concept due to its notion that imitates and follows the biological type, which has fundamentally misled the studies. They believe that applying Darwinian approaches lays bare the vital differences between biological and cultural evolution especially when this concept is applied to an area that covers a wide framework such as that of ancient civilisations and its development. In addition, selectionists reject social taxonomies and directional progressive frameworks of long-term changes. They consider selection as the dominant criterion for cultural change and ignore the normal development of any culture as a system that has its start stage and a line of progress (Monod, 1971).

On the other hand, the processual evolution approach, despite all criticisms, is sufficient for a study of the cultural evolution of big cities and civilisations. It prioritises a critical analysis of the civilisation’s history and fabric, which highlights the evolutionary aspects, over merely following and imitating the biological evolutionary approach (Spencer, 1994; 1997). Processual scholars strongly assert the importance of the material culture. Therefore, the use of architectural terms as well as architectural and urban fabric of the studied civilisation is vital and feeds evolutionary studies with plenty of indications which are located in the silent storyteller, the archaeological site including all its archaeological, architectural and urban ingredients.

A more detailed explanation shows that the processual approach is preferred for a study of cultural evolution, as it is more logical and depends on investigating the remains of a culture to chart its development. Most processualists understand culture as a system and that justifies their point of view about evolution, as a step-like process. Kent Flannery, for example, described evolution as a bypassing development which takes place in the community’s life system (Flannery and
Marcus, 1976a). Similarly, Gregory Johnson defines evolution as a logistic process. He considers evolution as a number of steps occurring consecutively in the institution’s system (Johnson, 1978; 1982). (Blanton et al., 1993) point out that directionality is more complex than everyone thought. They maintain that looking generally at evolution will directly show a movement from a simple to a complex level; however, further contemplation makes it easier to recognise different types of evolution in short-time variables. This group emphasises that evolution is not a repetitive action during different periods. Instead, it follows the conditions of each institutional level and depends on the surrounding historical and contextual variables. For that, four main variables (scale, integration, complexity and boundedness) are specified to indicate changes in culture. These four variables are the basic components in each culture, and in this case, they allow for conducting easy comparison over time and space (Blanton et al., 1993). Hence, Flannery (1995) emphasises the crucial role of social taxonomies in characterising the recurring organisational patterns of human history (Flannery, 1995).

In this sense, most scholars advocate investigating the material culture and archaeological records in order to understand cultural evolution and what happened to a civilisation’s political, economic, social and urban systems in the past. For instance, from Spencer’s point of view, investigating public architecture is very beneficial to understanding a culture’s political evolution (Flannery and Marcus, 1976a; b). Also, to determine the relationship between religious and political evolution, Drennan (1976) studies ritual artefacts and depends on what they may reveal (Drennan, 1976). Ugarit has a huge archive of archaeological reports and comprises very rich architectural and urban fabric. Therefore, investigating these elements will be essential for the interpretation of Ugarit’s past and the development of the civilisation’s cultural system.

Cultural evolution is a comprehensive process that combines all types of change. Many scholars believe that political evolution governs the other two evolutionary aspects, economic and urban; however, thinking logically, they are mutually related. Therefore, it is not possible to consider one specific type separately from the other as they are interrelated. From a spatial-form perspective, it is essential permanently to
establish correlations between the evolution process and its consequences on land; it is a sufficient method to have a logical justification for the evolutionary studies’ deductions, represented in spatial or physical forms. For instance, any development in the political sector should be accompanied by the appearance of new types of building and technology, commanding more land and people, and the launch of new internal or overseas trade routes. Anthropologists (Diener, 1980; Rosenberg, 1994; Spencer, 1993) promote the value of this hierarchical processual approach in studying cultural change. This type of evolution is always associated with the increase of the land scale dominated by new developed organisation, and justifies the expansion of some towns’ prevalence over other surrounding towns or villages (Crumley, 1995; Spencer, 1994). In contrast, any economic development can result in an increase in the polity’s power, as was the case of Ugarit. That only can bring about changes in the culture system and its political structure. These changes can transform the culture system and justify the relationships between the three socio-political forms in culture system (scalar hierarchy\(^3\), control hierarchy\(^4\) and heterarchy\(^5\)), suggested by Carole Crumley (Crumley, 1995). Therefore, the chain of cultural evolution process results from spinning the developments in the three main strings (economy, polity and urbanism), all together producing a plausible description of the whole evolution process that had occurred to the cultural system.

### 3.3.4 Values’ theories and classification

Since values and conservation are closely associated concepts, the first step in the conservation process is to identify the heritage cultural values. Thus, This PhD will involve the values-based approach (see section 4.3.3) in the conservation of the archaeological site of Ugarit and, therefore, it is very important to understand the value’s concept and answer questions of how values are measured and change through time. Moreover, taking into account the contemporary public perception, the

---

\(^3\)Scalar hierarchy is represented by family, village, region, and so on and characterised by mutual influential interaction between its levels (Crumley, 1995).

\(^4\)Control hierarchy is represented by the head of village, chief of region, and so on. This level always tries to dominate the lower levels with unbalanced relationship (Crumley, 1995).

\(^5\)Heterarchy is distinguished as a neutral structure, as each level has its own importance with respect to each other. The most interesting aspect in this type is that it proposes that the leadership can be transferred between levels in accordance with time and context (Crumley, 1995).
issues of values categories and the questions of how, why and when each value is chosen to be conserved and presented, are discussed.

**Thompson's Rubbish theory**

Since time has its effects on the physical conditions of any object, the held value subsequently changes and may convert into another type of value (Hucklesby, 2008). This point of view is clearly described in Michael Thompson’s Rubbish theory, in which he explicates the mechanism of object’s value change. Thompson clarifies that values might change in different forms. He adds that object mostly starts out having a functional or fashion value; however, over time this value becomes diminished and in some cases the object ends up without any significance. This phase is what Thompson calls the rubbish phase. There are many reasons for this shrinkage in the value, such as physical destruction, changing in fashion or growing interest in other types of objects. Consequently, object might stay in the rubbish phase for a long period, sometimes forever. In some cases, the object still has physically survived in the rubbish phase and new interest from different perspective grows, the so-called potential values the object holds in rubbish phase (Hucklesby, 2008; Parsons, 2008; Thompson, 1979). Doubtless, the object’s value, in this case, changes in phase from rubbish to the so-called durable phase in which the object is highly valued, and has an opportunity to be conserved and presented. Subsequently, the mechanism as illustrated in (figure 3.5) has its own paths from transient to rubbish and finally to durable phase. These paths, as Thompson maintains, cannot be reversed except in very exceptional cases (Parsons, 2008; Thompson, 1979).

**Figure 3.5: Michael Thompson’s Rubbish Theory: the mechanism (Parsons, 2008)**
In her PhD thesis, Claire Louise Hucklesby develops a similar point of view regarding values changing mechanism. She presents a Theoretical Artefact Value Curve (TAVC) (figure 3.6). The main difference to Thompson’s principle is that Hucklesby’s graph could be re-occurring during the object life, depending on the object durability as well as cultural and economic circumstances, which never happens in Thomson’s theory. Hucklesby divides the object life into three main phases; they are Activity Induced Diminishment of Utility (AIDU), Latent Minimal Utility (LMU) and Reinvigorated Utility (RU) phase. The object, she simplifies, starts its life with enough significance that fulfils its functional role. After that, and during the first phase, the importance of this object starts to diminish until it reaches the lowest value which object might have in the second (LMU) phase. If the object has not been lost in the second phase (mostly not), it starts to gain back its importance, but in a new value in the last (RU) phase (Hucklesby, 2008). Consequently, in both perspectives, the value is perceived at the highest point that the dotted curve reaches; in most cases, it happens in the third phase, but there remain exceptions. This identified which values are to be preserved and presented.

Figure 3.6: Theoretical Artefact Value Curve (TAVC) (Hucklesby, 2008).

Alois Riegl (1996) developed similar mechanism; however, he emphasised the bridging between the two phases of the object values. Riegl advocates an appreciation of the object’s values through a contemporary perception in order to enhance its relevance to local communities without compromising its original values;
this is referred to as the cultural significance of the object (Riegl, 1996). Bernard Feilden supports Riegl’s concept: he encourages the conservation of the heritage cultural significance (cultural property) (Feilden, 1979) which comprises the ancient people’s tangible heritage (architectural, urban and artistic elements), as well as its associated cultural, social and traditional aspects. Feilden introduces conservation as a dedication to preserving the heritage cultural significance, rather than only curing its physicality, using a range of aesthetic, historic, scientific and technical methods.

**Values classification**

Recently, cultural heritage values have received much attention by different authors (Ashley-Smith, 2013; Darvill, 1995; Hucklesby, 2008; Lipe, 1984; Thompson, 1979). They all highlight the importance of these values in understanding the civilisation’s cultural property (Hucklesby, 2008). Accordingly, heritage values have been categorised differently by scholars with different points of view. William D. Lipe, for instance, believes that economic, aesthetic, associative, symbolic and informational types are enough to cover the cultural heritage values (Lipe, 1984; Timoney, 2009). Darvill reduces these types into three main categories: use, option and existence (Darvill, 1995; Timoney, 2009). Great desire has appeared towards including other types of value. In this attempt, Clare-Louise Hucklesby proposed new classification, based on Jonathan Ashley-Smith’s categories in 1999. She has generated six main categories (functional, cultural, personal, capital, aesthetic and educational) to aggregate all values, held by any cultural heritage (Hucklesby, 2008). Also, Riegl encouraged thinking about heritage cultural significance, which includes historic, artistic, deliberate commemorative, use and newness values; Feilden has summarised them under the concept of cultural property (cultural significance) on which the conservation process should focus. In this thesis, studying the conservation of archaeological site will involve different disciplines such as archaeology, architecture, and archaeological and architectural conservation. Therefore, it is very important to make a balance between the values categories and relevant realms. Accordingly, it would be appropriate to categorise the values under three main lines that on one hand comprise all values outlined in Hucklesby’s prototype and that, on the other hand, are symmetric with the involved disciplines. Concisely, the cultural significance of archaeological sites holds historic, artistic and cultural values.
The values of any cultural heritage are hardly classified, as some values contribute to different categories. This is merely explained by the mutual relationship between the involved disciplines in the conservation process, Archaeology and Architecture. Therefore, since this research is carried out by an architect, it is worth trying to understand this relationship and how architecture can play a key role in reading and interpreting archaeology for the identification of the cultural values embedded in archaeological sites or any other case studies.

3.3.5 The role of architecture in understanding archaeology

The role of material culture
Material culture of any heritage contains huge amounts of information about people’s history, rites, relations and techniques. This information cannot be acquired off site, as the context plays important role in characterising this information and ascribing them to the ancient indigenous people. Conversely, material culture works with its interpretation to form its context (Gamble, 2001). Thus, the relationship between material culture and context is reciprocal (McGuire, 1992). Many definitions have been ascribed to the material culture by different archaeologists. J.D. Prown, for example, defines it as the produced material of specific civilisation which manifests the civilisation’s values and achievements (Prown, 1993). McGuire (1992) agrees with Prown and emphasises the importance of understanding the environment of material cultural production, especially the social context and relations. Moreover, understanding the material culture types and dates improves archaeological fieldworks, as Ivor Noel Hume maintains. His thoughts create a special milieu that encourages specialists to not only appreciate but also investigate past indigenous lifestyles and achievements. This aspect is considered as the first faithful leap away from archaeology in an attempt to include other social studies (Hodder, 2001).

Information about the ancient people can be imported using different resources, such as architecture, texts and personal and professional objects. As for Ugarit, the site is chronologically located between history and prehistory; it is more situated on the historical side. Consequently, some information can be acquired from scribed tablets found on and off the site. The rest of information can be imported using a deductive approach that involves many facts and variables, in order to produce a clear
interpretation of the architectural, urban and social settings of the city. This interpretation should be governed by three main regularities: time, form and space (Gamble, 2001). Therefore, architecture has to be one of the main catalysts for the interpretation of Ugarit’s past.

**The role of architecture**

Major developments have occurred to the archaeological interest in different architectural remains, after many years of merely concentrating on monumental buildings. For example, Childe built his civilisation trait theories on analysing monumental structures to evaluate a culture’s political level and whether it was a full civilisation or not, ignoring the role of other discovered structures (Steadman, 1996). The focus now has transferred to other types of architecture in the discovered sites (domestic, religious, etc.) that would give insight to the common ancient people’s life, thoughts and achievements (Fisher, 2009b; Sanders, 1990). This movement in archaeology was brought about by scholars’ belief in the equal importance of architecture to materialising a civilisation’s social, economic and political shifts, looking beyond the political and administrative systems. Thus, scholars had to move out of the royal district to other parts of the city to understand how people and their everyday life had been affected by the evolution which may have been driven by areas like the palace, and how that had affected the overall complexity of the city.

Using architecture in understanding archaeology has become a significant approach to formulating the best possible interpretation of the past. Although scholars were aware of the role of architecture in studying ancient cultures from the early 1900s, they had waited for many decades before starting to investigate architecture more deeply, and not only as artefacts that are only useful for dating (Saile, 1977). After that, most scholars believed that ignoring the architecture of any archaeological remains will result in an incomplete interpretation of the past. Architecture necessarily holds information that enriches the interpretation process with essential knowledge (Vila et al., 2003). By the end of the 20th century, more attempts had been found to inspire more theories and methods in studying culture’s architecture in order to achieve the tangled culture’s past and the theory of architecture (Kent, 1990; Steadman, 1996). Regarding evolutionary aspects, many scholars (Bill Hiller and
Hanson Julienne, for instance) believe that there is an intrinsic link between the population shifts (achievements) and their architectural and spatial forms (Hillier and Hanson, 1984). Also, Flannery (1972a,1972b) emphasises the actuality of intimate correlations between architecture and society’s evolution (Flannery, 1972b; a).

The most recent appropriate method for the study of evolution through archaeology and architecture is the stratigraphic analysis, used to understand chronology through a spatial analysis of the building and its landscape (Vila et al., 2003). Activity area approach is also useful for it uses architecture and artefacts found on the site to give a clue about the use of these buildings and also their people’s economy (Steadman, 1996). This approach can draw not only missed physical boundaries (Smith and Schreiber, 2005) of the buildings’ architecture, but also non-physical (social) boundaries, such as social rules and classification (Kooyman, 2006).

Since architectural spaces, domestic spaces in particular, had sequentially or simultaneously different functions, there is no way of achieve the exact interpretation of the real past. The agglutinative relic’s fabric, particularly in the areas of domestic use, usually increases the potential multivalence of the real past interpretation especially in the cultures of low political and social levels. However, and as Susan Kent confirms in her book “Domestic Architecture and the Use of Space: An Interdisciplinary Cross-Cultural Study”, the higher the political and social level in any culture the more obvious the segregation is between buildings, and especially between domestic architecture and public buildings. This is owing to the change of their space conception and the use of architecture at a higher level (Kent, 1990; 1993). Consequently, the political and social position of any culture ultimately affects its interpretation as well as the differentiation of buildings function. As this is obvious in many places in Ugarit, it subsequently confirms the advanced political level the Ugaritic kingdom had reached during its last phase. Hence, these principles are adequate to guide the architectural readings, analyses and observations in Ugarit at different (architectural and urban) levels.

Many archaeologists follow these approaches, but they are always encountered by the fragmentary status of archaeological remains, the prehistoric remains in particular, due to the shortage in buildings’ documentation. Thus, to grasp the spatial
and social settings of Ugarit’s buildings, domestic architecture in particular, it is crucial to incorporate a method that allows sufficient representation of the level of social interaction of architectural spaces. Space Syntax is a conceptual framework and analytical method, developed by Bill Hillier and Julienne Hanson in their book “The Social Logic of Space” (1984) and other publications (Hanson, 1998; Hillier, 1996; Hillier and Hanson, 1984). This approach allows to differentiate spaces used by inhabitants from those which were open to inhabitants and visitors and may have been used for different functions. In this sense, the approach presents the relationship between spaces and the different penetration level which visitors (workers and customers) and residents had into the structure. This variable can be utilised to represent the degree of privacy and its hierarchy which Ugaritic people had within their buildings.

One component of the Space Syntax Approach would be useful and easily applied on the domestic structures in Ugarit; it is Convex Spatial Analysis, commonly known as Access Analysis (Fisher, 2009b; a). This method is used to present the permeability and control of internal spaces. It also helps in reflecting social interactions inside the building. This mapping system will be applied mainly on houses from the four domestic areas of Ugarit. The house will be represented by a schematic diagram, which shows the level of integration and social interaction each space has with other surrounding spaces in the house, the basic unit of this analysis. Although this method usually uses some equations and calculations besides the graphs to determine spaces’ characteristics and social interaction, a qualitative analysis will be made only of the graphs to estimate the level of social interaction for internal spaces and follow the concept of privacy in Ugaritic structures.

3.4 Summary
It is obvious that there are many factors governing the understanding of cultural heritage and the verification of its cultural values. Archaeological approaches, methods and principles are not the main regulators of this process, especially when architectural reading is carried out. These approaches and methods will not be applied to Ugarit’s ruins for the collection of new data. Rather, they will play an essential role in reframing the presentation of architectural reading and analysis of
archaeological ruins, aiming to highlight and categorise their cultural values. Applying some methods, Access Analysis for example, is essential for filling in certain gaps that have not been taken into account in archaeological reports. Material culture, architecture in particular, faithfully holds the ancient people’s identity, social attitude and status and, therefore, its analysis plays a crucial role in refining the archaeological and architectural interpretations of the past. Consequently, directing the analysis of the ruins and producing some original knowledge are the main purposes of the understanding of these archaeological terms. This knowledge will be prepared in a coherent network to embody archaeological and architectural conservation debate, which will be explored in more detail in the following chapter.
Chapter 4 Conservation Concepts and Principles

4.1 Introduction

Conservation of archaeological ruins is a very advanced process in the conservation field. This task requires both the successful application of a unique concept and having sufficient relevant experience. Thus, the employed concept to preserve and present archaeological sites must result from a combination of firm architectural and archaeological understanding of both site and theory. For that reason, the type of archaeological ruins affects the direction which the conservation process takes. Consequently, the presence of an archaeological site has its special implications, concerning related sciences and derived principles, on the trajectory that the conservation process takes. Also, site values are the most influential aspects that govern its conservation. Thus, this chapter will discuss the key aspects and principles to be considered in the conservation of archaeological sites. Further, it will present the value-based conservation approach, which will be reviewed in detail and the rationale for its precedence over the “living heritage” approach for the conservation of the City of Ugarit.

An apt conservation attitude requires a strong combination of archaeological and architectural conservation concepts and thoughts, which establishes strong framework for, and makes efficient the preservation and presentation of, the site’s cultural significance. Thus, relevant architectural and archaeological conservation concepts and principles will be reviewed considering the ruins history and characteristics. The review focuses on the development in conservation thoughts as well as the influence of international conventions and charters on the development of specific conservation principles (e.g. authenticity). Accordingly, in order to achieve a coherent conservation plan for Ugarit, the call here is for an interdisciplinary conceptual framework which manifests the interaction between archaeology, architecture and conservation. Such framework is strongly recommended so long as there is good understanding of the intangible heritage (Orbasli, 2008).
4.2 The presence of archaeological site

This study focuses on Ugarit, an archaeological site. Thus, it is very important to know what that means and how it directs the conservation process. The presence of such a type of heritage (archaeological site) in conservation studies distinctly involves the concept of surrounding context (Matero, 2006; Orbasli, 2008) and destruction factors, such as human negligence and natural effects (Berducou, 1996). These ingredients collectively establish the real environment in which the archaeological site is located. For that reason, many authors emphasise the key role of the whole context and environment in conserving cultural heritage sites. Orbasli (2008), for example, insists on the importance of considering the surrounding contextual, social and political settings in archaeological sites conservation.

Justifications can be derived from the fact that this context has been created through the whole civilisation’s history, including its movement, encountering and association with other civilisations (Matero, 2006). Consequently, this context holds many values and events, contemporary with the ancient civilisation’s life. Thus, context is the narrator who tells the civilisation’s story and conveys the site’s messages. John Ruskin, the leading English art critic of the Victorian era and the writer of “The Seven Lamps of Architecture”, stresses this point and maintains that any building or site should be conserved in accordance with the surrounding context and environmental settings (Orbasli, 2008).

An archaeological site does not only reflect social aspects and identity of ancient society, but also represents the memory, history and national identity of today’s people (Carbonara, 1996; Orbasli, 2008). This identity has been created by ancient people throughout history, using their own methods and experience (Matero, 2006). Thus, it is part of their contribution and belongs to subsequent generations’ memory - both present and future. Consequently, the conservation of cultural heritage is quite an important process that properly reconstructs past civilisation’s messages (Wheeler, 1992). Therefore, passing the heritage message into the future generation’s memory is an unseen aim of the conservation process (Berducou, 1996). Considering the local community is essential too, as this heritage is part of their history and memory too (Orbasli, 2008). Thus, produced narratives should consider providing those people with the original architectural and urban experience of ancient people.
Therefore, to point out the influence of this type of heritage, that is the archaeological site, in governing the conservation process, it is important to thoroughly review and understand the involved science and principles that play a key role in the interpretation and reconstruction of archaeological ruins and people’s past.

### 4.2.1 Related sciences

An archaeological site comprises different types of inherited materials, buildings, objects, events, and traditions, among others. For that, its conservation drives scholars to consult with different disciplines during the whole process. Archaeology and architecture are effectively utilised, in addition to some secondary realms that help to accomplish the site preservation. In this sense, monuments, even the whole site, are merely regarded as complex artefacts which can be studied by archaeological science to reveal their values, legibility, and authenticity (Matero, 1993). Carbonara (1996) supports this idea and considers all artefacts, buildings, and sites to be works of art (objects) when they undergo conservation. Archaeological sites have power, spirit and social values that can be clearly perceived by archaeological science and presented using architectural and conservation procedures (Matero, 2006).

Consequently, the presence of archaeological site in conservation brings together many sciences that participate in the inclusive conservation process. In addition to archaeological science, architecture plays a considerable role in supporting conservation attitudes; after all, the site’s physical architectural and urban fabric makes it both an archaeological-architectural candidate for conservation-bound investigation. Both archaeology and architecture form the information spring from which conservation, the third related discipline, derives its approaches and principles to form archaeological and architectural conservation thoughts and principles. This theoretical base governs the preservation strategies and procedures throughout.

### 4.2.2 Derived principles

Conservation of archaeological site gives rise to many principles that help to achieve proper physical protection as well as spectacular and educational presentation of the ruins. Four main principles can positively contribute to the conservation proposal of
Ugarit; they are stratification, restoration of fragments, memory and musealisation. These four concepts work together to preserve and present the essence of the archaeological site to the public in an appropriate manner. The principles in question should take into account that presenting the archaeological site of Ugarit to the public must ensure people’s safety within the ruins and protect the architectural fabric of the city from visitation flux consequences. The following sections present a detailed overview of these principles.

**Stratification**

The evolutionary perspective in any civilisation guides archaeologists not only to study the excavated ruins, but also think deeper of the configuration of their subsurface layers. This, archaeologists maintain, is a very important issue to acquire for understanding the site history and movement phases. Stratigraphy of any archaeological site is an important principle for both archaeologists and geologists. It provides them with valuable information about the archaeological stratifications and the interrelationships between these layers. It also tells archaeologists more about both the movement and evolution of the ancient civilisations that occupied the site. Moreover, stratigraphic order reveals detailed and significant information that verifies the civilisation’s hypotheses and helps to establish the site’s physiographic history.

In Ugarit, this principle made a vital contribution to the understanding of site history. The ancient history of the site, dating back more than six millennia, was stratigraphically divided by the French archaeologist Claude Schaeffer into five main stages based on two archaeological soundings which had been made at the highest point of the site, the Acropolis (see section 3.3.3: The origin of civilisation) (Curtis, 1985; Marchegay, 2008; Schaeffer, 1935; Yon, 2006). This distribution of layers guided Schaeffer hierarchically from the bottom layer of the Neolithic period 8000-6500 BC through to the Middle and Late Bronze Age layer, which is represented by the current excavated fabric of the city (figure 4.1). Studying these layers has unearthed a hidden evolution process that occurred in Ugarit between 8000 and 1200 BC. This evolution is not represented anywhere of the city, out of the archaeological soundings. However, the earthquake, the catastrophic event which occurred in
Ugarit’s history around 1250 BC, contributed to another type of stratigraphy which existed in the upper layer, the excavated Middle and Late Bronze Age structures. Both stratification patterns contribute to the perception of the city’s history and evolution and people’s attitudes. The effects of the earthquake further highlight the urban and architectural concepts and experiences that Ugaritic people encountered during the last phase of the city.

Figure 4.1: (a) Claude Schaeffer’s sounding SH (Yon, 2006). (b) Diagram illustrates the historical stratification of Ugarit as it has been demonstrated in the sounding made by Schaeffer.

**Restoration of the fragments**

The fragmentation concept is twofold. On the one hand, it related to the materiality of archaeological objects. In this case, fragments restoration principles mainly work on rebuilding the materiality of archaeological relics of the past using their authentic fragments. The main aim then is to represent the past physically and restore the objects’ identity and power (Timoney, 2009). On the other hand, the concept might refer to human societies. In that case, enchainment and accumulation are considered the most appropriate aspects to be followed, parallel to fragments restoration, in representing fragmented objects (Brittain and Harris, 2010; Chapman and Gaydarska, 2010). Clive Gamble supports this point of view and emphasises its centrality in reconstructing the history and evolution of any ancient society (Gamble, 2007b).

Restoration of the fragments is one of the most important principles not only in archaeology but also in architectural conservation science. Many scholars, Cesare
Brandi for example, adopted it to restore disassembled works of art (Brandi, 2005; Carbonara, 1996). Additionally, Nikolas Balanos and Anastasios Orlandos had depended on this notion to form their principles, Anastylosis and Anasteloseis respectively, for the buildings restoration (e.g. the Parthenon) (Dimacopoulos, 1985). Consequently, restoration of fragments is a multi-scale principle which can be applied at different levels (artefacts, work of art, buildings) so much so that its application reaches the urban scale to connect between fragmented areas (site level).

The current condition of Ugarit is represented by the fragmentary situation on architectural and even urban scale (figure 4.2); the discovered areas on the site are disconnected from each other by unexcavated parts. These areas are not only physically disconnected; they are also historically disaggregated between the Middle and Late Bronze Age periods, representing the urban development of the city between the Acropolis (2000 BC) and the Royal Palace (1500-1300 BC).

![Figure 4.2: Schematic plan of Ugarit that shows possible connections between fragmented areas.](image)

1 - Royal Area  
2 - Residential Quarter  
3 - House of Yabinu  
4 - The New House  
5 - City Center  
6 - Main Street area  
7 - South City  
8 - Acropolis  
9 - South Acropolis slope  
10 - Lower City  
11 - House of Urtenu  
12 - North Residence  
13 - The Stone base of the bridge
Archaeologists and architects of the mission to the site have exerted significant efforts to connect between these areas. Based on their long experience and understanding of the site (Yon, 2006), they proposed many routes to connect between excavated areas of the city; however, they all were hypothetical. They always emphasised the importance of future excavations to confirm their hypotheses. Based on the above, the current PhD research focuses on restoring fragments at an architectural level in order to facilitate easy reading of the physical fabric. Additionally, the study is responsible for establishing proper physical and chronological connections between fragmented areas, based on urban analyses and appropriate narratives of the whole city.

**Memory**

Memory generally concerns some key events, resulting from the relationship between people and place. It is not a static concept because people, places and their interrelationships keep changing. Consequently, memory and events are fitted in a spatial framework (Muller, 1999). Principally, collective memory is an important aspect that influences both politics and society (Weaver and Matero, 1993). In his book, “The Social Framework of Memory”, Maurice Halbwachs\(^6\) exerts great efforts to disembarrass memory from its subjectivity. He maintains that memory is simply a result of minds’ cooperating within the society structure (Halbwachs, 1992). Also, both Emile Durkheim\(^7\) and Pierre Nora\(^8\) have immensely contributed to this field. Durkheim started writing about commemorative ritual in his book “The Elementary Forms of the Religious Life”. His thoughts have been met with acceptance from Halbwachs who was very keen on distinguishing between history and social (collective) memory. A people’s context, Durkheim insists, is essential; it is the backbone of collective memory (Durkheim, 2000). John Ruskin also skilfully created his architectural perspective of memory and emphasised that building cannot be recalled if it is not beautiful and significant. In other words, if a building does not

---

\(^6\)Maurice Halbwachs (1877-1945) is a French philosopher and sociologist and considered the most memorable scholar who worked on collective memory aspects.

\(^7\)David Émile Durkheim (1858-1917) is a French sociologist, social psychologist and philosopher. He is commonly known as the father of sociology. He was considered as the principal architect of social science.

\(^8\)Pierre Nora is a French historian and very well know through his work on French identity and memory.
have meanings and special connections with its builder, user and their successors, the restoration procedure will never take place. Ruskin pointed out that beauty and significance belong to the memory of ancient people and their successors (Jokilehto, 1999; Wheeler, 1992).

Although Ugarit had hidden beneath the hill for more than 3000 years, building Ugarit’s collective memory was started with the help of different resources before its discovery. The first trigger of the discovery of Ugarit was a tomb, accidently unearthed by a local peasant. This finding has catalysed the French mission, Schaeffer in particular, to think about and search for the civilisation’s sites, to which the discovered tomb is related. Also, the first written source that mentions the name of Ugarit was found in Ebla. It dates back to the 3rd millennium BC (2400 BC). Moreover, some discoveries in Mari in the Euphrates from the 18th century BC made reference to Ugarit too (Bordreuil, 2000b; Klengel, 1992; Yon, 2006). Later on, in the 14th century BC, Ugarit had been profusely indicated in the written resources of Alalakh at the Hittites capital of Boghazkoy and Tell El-Amarna in Egypt (Bordreuil, 2000b; Klengel, 1992; Lackenbacher, 2000; Saadé, 1979; Yon, 2006). These external resources facilitated Schaeffer’s task and guided him to finding the original and most important site of Ugarit, the capital of the civilisation. After discovering the site, numerous scribes, found all around the site, and the architectural and urban fabric, along with the external resources, play a key role in building the collective memory of this site and its civilisation.

**Musealisation**

Musealisation is a strategy by which the urban space is transformed and the past is reconstructed depending on the influence of cultural, social and aesthetic aspects. This definition primarily modifies the museum’s aspect to become the event space (Muller, 1999). For this purpose, the significant musealisation principle, especially in the case of archaeological site, does not mean fundamentally showcasing the objects in a museum with the aim of providing visitors with some basic information about their period, style and function. Rather, it is the method by which a specific and active relationship can be established between visitors and objects, whatever the objects may be (artefacts, buildings or even entire sites). This principle can be
outlined by displaying the object in a way that allows people to see it from inside, outside, or both in order to actively promote their understanding of its materiality and history. It allows visitors to develop a strong appreciation for and relationship with the musealised object or space through the exposed narrative. This principle has very strong educational values (figure 4.3).

Figure 4.3: Musealisation approach at Villa Romana del Casale outside Piazza Armerina © UNESCO.

The concept of musealisation essentially uses the urban space to display aesthetic aspects. Thus, the urban space does not only comprise memory and aesthetic experience, but also accommodates multicultural involvement. In this sense, Musealisation is ultimately the urbanisation of the museum where the spatial boundaries are dissolved (Muller, 1999).

The musealisation principle also plays a significant role in linking fragmented areas in any archaeological site. Keeping this concept in mind, scholars suggest some linking routes between the site buildings or areas. These links are built upon architectural and urban analyses, archaeological hypotheses, the presentation methods that scholars prefer, or all of the above. In either case, the ultimate goal of this principle is moving the site out to be self-described as well as easily communicated with and appreciated by both specialists and the public. Many projects have adopted this concept in different forms, and (figure 4.4) shows some examples of implementing the musealisation principle on some archaeological sites.
In Ugarit, using this principle is quite necessary for exposing all embedded educational values in the ruins as well as facilitating the visitors’ movement within one area and between different areas of the city; this principle enables the conservation of the ruins and the representation of their values within the original context and allows visitors to perceive these values through self-experience. Establishing effective communication between the ruins and public visitors strongly enhances the fabric condition and protects it from further degradation by inappropriate visitation flux. The musealisation principle will be utilised on both architectural and urban scales in the City of Ugarit. Based on the concept of cultural routes, the output of this concept will facilitate the understanding of the ruins, the site’s history and the original architectural and urban experience of Ugarit during the Bronze Age period.

4.2.3 The Relationship between single buildings and the whole site

The presence of urban and cultural aspects characterises and differentiates site conservation from other types of heritage. These aspects concern not only the site’s urban fabric and functions distribution, but also the traits of past civilisation’s daily life. They, moreover, investigate political and economic issues that may be highlighted by some key features on the site. Additionally, urban and cultural aspects accentuate the essence of archaeological site and help to study its history and people’s memory. This procedure requires a specific building or sometimes group of buildings to be displayed. Precisely, even though a building only forms one single part of the site, the whole site’s system process and memory are sometimes
represented by a key building. The example most suitable for this case is Knossos Palace. On this site, the palace was enough to dominate and describe the whole story of the site, even though there are numerous other buildings (Villas) around it.

![Figure 4.5: Knossos Palace, Greece © Theodossopoulos, 2013.](image)

On the other hand, some archaeological sites cannot be precisely represented by one building. Instead, many buildings or even areas of the archaeological site may be required to reconstruct the site and its civilisation’s past. The best example to describe this type is Hattusa, the capital of Hittite Empire in the Late Bronze Age period, in Turkey. This site could not be represented by one part. It needed the citadel area, royal palaces, temples area, and public city to display the site and the achievements of the Hittites civilisation over time; each area contributes with different significance to the city’s conservation and representation approach.

![Figure 4.6: Hattusa, the capital of the Hittite Empire in the Late Bronze Age period: (a) the site’s map © UNESCO, (b) Artistic reconstruction of the city © UNESCO.](image)
Ugarit belongs to the second type, as each area shows a different kind of information regarding the city life in the past. For example, the Royal Area strongly presents the city’s political and economic systems and their evolution whereas the domestic areas accommodate Ugaritic people’s everyday life domestic, social and religious aspects. The temples in the Acropolis area are vital for the understanding of the city, given that they were the start point of the entire urban agglomeration during the Middle Bronze Age period. Furthermore, appreciating the city’s architectural and urban development requires at least the involvement of two dominant areas in the city: the Royal Palace and the Acropolis temples. The domestic areas are also important for reconstructing the full urban dynamic between the two focal points of the city (the temples and the Royal Area) and, subsequently, reconstruct the city’s urban structure, experience and morphology, which embody not only architectural and urban concepts, but also people’s everyday life and cultural and social attitudes.

Therefore, to achieve a sufficient and consistent conservation proposal, it is highly significant to think about conservation in both architectural and archaeological dimensions. To conclude, reviewing architectural as well as archaeological conservation concepts, thoughts and principles is believed to contribute to the establishing of an appropriate conservation framework and enhancing it with advanced principles and architectural procedures.

4.3 Architectural conservation

Architectural conservation is the mechanism that applies on changes to historical objects with the aim of prolonging mankind’s built heritage in terms of its material characteristics, history and design integrity (Orbasli, 2008; Weaver and Matero, 1993). Style, form and physical structure of buildings or sites are considered the main architectural design terms on which this process focuses and seeks to preserve. In other words, it is the professionalism employed in creating preservation tools via the combination of art, science, craft and technology (Weaver and Matero, 1993).

The main aims of conservation are buildings and people. On one side, architectural conservation intends to prolong the heritage life and reveal its significance to the public without manipulating any physical or historical settings. On the other, architectural conservation links the physical heritage to past society values (Agnew et al., 2002; Orbasli, 2008) and expose its cultural significance and links to the
contemporary time and society. It also seeks to protect ancient monuments and sites from natural or human threats (Agnew et al., 2002). In this sense, architectural conservation process intends to find out the best type of intervention which implements the conservation goals. Architectural conservation, in broader terms, indicates the issue of regulation, policies and integration with cultural and built environment. It assumes that local community plays a considerable role in identifying their cultural significances in the heritage and developing a suitable approach to protecting and interpreting them.

Architectural conservation is not too different from architectural design, as both of them adopt creative ideas to promote the building function. More attention is devoted in the case of architectural conservation, especially when adding new material to historical building. This indicates that architectural conservation merely combines material conservation and heritage sustainable management (Orbasli, 2008). An archaeological site has a dual perspective in conservation, as it is considered as a place and document (Matero, 2006). In such objects, the conservation process maintains the site authenticity and retains its values for future generations without altering the site historical conditions (Agnew et al., 2002). The architectural aspect of conservation involves different terms and levels of intervention. Restoration and reconstruction are involved in the inclusive notion of conservation as (figure 4.7) demonstrates. They are similar to conservation in objective terms of durability, accessibility and integrity, but less broad as they are related only to physical material treatment (Berducou, 1996).

Figure 4.7: Diagram illustrates the hierarchy of heritage protection concepts.
Thus, conservation is the process that works towards protecting and presenting tangible and intangible evidence of archaeological sites and their ancient inhabitants through applying different levels of intervention.

4.3.1 The development of conservation concepts and thoughts

The concept of architectural conservation has been considered by many international associations and congresses such as ICCROM, UNESCO and ICOMOS (Orbasli, 2008). It mainly focuses on aesthetic, historic and cultural properties of the studied heritage. For this reasons, and before embarking on any conservation journey, it is advised to form a good understanding of the physical conditions and cultural connotations that the heritage fabric has in order to maintain its authenticity, a very important concept in archaeological sites that show the architectural and, in some cases, urban principles of ancient societies. It is worth mentioning that choosing appropriate conservation approaches is essential to achieve successful and complete protection (Agnew et al., 2002; Matero, 2006).

The purpose of architectural conservation in archaeological sites extends to include studying and displaying the site to the public. Additionally, the conservation process involves the issues of accessibility and walkability through the site’s historic fabric. The intention here, as had been declared in a cooperative conference organised by ICCROM and UNESCO in Cyprus 1983, is to promote the site’s visual accessibility and make its messages clearly displayed for scholars and the public (Matero, 2006; Orbasli, 2008). In situ conservation is a highly important approach to recovering the site’s cultural significances and revealing as much of its information as possible. Scholars would mainly adopt this approach unless the natural environment does not allow it (Matero, 1993; 2006). Considerable emphasis was placed on this concept in 20th century conservation attempts, although it had been applied to some case studies in the 19th century (Jokilehto, 1999).

The 19th century conflicting restoration concepts and principles in Europe, some scholars agree (Jokilehto, 1999), had created the fertile ground, from which conservation and restoration principles of the 20th century were derived (Matero, 1993). The differences between faithful restoration (John Ruskin and William
Morris) on the one hand (figure 4.8a), and stylistic restoration (Viollet-le-Duc) on the other (figure 4.8b), have been reported in many publications. These differences are considered to be the essential axis, around which all conservation and restoration principles have been built and developed (Denslagen, 1994; Orbasli, 2008; Pevsner, 1969). Accordingly, specialists have been categorised by Canon Raymond into two groups: maximalists who advocate the unity of style theory and the minimalists who support original archaeological and documentary values (Jokilehto, 1999).

Some scholars have employed the concept of stylistic restoration to fulfil specific goals through historical building. For example, nationalist aims had catalysed German restorers, particularly Friedrich Gilly and Gasper David Friedrich, to bring back specific forms of historic buildings in order to impose national values and unite German people’s outlooks. For that, Johann Wolfgang Goethe, Johann Joachim Winckelmann and Karl Friedrich Schinkel all sought to conserve the historical values for educational purposes, aiming by doing so to enlighten young generations. In this sense, the in situ protection and presentation principles have been advocated for the first time by Schinkel, through the establishing of local and in-context museum. The main aspect was to re-establish buildings architectural form and the significant achievements of surviving periods (Jokilehto, 1999).

Historical stratification is not the core aspect of stylistic restoration; however, it has occasionally been considered in some of Schinkel’s projects, for instance Cologne...
Cathedral and Marienburg Castle. Schinkel’s work on these two projects had constituted the first emergence of respecting stratifications in historic structures. Although the aspect has been applied to some projects, it was not deliberate enough to be launched as a clear stratification principle. Additionally, function requirements, at some points, governed restoration aspects. Von Quast’s work on Abby Church of Gernrode in 1859 is a good example of this case. As a result, stylistic restoration concept had been applied to many important and famous projects all around Europe, such as Notre-Dame Cathedral in France, Marien Castle in Germany, Durham Cathedral in the UK, and Florence Cathedral in Italy (Jokilehto, 1999).

Although stylistic restoration had substantial influence on heritage protection thoughts and achievements, restorers were opposed (or scrutinised) in all of Europe. The desire for conservation has obviously grown especially after many publications have appeared criticising restoration and its implications on heritage. The most important event in this vein was the SPAB’s (Society for the Protection of Ancient Buildings) manifesto written by William Morris and his colleagues in 1877. This manifesto is considered the philosophical basis of the SPAB works and the main opponent for stylistic restoration trend. Restoration policies have been reinvestigated and rewritten by the SPAB group and, accordingly, they formed the basis for the modern conservation policy. SPAB group criticised the notion of restoration in protecting the object’s style regardless of its stratification. In their view, the protection must extend over style and time together, depending on critical and independent evaluation of each case (Jokilehto, 1999; Morris, 1877b; a). The influence of Morris and his colleagues’ ideas was not only felt in the UK, but also in other European countries, especially Italy. The most important example of their concept is the conservation of St. Mark’s in Venice. In this project, John Ruskin had criticised the cathedral’s 1840’s restoration and worked on the new protection campaign after 1877 (Jokilehto, 1999).

Another criticism of stylistic restoration was started in France by journalists and novelists alike. Anatole France⁹ had devoted his work to criticising historic building restoration, especially the restoration of Notre-Dame Cathedral conducted by Viollet-

---

⁹ Anatole France (1844-1924) is a French poet, journalist, and novelist.
le-Duc. He also accepted and supported Victor Hugo’s thoughts concerning the preservation of national memory (Jokilehto, 1999).

Both sides in the restoration conflict, stylistic and faithful restoration, were not deemed satisfactory for many scholars in Europe, for the conflict was just one between style and origin, in addition to the fact that both sides comprise falsifications (Jokilehto, 1999). It is believed that both approaches are not suitable for preserving the cultural significance of certain types of heritage including archaeological site; however, the conflict between them contributed to more developed approaches that can play an essential role in building a comprehensive conservation framework for archaeological sites. Therefore, great endeavours have emerged in the restoration domain to improvise new critical principles for conservation and restoration. The concept of Critical Restoration\(^\text{10}\) (restauro critico) applies systematic and independent investigation to the object’s history and conditions, taking into account both aesthetic and historic aspects of the object. This concept works on integrating these aspects together without any falsification (Carbonara, 1996; Jokilehto, 1999). Paul Philippot advocates this principle and, like Prosper Mérimée in France, recognises the significance of respecting all historical phases of the object in order to implement successful and complete restoration. Additionally, Philippot champions many principles in critical restoration such as reversibility, minimal impact, compatibility and authenticity without restoring the object to its original condition (Carbonara, 1996; Jokilehto, 1999).

The trend of critical restoration has become strong especially after the international architects’ meetings in Brussels 1897 and in Madrid 1904, at which great assertion had been placed on not allowing stylistic restoration under any condition. That brought about awareness in the public opinion, particularly in France, of restoration’s destructive consequences. Scandinavian countries also have their own attitude which dictates respect for historical stratification and critical evaluation of any addition. That is obviously noticed in Jan Kalf’s (Netherlands) and Lars Sonck’s (Finland) works during the first three decades of the 20\(^{\text{th}}\) century. Moreover, a careful

\(^{10}\text{Critical restoration (restauro critico) is a critical conservative approach which resulted from European scholars’ attempts to dissolve the conflict between stylistic and faithful restoration concepts and find new concept that consider more aspects in historic structures.}\)
archaeological study of historic buildings has been advised by Mogens Clemmensen, a Danish architect, to strengthen the prospective conservation principles (Jokilehto, 1999). This aspect is essential in studying the archaeological site of Ugarit. Archaeological reports and material culture hold essential information which will be incorporated within architectural analyses and observations to form coherent and comprehensive interpretations.

In Italy, the voice that was proclaiming critical restoration and conservation principles was louder than its counterparts in any other country. Gustavo Giovannoni, the first scholar to be attracted to stylistic restoration, stresses the importance of an intermediated concept between stylistic restoration and pure conservation. His approach matured in 1929 and aimed to preserve the structure’s authenticity and respect all monuments’ artistic and historic phases. Giovannoni also accepted modern technology under the condition of dating new additions. His principle was presented in the international congress of Athens in 1931, at which critical restoration theory came to life (Jokilehto, 1999). The charter confirmed Giovannoni and his contemporaries’ thoughts. It additionally paid attention, for the first time, to enlarging the protection scale and including the archaeological site with its surroundings in the restoration and conservation concepts. Consequently, the charter of Athens 1931 and 1933 promoted the conservation position rather than restoration. It called for respective restoration where it works. In this charter, scholars had created the basis for the 20th century principles concerning urban heritage preservation (Qing, 2005).

The post-war period testified to great movements in the restoration field and the emergence of reconstruction thoughts. The reconstruction concept has been strongly active, especially in Germany and France, to restore destroyed buildings. Reconstruction works had adopted two main approaches. The first approach focused on restoring (by means of reconstructing) historic structures to their original form, but using new materials nonetheless. On the other hand, the second approach advised to complete the destroyed buildings using available original materials without reconstructing the lost parts; this concept was called a conservative reconstruction (Jokilehto, 1999). The confrontation between these two approaches had resulted in a
firm refusal of reconstruction in its original form and a call for suitable principles that effectively work in restoration, reconstruction and conservation, while simultaneously maintaining respect for the building and its physical surrounding context. Critical restoration theory played a key role in formulating the new principles that promoted the conservation and restoration fields.

A new line in conservation has emerged based on critical thought, which was proposed by critical restoration theory. Scholars, particularly in Italy, stimulated their attempts towards the conservation of historical objects. Although the shifts that scholars added to this paradigm were sometimes nominal, scholars’ attempts played important role in encouraging others to start thinking critically, even about their colleagues’ work. Moreover, these attempts encouraged some scholars to adapt their approaches differently in order to improve their performance on historic structures. For example, the Italian architect and architectural historian Renato Bonelli’s approach is based on removing some part to enhance specific values in the historic monument, although he respects the existing conditions of any structure for these conditions are saturated with past achievements. One of his important approaches, in this sense, is to make correspondence between historic monuments and contemporary architectural concepts (Bonelli, 1959; 1963; Jokilehto, 1999). This correlation results in removing some specific parts.

Bonelli has been criticised by Roberto Pane for his “unity of line” concept and also for the subtle difference between his approach and stylistic restoration. This difference in some cases is not recognisable. Pane had worked on redirecting Bonelli’s thoughts by relying on critical appreciation of the monuments. He upholds anastylosis as a good principle for consolidation, urging the importance of differentiation between origin and new materials. In Pane’s work, the artistic vision of restoration is clearly recognised. He encourages specialists to be creative and critical at the same time. He clearly points out that “Restoration itself is a work of art” (Jokilehto, 1999; Pane, 1948; 1950). Pan’s approaches, the anastylosis approach in particular, is efficient in the case of archaeological site, where buildings are demolished and many of the original materials are available in the vicinity.
Cesare Brandi, whose approach is similar to Pane’s, had a significant influence on pushing restoration and conservation to the critical side. Brandi and Camillo Boito give the characteristics of a conserved object the power to govern the conservation and restoration process. Brandi balances between historical and aesthetic requirements for the restoration process and awards equal importance to the whole image of restored object and to the historical patina which shows the object’s chronology (Brandi, 2005). His concept ignores the object’s use value and focuses more on material, historic and aesthetic aspects. This approach is sufficient in the case of archaeological sites where the original function is not relevant anymore to the present time and its restoration is not considered as a priority. Brandi’s best contribution is his restoration theory in which he constructed his main principles. Appearance, to Brandi, is the essence of any monument and should not be altered. Also, he declares that alteration might occur to the structure, especially when the whole object is facing the threat of collapsing due to structural problems. In this sense, he conditions the addition of new components by guaranteeing object conservation. Accordingly, any addition to historical monuments should be recognisable from a close distance, without affecting the unity of object image from far away. Thus, re-establishing the potential unity is one of Brandi’s main aims, but without falsifying the object or obliterating its historical stratification. This concept does not ignore the future of the object. In this vein, Brandi emphasises the importance of giving opportunity for future conservation works; otherwise, the restoration will be a destructive operation (Brandi, 2005; Jokilehto, 1999).

Brandi’s efforts had extended beyond existing monuments to include ruins. He believes that any ruin has much to tell and for that reason reconstructing and restoring it to original form is not necessary. He criticised many reconstruction projects, such as Stoa of Attalos in the Athenian Argos 1950s and Temple E at Selinunte in Sicily in the 1960s. He justifies his refusal for such reconstructions by maintaining that people during the time would accept the new reality and, as a result, the origin will be lost. Consequently, with his approach, Brandi opens an outstanding gate for critical conservative thinking, especially when he legitimates the restoration in a present period sense without ignoring the conservation of patina of the time. Brandi manufactured two essential keys for his theoretical gate. He insists on the
equal importance of the conservation of object authenticity, on one side, and the historical and critical investigation to suggest any intervention on the other. These keys fundamentally work together in order to achieve successful and complete conservation and restoration projects.

For that, thinking has been turned to concentrate on the available materials (tangible and intangible) of the object. This material is a catalyst to not only develop the object, but also to promote the surrounding area. Also, greater attention has been paid to integrating objects (buildings, sites) with the surrounding physical environment, social context and used disciplines. This integration guarantees efficient interpretation, the integral part of conservation (Orbasli, 2008), and better ways to refine historic narrative and culture identity (Matero, 2006). Accordingly, the concept of cultural property (tangible and intangible heritage) started to be focused upon in 1950 when UNESCO’s meeting in Florence had proposed to institute ICCROM “The International Centre for the Study of Preservation and Conservation of Cultural Property”. The proposal was discussed in the Netherlands in 1954 and also in New Delhi in 1956, when, as a result, it became confirmed and ratified. The key aspect of these three conventions was the definition of cultural heritage (cultural property). Regarding these conventions, cultural property covers moveable, immovable, tangible and intangible heritage, comprised in artefacts, works of art, buildings, monuments and even archaeological sites (Jokilehto, 1999). In his paper “Teoria e metodi del restauro” Giovanni Carbonara endorses this point of view. He maintains that there are no differences between all types of heritage, referred to above, under the conservation process. He additionally concludes that restoration and architectural restoration are not different from each other, and it is the same for conservation and architectural conservation (Carbonara, 1996). From then on, conservation and restoration have been seen as integral parts of the preserving and presenting operations, keeping in mind that conservation is a wider concept that incorporates additional acts. That was manifested in the Venice Charter of 1964, which combined both concepts to protect historical monuments and sites. This charter is based on former charters’ principles in refusing stylistic restoration, respecting the patina of time and in regard to aspects of modern additions. It also advocates Brandi’s principle in balancing between aesthetic and historic
requirements of the conservation process. The distinguishing feature of this charter is the widening of concentration to include a regional level. In other words, in addition to the single architectural monument, the charter suggests enlarging the scale and focusing on urban settings. These settings, the charter points out, can be found in the civilisation’s historical and archaeological evidence, developments as well as historical events. Thus, investigating the civilisation’s archaeological reports and history has become fundamental, as conservators, particularly by the end of the 20th century, had intended to link the studied heritage to national community and landscape. Integrating conserved monuments into contemporary life is, also, a very important aspect in this charter, as it is for the archaeological site of Ugarit.

Consequently, involving the cultural aspect of the studied heritage in conservation process appeared as an important aspect. In this sense, the conservation of heritage, that has cultural significance, has officially come to light in 1979 via Burra charter (revised 1999), that was held in Australia. The involvement of cultural aspects contributes to restoring the identity of ancient people and the past that has formed them. Caution approach11 is advocated by the charter to avoid destroying the heritage physical evidence. In this charter, also, the effective protection operation has been ascribed to the excellent integration between conservation and management of the cultural heritage (ICOMOS, 2000). The importance of managing cultural heritage, archaeological sites in particular, had achieved considerable attention by the end of 20th century. Managing cultural heritage was strongly emphasised in the international conference “The Conservation of Archaeological Sites in the Mediterranean Region”, held by Getty Conservation Institution in May 1995. The main concern was to avoid any negative or fortuitous consequences which may result from in situ unplanned decision due to the lack in understanding of the site. The conference concluded that lack in management raises a very serious problem during the excavation process if there is no conservation plan for the site (De la Torre, 1998). Thus, the management aspect is very important in Ugarit to devise an effective and comprehensive conservation strategy, particularly as the conservation proposal of the city will be carried out while further excavations are being implemented.

11 The Caution approach champions as much care as possible for the object to be usable; as little change as possible to retain the object’s cultural significance.
Consequently, the broader conservation operation comprises a management principle in addition to the restoration, reconstruction and preservation ones. Thus, conservation may result in different levels of preservation work and architectural intervention for preserving and presenting historic buildings and sites.

### 4.3.2 Levels of interaction

The very wide movement of architectural conservation, stated above, has resulted in different types of intervention used to accomplish the conservation process. These types vary from simple maintaining works to advanced and invasive re-erection of the past. These interactions are included in ICOMOS publication “Principles for the Conservation of Heritage Sites in China” (Agnew et al., 2002).

As this PhD thesis focuses on the conservation of archaeological sites, the levels of interaction are categorised in five types which are shown below.

**Regular maintenance**

This level is represented by the daily simple and preventive procedures that guarantee the on-going protection and reduce damage. It is the basic interaction in the conservation process resulting from regular maintenance and monitoring program, which should be established in any conservative operation. The works done in Domus of Criptoportico, Italy (figure 4.9) are the best example of such interaction. This type of intervention is essential in archaeological sites for it maintains the original fabric in a good condition, enhances the reading of the ruins on architectural and urban scales, and prepares them for the conservation process.

![Figure 4.9: Regular Maintenance works at Domus of Criptoportico, Italy, 2013](image-url)
Physical protection and strengthening

This measure aims to protect the physical remains of any heritage as much as possible. The main procedure is to establish a protective shelter that can isolate the ruins from surrounding natural threats and, at the same time, respect their character and original material. The design and erection of such shelters concern mainly the physical components and protect them from being destroyed by construction means or the shelter’s architectural and structural elements. The shelter could be devoted to a space, building, area or the whole site in some cases, based on physical conditions and types of threat. The shelter ranges from a simple structure, as in the Temple of Apollo Epikourios in Figalia, Greece (figure 4.10a), to very advanced construction elements, as in the shelter built over Ancient Akrotiri at Thera-Santorini (figure 4.10b) (Doumas and de la Torre, 1997; Doumas, 2013) and Chur museum for the roman ruins in Switzerland (figure 4.11) (Ertosun, 2012; Vila et al., 2003).

Figure 4.10: Different types of physical protection shelters. (a) The Temple of Apollo Epikourios in Figalia, Greece (Odyssey, 2014). (b) Shelter over Ancient Akrotiri, Thera of Santorini, Greece (Eptakili, 2015).

Figure 4.11: Chur museum for the Roman ruins by Peter Zumthor in Switzerland (Martin, 2013).

This principle of intervention has many important contributions to the field of conservation. It allows people to explore ruins, facilitates the in situ conservation process and establishes a possibility for effective ruin musealisation approach. The
shelter in some cases can becomes an essential part of the overall conservation approach just like what happened in Chur museum for the roman ruins in Switzerland; Peter Zumthor has creatively enhanced the landscape setting of the area through emphasising metaphorical and poetic inspirations in his design.

**Minor restoration**
This type of intervention is represented by a set of procedures that work on promoting the archaeological ruins without any disturbance. It is very useful to reassemble the ruins and convey some useful reading of them with minimal interventions. It is mostly used when a substantial amount of the original materials is available, but in a dismembered condition. This type has been successfully applied to the archaeological site of Phaistos in Crete (figure 4.12). The concept of minor restoration mainly involves rectifying fragmented elements as much as possible using, sometimes, new materials, but without adding any new design component to the original structure. Minor restoration advocates restoring some essential elements that are necessary to facilitate the overall reading of structures. In addition, it encourages the removal of later unvalued additions with a detailed documentation of each step.

*Figure 4.12: Minor restoration works at Phaistos archaeological site in Crete © Theodossopoulos, 2013.*

**Critical conservation**
Critical conservation principle means returning the ruin into specific condition that exposes the most important values of the archaeological ruins. This measure is done
using new contemporary elements and based on full appreciation of the original material. Thus, added designs and materials are governed by the existing original fabric. For that, completing dismembered and missing components should consider very cautionary procedures. Respecting historical stratification is essential in this approach. As far as the components that might be destroyed by conservation measures is concerned, it is advised to remove them from the site and only return them after finalising the process, while paying considerable attention to their historical conditions. The principles of reversibility and compatibility are fundamental in critical conservation; ruins can be returned to their original condition without losing or harming the original material. This might happen if a new discovery occurs on the site and contributes to essential changes in the old conservation approach. Some of the most successful critical conservation projects are believed to be San Nicolo Regale by Franco Minissi (figure 4.13a), Crypta Balbi Museum, Rome by Maria Letizia Conforto (figure 4.13b), and Villa Romana del Casale outside Piazza Armerina by Franco Minissi (figure 4.14) (Vivio, 2011; 2014).
Ugarit is not completely excavated and, thus, the principle of critical conservation is invaluable for the city’s conservation proposal for its flexibility to incorporate data from future excavation without causing any destruction to the original fabric. The principle of critical conservation will be discussed later on in more detail.

**Reconstruction and Historicist Reconstruction**

This exceptional and irreversible procedure might occur to archaeological ruins under special circumstances. As in situ measure, reconstruction starts with conserving as much as possible of the archaeological ruins before starting to reconstruct threatened, collapsed or missing components without any conjecture. For this purpose, some evidence is crucial to complete the reconstruction project and make it legally accepted. Unfortunately, the concept of reconstruction occasionally results in losing the archaeological ruins if it is not critically judged. Reviewing this type of intervention in this study is important for emphasising its negative potential especially in the case of archaeological sites, where ruins are sometimes very fragile. The conservation proposal of Ugarit does not intend to involve any full reconstruction, unless it is carried out under critical and cautionary supervision and reflects essential cultural values of the ruins.

On the other hand, reconstruction is sometimes a crucial act to enhance the value of specific structures collapsed by war or other human or natural threats. The Frauenkirche church in Dresden, Germany (figure 4.15) is considered a good example of successful reconstruction projects (Collins *et al.*, 1995; Jäger *et al.*, 2003; Burger, 2000).
One of the most severe types of reconstruction, Historicist reconstruction, is still debatable; not many specialists would endorse such an approach. This special type of reconstruction, which mainly depends on historical references for justification, can be seen in the work of Sir Arthur Evans at the Minoan palace at Knossos, Crete (figure 4.16). Although Evans succeeded in enabling people to visualise and understand the aesthetic expressions of Minoan civilisation, and Knossos became one of the most famous archaeological sites around the world, unforgiving criticism has been launched against the palace reconstruction. Some critics have not accepted Evans’ desire to reconstruct the ruins and show Knossos as a royal palace. Not only that but they also criticised his reliance on other authors’ preconceptions of Minoan civilisation. Hence, they refused to accept Evans’ interpretation of the palace and his architectural matches with any origins (Whitmore, 2004).
4.3.3 Conservation approaches and principles

Having discussed the development of conservation theories and concepts, this part will place more focus on specific approaches and principles that invaluably contribute to establishing a coherent conservation framework for the City of Ugarit and, consequently, preserving and presenting its most cultural values. Identifying these approaches and principles considers as fundamental aspects the characteristics and physical conditions of the ruins as well as the role of archaeological site in refining the final conservation framework.

Interpreting, constructing and presenting the past

Interpretation in archaeology is the process whereby the meaning and significance of any object is explained and unveiled (Wall, 2004, p. 39). Thus, it is the art of using knowledge of the past to establish key messages and stories to be conveyed to the visitors (Tilden and Heritage, 1977; Tilden, 2007, p. 8). In this sense, Tilden ascribes two main roles to the interpretation of the past. First of all, it unveils the narrative that lies behind scientific results of archaeological works. Secondly, Tilden maintains that interpretation refreshes people’s minds and spirits by capitalising on their curiosity. Therefore, interpretation can be considered as the connector between the past, the ruins and the public. Interpretation, then, can be used as a communication medium through which knowledge is exchanged and people’s understanding and appreciation of the archaeological object are established. Consequently, people can allocate their role in their world through the understanding of their ancestors’ achievements and principles (Hall and McArthur, 1998, p. 166).
Interpreting the past aims to benefit individuals (academics or public), society and organisations; the provided information builds a bridge between subjective creation (the narrative) and the objective fact, creating the so-called the archaeological product. In this sense, archaeologists and architects act as interpreters between the archaeological findings and the public, which is fundamentally a post-processual concept (Carman, 1995; Hodder, 1991b). In more detail, interpretation is carried out through two main stages. Primary interpretation, as the first stage, results from interaction with the ruins to clearly establish their objectivity. The secondary interpretation works on transmitting the most valuable aspects of these facts to the audience, the public (Thompson, 1981, p. 85). In other words, primary interpretation is scholarly rewarding to archaeologists and architects, whereas secondary interpretation targets the public providing the facts via interesting narratives. The analyses of archaeological reports as well as the architectural and urban fabric of the City of Ugarit constitute the primary interpretation. Creating the archaeological product in each area of the city and even at the city scale (the established narratives) is the secondary part of interpretation of the city, which engages visitors with the archaeological ruins through transforming the scientific results of archaeological, historical and architectural analyses into subjective forms.

The main purpose of interpretation is to inform the construction of the past, which always considers the modern society’s values and beliefs (Funari, 2000; Merriman, 2000). The archaeological ruins are interpreted and understood through contemporary social system (Molyneaux, 1994). Therefore, the representation of archaeological site, which opposes the objective illustration process, is the reflection of scholars’ interest in any cultural values of these ruins, taking into account the audience’s political, social and cultural character (Bograd and Singleton, 1997; Pearce, 1990). In this sense, the past can be constructed to perform specific tasks (Cooney, 2000); for example, during the 17th and 18th centuries, museums and their exhibits were used to reflect strong political or national attitudes (Merriman, 2000). Nowadays, the most central aims of constructing the past of any archaeological ruins are to enhance the meanings of these ruins and reinforce the concept of identity (Merriman, 2000; Moser, 2003). Therefore, instead of reflecting a series of past events, scholars should analyse archaeological data and construct the ruins’ past
based on their expertise (Bintliff, 1988; Timoney, 2008) while taking into account indigenous communities (Timoney, 2008).

The above-mentioned concepts, concerning the reconstruction of the past, highlight two types of pasts: the temporal past which is gone, and metaphorical past which is embedded in current people’s culture and traditions and the surrounding landscape. Therefore, involving the urban aspect of any ruins is immensely significant for achieving the complete construction of their past. The metaphorical past is the most dominant form nowadays which corresponds to the public archaeology in which public engagement is encouraged (Molyneaux, 1994; Merriman, 2004). The increasing public role in constructing the past resulted from the so-called “crisis of representation” (Merriman, 2004) where the authoritative interpretation of the past was both questioned and objected. On the other hand, there was a strong emphasis on ensuring scholars’ scientific interpretation is not underestimated, but combined with the non-experts’ aspects of interpreting and constructing the past (Moser, 2003; Stone, 2004). Consequently, presenting the past started to consider everyday life depiction in order to broaden public engagement in constructing the past of their heritage (Davis, 1997; Funari, 2000). In the case of archaeological sites (Ugarit for example) visitors should be encouraged to interpret the ruins by relying on the informed imagination approach. This approach is based on both scientific and subjective interpretations, which show diversity and interpretation contingency of the ruins, as well as enhance visitors’ imagination and enjoyment within the ruins. As a result, a series of narratives are created and so narratives will be prioritised in accordance with the embedded significance, scholarly interests, and public cultural aspects. The implementation of subjective interpretation then plays a major role in promoting the understanding and recognition of ancient people’s aspects by modern communities. This implementation should go through a suitable presentation strategy of the past, in which relevant disciplines (e.g. architecture and conservation) are seen

---

12 Many questions have been raised regarding the owners of the past which archaeologists and historians are interpreting. Therefore, people became increasingly unwilling to accept elite interpretations of the past, while questioning the authority that academics have for analysing and interpreting the past without considering its actual owners, the public. Consequently, the authoritative interpretative approach has come to be gradually denied, and more approaches started to consider wider audience engagement with the past.
highly relevant to the visual representation of the past, knowledge management and the connection between prioritised narratives.

The desire to increase public engagement and achieve perceivable construction of the past requires suitable presentation forms for the knowledge and interpretations involved. Thus, the standard form “artefact-based” museums is not acceptable by the public anymore, especially in the case of the archaeological site. They rather prefer the in situ experience and physical engagement with the ruins of the past (Blockley, 1999; Holtorf and Schadla-Hall, 1999). This increasing demand for visiting archaeological sites and obtaining in situ experience emphasises the importance of interpreting, preserving, protecting and presenting many archaeological ruins around the world to make sense of what people could see there (Tilden, 2007; Tilden and Heritage, 1977). Subsequently, presenting the archaeological sites has different values in accordance with the ruins’ architecture, history, location and cultural aspects. This shows that the presentation process is used to highlight the most valuable aspects of the ruins for cultural or educational benefits. Sometimes, presenting archaeological sites aims to direct people’s attention to and heighten their awareness of the importance of protecting the ruins by highlighting a specific threat or erosion taking place on the site (Taylor, 2004). In the case of prehistoric ruins, visitors have more challenges in interpreting and making sense of everything on the site. Therefore, scholars always seek to find the most appropriate presentation forms for archaeological ruins. Tim Copeland has, for example, classified the archaeological sites’ presentation, in accordance with the interaction mood, into three main forms: enactive, iconic and symbolic (figure 4.17) (Copeland, 2004). The first two forms, enactive (through action) and iconic (visual representation), are appropriate for visitors with little experience and knowledge. On the other hand, the symbolic form, in which only written materials are presented, is suitable for people who can understand the written concepts and terms, that is scholars and experts.
Combining between the three forms is a unique aspect in Ugarit, as the city is not yet fully excavated and thus requires a special presentation strategy in order to make sense of the various types of structure and interpretation. The combination between the three forms of presentation aims to take into consideration both public and academic visitors’ interests, especially since Ugarit’s ruins stand for interesting narratives and educational potentials. This strategy will be nurtured with complementary conservation approaches and principles as well as poignant in situ architectural interventions. These approaches and procedures will be fundamental to facilitating the reading and visualisation of archaeological ruins and unveiling their most cultural values. Conservation approaches (e.g. values-based, critical conservation and the concept of cultural routes) along with the principles of international conventions, discussed in more detail below, will be substantially employed to achieve well-informed and managed presentation of the archaeological ruins. The first step requires an approach that frames the ruins’ cultural values, presenting them as the basic and fundamental elements of the conservation process. The values-based approach aptly carries out such task in Ugarit and guarantees persistent links between these ruins and the visitors or local communities; this approach will be explained further in the following section.

**Values-based conservation approach**

Values have centralised the protection and on-going management of heritage for a long time (see section 3.3.4). The emergence of the values-based approach has further emphasised combining the values in conservation project through the so-
called “values-centred theory” (Mason, 2008). This emphasis is on the integration of conservation into other disciplines such as architecture, archaeology and urban planning. Therefore, values constitute the ultimate focus that scholars from different disciples are encouraged to look at, in order to unify their initiatives in heritage protection.

The central role of values in the conservation process has been debated by many international organisations and conferences (for instance, (ICCROM) International Centre for the Study of the Preservation and Restoration of Cultural Property, the Foundation Romualdo Del Bianco, (ICOMOS) International Council on Monuments and Sites, “Capturing the Public Value of Heritage” conference, London, 2006, and “Values and Criteria in Heritage Conservation” conference, Florence, 2007). Also, values have constituted the principal aspect of many international conventions such as the “Framework Convention on the Value of Cultural Heritage for Society”. Some scholars, Jukka Jokilehto for instance, regard values as key aspects governing conservation theories and practice. The appearance of the concept of cultural significance in the first version of Burra charter (ICOMOS, 1979) has attached more significance to the importance of considering cultural values (historic, artistic, social and scientific) for any conservation project. This consequently led to the emergence and development of the values-based approach in the conservation field.

The values-based approach is now the most highly regarded approach in heritage conservation (McClelland et al., 2013; Poulios, 2010). It has been developed based on the principles of the revised versions of Burra Charter (ICOMOS, 1987; ICOMOS, 2000) since 1980s alongside the development of post-processual archaeological approach. This values-based approach has also been advocated by several publications of international institutions in the conservation field (for example, Getty Conservation Institute) (De la Torre, 2005; Demas, 2002; Mason and Avrami, 2000; Sullivan, 1998). The main purpose of this approach is to carry out a coordinated and structured conservation process in order to protect the heritage values, identified through in-depth analyses of all aspects involved, such as archaeological excavation, architectural fabric, social life and cultural and religious aspects. The values-based approach considers the values to be related to the past,
modern and future generations; it works on linking the conserved heritage to visitors and modern society by exposing these values in a sensible manner. Therefore, this approach not only focuses on the preservation of physical fabric, as the case in material-based approach, but also protects and presents the values attributed to this fabric (Mason and Avrami, 2000, p.25; Poulios, 2010). It is believed that the values-based approach has privilege over other approaches as it improves the community’s engagement with heritage and conservation practices. It further enhances the appreciation of a great diversity of values with no focus on specific types of value; it rather prioritises the heritage values in a contingent manner. Derek Worthing and Stephen Bond assert in their book “Managing Built Heritage: The Role of Cultural Significance” that the values-based approach can be applied to various types of cultural heritage on different scales (Worthing and Bond, 2008). Consequently, the values-based approach is adequate to be employed in the conservation of Ugarit, the archaeological site that bears diverse valuable aspects at micro (architectural) and macro (urban and regional) levels. This approach is fundamentally based on the idea of discontinuity between the site of the past and the people of the present. This is a fundamental aspect in Ugarit as the site was hidden under the Tell for more than 3000 years, and many of its cultural aspects are not related to the modern community anymore. This shows that the values-based approach will interweave the fabric and its intangible values to make sense of everything for present people and encourage linking the site to the present aspects. Although it is very well structured and is chiefly contributing to the understanding of heritage, “living heritage” approach cannot be sufficient here. It is mainly based on the functional continuity of the living sites, which is not the case in Ugarit.

The values-based approach also considers authenticity aspects based on its notion. Authenticity for the values-based approach is embedded in the physical fabric of the past; however, it is a seminal concept for modern people’s history and identity and thus must be preserved and presented. This approach regards authenticity as something as belonging to the past, and scholars are actually preserving the “aura” of authenticity and presenting it in the physical fabric. Thus, authenticity in the City of Ugarit should be anchored in the physicality of Bronze Age ruins, which convey some cultural, social and ritual aspects of the ancient people. Therefore, and since the
values-based approach insists on not causing any damage to the physical fabric (McClelland et al., 2013; Poulios, 2010), the preservation and presentation of the ruins and their cultural values demand some additional approaches that facilitate the implementation and presentation of these values in a preventive manner and using critical approaches. Since the main case of this study is Ugarit, an archaeological site, there is a need for an approach that controls the movement within the ruins in accordance with embedded cultural significance and proposed narrative without causing any further damage to the ruins. The concept of cultural routes, which will be discussed in the following section, is sufficient to do so.

**The concept of cultural routes**

Cultural routes are the means whereby cultural significance of heritage is recognised and appreciated. This concept is usually addressed on a large scale (regional scale mostly); however, it could be used on any scale so long as there is embedded cultural significance (The ICOMOS charter on cultural routes, 2008). These physical elements are added within the historic fabric for the sake of presenting archaeological and architectural interpretations to the visitor in a plausible manner and establishing strong links between visitors and the archaeological object. These routes should be complex enough to be transformed into manifestations through which cultural heritage is appreciated in a wider dimension combining tangible and intangible elements of the cultural property (Martorell Carreño, 2003). This concept works on reflecting cultural associations through time and space and presenting both tangible and intangible evidence. Therefore, it is sufficient to establish a strong musealisation process in any historic site through creating a mutual relationship and efficient exchange process of knowledge between the public and existing fabric (The ICOMOS charter on cultural routes, 2008). For this purpose, scaling and prioritising these routes are of a high significance. Physical evidence - archaeological, architectural, urban and landscape components - plays an essential role in appropriately identifying the scale and hierarchy of the routes to suit the overall presentation of the ruins’ past and cultural values.

In Ugarit, this concept is quite useful in guiding visitors through appropriate paths where they can properly absorb the unveiled narratives and significance. These paths
are of a high educational value in Ugarit as well. They highlight the architectural and urban experience of the site, enabling the visitors to easily interpret and understand these original experiences and their development along the installed routes. Therefore, the concept of cultural routes will be applied on micro (the single architectural component of the city) and macro (complete area or the whole city) scales, while establishing appropriate connection between the two levels of narrative. Establishing the original architectural and urban experience on the site requires sufficient conservation approaches by which the implementation of specific architectural interventions is critically decided and appraised. Therefore, unveiling the cultural values of the City of Ugarit at architectural and urban levels requires critical conservation approaches that respect the physical ruins and expose their tangible and intangible significance, as will be explained below.

**Critical conservation approaches**

The steady evolutionary process in Ugaritic architecture needs to be treated as a fundamental aspect to be preserved and presented. Therefore, historical stratification principles should be applied. Cesare Brandi developed this principle through his stratigraphy and reintegration approach (the concept of lacuna). Paul Philippot also emphasised the structural integration and the readable composition of different phases in order to guarantee the minimal impact, compatibility and structure’s authenticity (Carbonara, 2012; Jokilehto, 1999; Theodossopoulos, 2012). As a consequence, the intervention’s design and materiality should be critically selected with evident technical aspects (Theodossopoulos, 2012). Considering any unearthed structures should, too, be a fundamental aspect that helps to avoid compromising originality and authenticity when rectifying the original structures or adding new materials at the site. This is very important in Ugarit, particularly since the site is not fully excavated and further excavation might bring to light more interesting aspects, which will certainly amend the interpretations. Thus, reversibility is a fundamental principle in the final conservation proposal and so the ruins can be restored back to a previous condition and made to integrate the new aspects without losing or modifying their original status.
The critical conservation approach is also a dynamic choice at the City of Ugarit that helps preserve the ruins and highlight a specific important period or key cultural values on the existing fabric by promoting appropriate interventions. This approach exposes the most important valuable aspects of the archaeological ruins, taking into consideration the final narratives. Using contemporary design principles and materials, accompanied by full appreciation of the original fabric, is what characterises the critical conservation approach. It recognises the ability of architecture to express the aspirations and values of a society in their spatial resolution and gives the original fabric, the absolute faithful representative of the past, a powerful role to control the design and reconstruction process. Moreover, it gives the architect the responsibility to prioritise the ruins’ cultural values and then critically operate their conservation and presentation acts. Consequently, proposed interventions would vary from simple preservation procedures to complete reconstructions (see section 4.3.2), considering the role of architecture in exposing the cultural values, the nature of original building materials and techniques in Ugarit, as well as the authenticity of these structures.

The critical conservation approach sometimes requires other proactive archaeological and conservation procedures that enhance the clarity of the ruins and facilitate the insertion of new interventions on the site; Anastylosis and Anasteloseis are very useful concepts in the reconstruction of the original ruins after excavation works or destruction (Dimacopoulos, 1985). The concept of Anastylosis has strongly entered and enriched the field of architectural conservation, even though the use of this concept was not easily justified. It was formally mentioned in the Athens Charter 1931, particularly in Article (4) concerning the treatment of ruins (Athens Charter, 1931). Then, the concept was given its present meaning by the charter of Venice 1964 in Article (15) (Venice Charter, 1964). This very important concept works mainly on returning and reinstating the existing but dismembered archaeological ruins to their correct and believable appearance with absolute respect for original material. Adding some other materials is permitted in a small amount when necessary, but it should be critically identified and recognisable from the originals. Applying this concept to ruined structures aims to conserve the important element, avoid any further decay, and enable a comprehensive reading and easy visualisation.
of the monument and its surrounding spaces. This concept was employed by Nicolaos Balanos (Anastylosis) and Anastasios Orlandos (Anasteloseis) in the restoration of the north side of the Parthenon (Dimacopoulos, 1985). As far as Ugarit is concerned, this concept is sufficient to enhance the clarity and reading of Ugaritic structures by repositioning scattered stones to rebuild the structures’ walls using available original stones. Thus, the knowledge and experience of the specialised professional are crucial for avoiding unskilful implementation which definitely results in falsification and, in turn, misunderstanding of the historical ruins.

Critical conservation approaches have also been advocated by international charters on heritage conservation. Since Ugarit is a site of cultural significance and presents authentic Bronze Age fabric, Burra and Nara charters comprise conservation principles which are relevant to Ugarit’s character and conservation process.

**International conventions**

Ugarit’s architecture is part of the history and culture of modern Syrian communities. The site reflects the ancestors’ achievements, aspects and principles in space, architecture and urban organisation. Therefore, mapping these aspects onto the original fabric will positively contribute to the identity and cultural aspects of modern Syrian society. Considering the Burra charter’s principles is fundamental in the conservation proposal to establish connections between the site and its surrounding modern Syrian cultural environment. Moreover, it is very important to restore the links between the site’s fragmented areas to make sense of the overall urban narrative in the city. Establishing links with the surrounding landscape in which Ugarit has always been a dominant part is crucial. The conservation proposal will therefore consider the reconstruction of the external image of the city within its landscape and restore its visual links to the subordinated sites, for example, the two harbours at Minet El-beida and Ras Ibn Hani. Ugarit has also particular significance for international scholars; despite its small size, Ugarit was an influential power within the wider international sphere. Its studies in all disciplines will be useful for enhancing the understanding of many current and future discoveries in other surrounding civilisations. Therefore, the international and educational values of the site will be considered, as advised by Burra charter (ICOMOS, 2000).
Since reversibility is a crucial aspect, the Cautionary Approach which is advised by the Burra charter is a good choice. It is similar to the critical conservation approach and ensures high appreciation of and respect for the original fabric when any reconstruction or restoration works take place (ICOMOS, 2000). Ensuring minimal impact, however, does not mean conducting minor architecture work, but rather understanding all associations and meanings of the city, documenting the current situation and rectifying the original structures as much as possible. These procedures lead to proposing architectural interventions, drawing on specific narratives, in order to expose the city’s aesthetic, historic, scientific and cultural values.

The cultural values of Ugarit are extracted by means of a detailed analysis of the city’s archaeology, architecture and written resources. Therefore, based on Nara document on authenticity (ICOMOS, 1994; Lemaire and Stovel, 1994), the excavated physical fabric is the main source of information and the place where the concept of authenticity is anchored. This further advocates the use of the above-mentioned values-based conservation approach to guide the conservation process in Ugarit. The excavation works in Ugarit revealed various structures in their original 12th century BC arrangement. Accordingly, the undisturbed ruins are a faithful reflection of the everyday life of the past and conservation works should seek a full reflection of this original social life.

The ruined fabric also constitutes the main trigger that governs and stimulates the types of intervention in the site. Therefore, protecting this fabric is a primary aspect in the conservation framework of Ugarit. This, however, does not mean refusing creative interventions; the only condition is that these interventions, whatever their scale, should be critically analysed and judged for they are invaluable in exposing the assigned cultural values to the city’s visitors. It remains to say that the role of critical conservation approach mentioned above is essential.

4.4 Archaeological conservation
The concept of archaeological conservation represents the relationship between conservation and archaeology. This relationship has different perspectives in different countries, due to the types of archaeology every country adopts. It is also
owing to what archaeologists need to extract from this process (Johnson, 1993). After all, there are many aspects that need to be covered, varying between, for example, symbolic and spiritual in Greece, social and contextual in Italy, and nationalistic in Germany and some other European countries (Hodder, 1991a). Frank Matero\(^{13}\) points out that archaeological conservation is not only a concept about protecting and recovering the physical conditions of the archaeological items, buildings or sites. It also concerns the system and people of the ancient civilisation that had created the under-focus case study (Matero, 2006). Therefore, Archaeology affects conservation principles, and that is obviously noticed between countries that adopt different type of archaeology. Jessica S. Johnson tasted these differences in her paper “Conservation and Archaeology in Great Britain and the United States: A Comparison”. Based on the publications by National Institution for the Conservation of Cultural Property in Washington (ethnographic and archaeological conservation in the United States), the paper points out that the concept of archaeological conservation in the United States is allied to ethnographic conservation with an endeavour to create a separate identity for object conservation. In Great Britain, on the other hand, this concept sometimes extends to only cover folk-life and ethnographic collection. It is closely correlated to archaeology but with a separate identity (Johnson, 1993; Pye and Cronyn, 1987). In view of that, Johnson narrowed the definition of archaeological conservation to include in and ex situ works, to be conducted on the discovered objects, monuments, buildings and even whole sites, before and after excavation is carried out (Johnson, 1993).

Archaeological conservation is also a suitable concept for the recognition and display of the cultural property of any heritage (Berducou, 1996). It is very important to note that the values possessed by the investigated items are the clues on which all studies will depend. In this vein, conservation and archaeology should not be separated, as they are in fact conjoined subjects (Matero, 2006). Testing the influence of archaeology on the outcomes of archaeological conservation is achieved by explaining some exemplary principles such as contextualisation, diachronic continuity, enlarging the scale of protection and theoretical dependency.

\(^{13}\) Professor of Architecture and Acting Chair Historic Preservation.
Contextualising preserved objects, building or sites has become an important principle which presents the object and its production in the same context. Andrea Carandini, an Italian professor of archaeology, proposes that this principle helps to convey as many approved facts of the past as possible at both technical and social levels. The contextual relationships are even more important when the object contains more than one meaning, the so-called polysemy of the object. In this vein, spatial archaeology (see section 3.3.2), derived from processual archaeology, had received considerable attention in Europe for feeding the conservation discussion with original facts of the civilisation’s past. Thus, Antonios Keramopoulos, who was a Greek archaeologist, insists on the importance of including geological and diachronic aspects in spatial archaeological surveys, which help achieve authentic interpretation of the past facts (Hodder, 1991a). Based on his analytical approach, David Clarke worked with Salvatore Puglisi on contextualising objects with their production modes in order to reconstruct a socio-economic process of the past. The evidence required for this reconstruction has been picked up using processual archaeological method referred to as “spatial archaeology”. The contextual aspect is very important in the City of Ugarit for it helps make sense of the ruined fabric. An example of this is presenting the Ugaritic house, while highlighting its social and functional characteristics (tombs, workshop, courtyard, social interaction between spaces, etc.), in its urban network which will unveil more outstanding social and cultural values in addition to the tangible ones. The required evidence for this process will be collected by reading former archaeological reports and analyses based on the understanding of relevant principles of contextual (spatial) archaeology. Brand new analyses at architectural and urban levels will also be crucial for identifying additional evidence in the ruins and reconstructing the relevant narratives.

Diachronic continuity is another principle that some scholars, particularly in Greece, attempted to establish in their heritage studies. Demetrios Theocharis’ endeavours to establish the continuity of Greek history (Theocharis, 1973) is a good example. In architecture, this principle is also active and used to establish close relationships between successive types, phases or aspects. In this sense, Christos Tsountas had created diachronic continuity between the Neolithic Megaron and the classic Doric temple in Greece (Shanks, 2003, p.79). Therefore, explaining the formation process
of building types should be based on the information derived from the preceding local phases of the studied civilisation, not from diffusion terms. This concept is advocated by Salvatore Puglisi for the purpose of reconstructing civilisation’s economic, productive and cultural aspects (Hodder, 1991a). The earthquake that hit Ugarit in 1250 BC resulted in diverse evolutionary aspects. Preserving these aspects together with the existing before-earthquake structures will highlight the city continuity, advancements and people’s creativity. The principle of continuity is more functional at the Acropolis and the Lowe City of Ugarit where some structures (tombs, foundations, temples) are from the Middle Bronze Age period. In this sense, establishing the diachronic continuity requires a special conservation proposal and architectural interventions to highlight the city’s continuity and the relationship between the successive phases.

This new focus of archaeological conservation encourages scholars to expand their works over whole sites, not only on specific important objects or buildings (Matero, 2006). The aim becomes to tell the entire story of a civilisation via presenting the full range of its considerable values. Eventually, this added a new principle to be considered by archaeological conservation, which is the concept of representation. This concept is very useful for revealing the past civilisation in terms of present schemes, which ultimately enhances understanding of the past. This model, Vicente Lull maintains, should be formal and systematic. It should also structurally create subject-object relationships. With this aim, Lull introduced dialectic methodology as the best way to purify scientific discussion of ideological debates and verify hypotheses in a proper way (Hodder, 1991a).

Enlarging the conservation and protection scale sometimes reaches a regional scale in accordance with possessed values and changes that have occurred to the civilisation system (Gamble, 2007a; Matero, 2006). This approach is justified by archaeologists as they emphasised the importance of understanding the culture system’s origin and changes that occurred to the studied civilisation in order to give a contextualised and accurate interpretation of the material culture. Processual archaeological principles and methods play a key role in inferring these facts of the past (Gamble, 2007a). As an example of that, Kent Falnery applied systems theory,
processual archaeological method, in order to understand the origin of production in Mesopotamia between 8000 and 2000 BC. Additionally, uncovering the cultural values of archaeological sites is the clue by which the conservation process is commenced (Matero, 1993). This tendency has been strongly encouraged especially by ICCROM charters (1964 and 1981) and ICOMOS (1979 and 1999), which have further promoted the conservation of the heritage that embodies cultural significance (Matero, 1993; ICOMOS, 2000). For that reason, as Ugarit is related to historic and prehistoric periods, it is very important to reveal the relationship between history and prehistory; in broader terms, this is the best way to figure out how the national Syrian roots had existed in prehistory. This will immensely contribute to the cultural values of modern communities. Also, preserving the site’s stratigraphy (soundings, in particular) and representing the city connections to surrounding suburbs (the two harbours, for instance) will be useful in representing the civilisation’s system and highlighting the ingredients that were part of its developments.

Like archaeology, the influence of architectural and urban aspects is very strong in archaeological conservation. They are the tools which will tell the site’s story. In this sense, the most interesting aspect in archaeological conservation is that the conservators have to create their own principles in accordance with the site’s history, environment and significance (Berducou, 1996). They can critically derive such principles from the comprehensive theoretical debates in both archaeology, architecture, and architectural restoration and conservation disciplines, that have been already formalised in the 19th and 20th centuries (Berducou, 1996; Matero, 1993). For that, theoretical dependency has been strongly emphasised by George Chourmouziadis as a very important principle which helps to avoid failing archaeological approaches. It is advised that the correspondence between theoretical models and practical evidence is a crucial aspect that should be done by the archaeological side of a study (Hodder, 1991a). The analyses of archaeological reports and data in Ugarit contribute to highlighting this aspect which will be presented by conservation concepts and procedures. This integrative method contributes to manifesting logical respect for cultural and social facts of the past. Thus, it is essential to establish a concluding stage for the above-mentioned concepts
and principles and formulate a conceptual framework through which the City of Ugarit will be analysed, preserved and presented to the public on various scales.

**4.5 Conceptual framework for the conservation of Ugarit**

In various international meetings, studies and conventions, it had been emphasised that an interdisciplinary approach is the most suitable choice to achieve coherent preservation and presentation process for any archaeological object (single object, building or site). In archaeological conservation studies, this approach usually intermediates among many disciplines, such as archaeology, history, architecture, conservation, techniques, sociology and economics. It goes without saying that the case of archaeological sites is even more complex, as there are more dimensions to be considered in the conservation process. Cultural aspects, for example, are very important; they are the basis that justifies and explains the characteristics of the physical ingredients of any heritage at all architectural, urban and regional levels. Therefore, it is crucial to enhance the archaeological understanding of the site’s values with conservation approaches that will be applied on the physical remains in order to expose their intangible (cultural and historical) values and settings. This connection is reasonably based upon archaeological investigations and studies, but not governed by them. Single objects, buildings, and sites can become multidimensional and complex especially after the strong emphasis placed by international conventions on cultural significance, in addition to the historical and artistic, to promote the conservation of archaeological objects.

Epistemological ground and the types of knowledge an archaeological project is going to present are the foundation on which conservators build their own perspectives. This fact asserts the important role of archaeological understanding of the object in all its various aspects. This understanding is basically derived from archaeological research carried out on the object, which have a valid contribution to building various types of narrative knowledge - the main triggers for conservators to establish their conservation principles - based on the objects’ characteristics and history. Strategic, narrative, indigenous and contemplative knowledge are among the most common types. It is important for the interpretation stage to distinguish between the practical (strategic) and conceptual (narrative, indigenous and
contemplative) knowledge in order to identify the role of each type in the final interpretation.

Strategic knowledge, in specific, enables conservators to decide on the piece of the past they are going to preserve and present. Many scholars have worked on developing this type of knowledge such as (Arup, 1991; Darvill et al., 1994; Van Leusen and Kamermans, 2005). Other conceptual knowledge (narrative, indigenous and contemplative) are mainly dedicated to producing the possible narrative of the object’s past taking into account traditions and experiences of the ancient people as well as the most valuable aspects of this heritage for the modern local community. It is worth mentioning that only contemplative knowledge is a personal issue, while all other types are shared among all groups considered in the conservation project. In this sense, cultural aspects are the identity vehicle that establish sensible connections between people and their past while making meaning out of this past.

Consequently, heritage preservation and presentation process comprises sequential steps, strongly linked to one another. It is commenced by building the archaeological products (narratives) upon which conservators ultimately depend to present cultural heritage aspects and values. Using problem-oriented research, archaeologists verify known-unknown equation in their archaeological data and evidence. This type of research is based on hypothetical-deductive method to highlight cultural (intangible) values in the physical material and context of the object. This ultimate processual part is followed by building the archaeological interpretation of the material culture. This interpretation should realise the importance of the equilibrium between subjective and objective aspects in writing the past and communicating ancient peoples’ values to the present local or international communities. Thus, reading Ugarit’s archaeological reports through processual and post-processual lenses is sufficient for extracting comprehensive knowledge and constructing the complete past that is relevant to the present community. Therefore, interpreting the material culture is not the process of depicting the real past; it is, instead, carried out through the social system of the present time to make sense of the material culture and retain the relic for future generations. In other words, testing this interpretation will be mainly done through finding out whether it fulfils its requirements or not.
Throughout this step, producing interpretation is a result of an on-going hermeneutic circle, stimulated by known information. This circle comprises the existing information, its prejudgment, new questions, given answers, and then returns to the starting point of circle using the new information as a trigger. As any archaeological object cannot be separated from its context, the contents of archaeological heritage will be intertwined with their context to acquire better understanding of the past. Consequently, producing the archaeological product (interpretations and narratives) is about establishing connections and contexts of archaeological heritage in a coherent dialogic narrative. The most important issue is to inject this production with social and public meaning of the past relevant to the present; it is the process of making sense and designing the past in current time.

The site’s history and description help in refining the final interpretations and reframing the possible narratives in accordance with historic, cultural, architectural or urban components of the site. This highlights the meaning of each of these components for the conservation strategies, specialists and/or the modern local community. Also, it clearly exposes the outstanding values of each narrative to be prioritised. Consequently, the final interpretation is created and coloured by historic, social and cultural meanings. This final interpretation is going to be mapped onto the existing physical fabric (the ruins), based on suitable conservation approaches, concepts and principles which are chosen in light of the concluded strategic knowledge, outstanding aspects as well as the in situ architectural analyses and observations. Furthermore, the architectural analyses and observations will highlight some practical and technical aspects which are crucial in mapping these values and interpretations onto the archaeological ruins. Consequently, a set of conservation procedures and architectural interventions will be proposed; they constitute the conservation framework of the site at architectural and urban levels. Therefore, these procedures will vary from normal maintenance, combining the original fragmented structures (anastylosis), to full conceptual reconstruction of some parts with full respect for the original fabric. Fundamentally, any conservation procedure should fit within its context to enhance the data presenting process and not destroy the cultural landscape around. Critical judgment will, thus, govern all proposed intervention to meet the requirements of physical fabric conditions, narratives, and other practical
(cultural, social-economic, historical, environmental, technical, and artistic) issues. The various stages of this framework are diagrammatically drawn in (figure 4.18).

![Flow diagram that presents the sequential stages of the conservation framework of Ugarit.](image)
The relationship between architectural (at both architectural and urban levels) and archaeological conservation is invaluable for proper establishment and substantial contribution of this framework. Concisely, concerning the heritage (historic, artistic and cultural) values (see section 3.3.4: Values classification), the implementation of the conservation process can be graphically symbolised via a pyramid model (figure 4.19). This pyramid consists of three main levels (or layers), representing archaeological, architectural and urban conservation aspects. The first level, archaeological conservation, works as a foundation or a base, while the other two levels are intended to give this pyramid the three dimensional characteristic; in other words, they create meaning out of the basic information available in the first layer. The following discussion will highlight how this model can be reflected upon the archaeological site’s conservation framework.

![Figure 4.19: graphical model shows the mechanism of the concept of archaeological conservation.](image)

Archaeological site (heritage) comprises three different dimensions represented by civilisation contributions. They are architectural, urban and cultural aspects; the cultural aspect played a stimulating role in producing and developing the other two dimensions. For that reason, archaeological conservation works on cultural aspects of the studied heritage; it is regarded as the potential starting point in the conservation process which helps to formalise the base on which other aspects will stabilise.
Accordingly, archaeological (cultural) conservation concerns a civilisation’s cultural system, people and the relationships between them, and how all these relationships are related to one another and manifested in the physical fabric; it, therefore, formalises the first level of the conservation process. At this level, the fabric cultural values are defined and discussed. Also, the civilisation’s system is investigated mainly by the analyses of archaeological reports and data, based on the principles of selected archaeological approaches and methods in Chapter 3. This archaeological and cultural characteristic of conservation has been established by many scholars such as Paul Philippot and Frank Matero. Therefore, it is crucial to point out that archaeological (cultural) identification and conservation form the basic and most important level in the conservation of archaeological sites, as all other aspects result from historical and cultural formation and development processes of the studied civilisation.

The other two levels in the conservation process (architectural and urban conservation) are used to present the outcomes of archaeological and cultural discussion of the first level in spatial resolution. This presentation is established on specific important buildings or the entire urban fabric of the site, using different types of intervention. Also, architectural and urban conservation are utilised to conserve the artistic values, as they focus on the physical significance of the studied heritage (buildings, site and surrounding context). Architecture and conservation are combined here to build the theoretical framework for these two principles. Thus, the architectural conservation debate is mainly the theoretical corroboration and support for this framework. Hence, site values are perceived and understood by and presented to the public using architectural and urban conservation procedures.

4.6 Summary
Both archaeological and architectural principles are essential for the implementation of a proper conservation framework for archaeological sites. This chapter has comprehensively demonstrated how the conservation process spans the two disciplines, archaeology and architecture. Interpreting and constructing the past of any civilisation, starts with investigating its ruins and culture. Afterwards, the civilisation’s original architecture is utilised to present this past, applying varied
levels of architectural intervention. Therefore, the conservation of archaeological sites involves more principles than other types of archaeological object (buildings, artefacts, for instance). Consequently, a critical judgment of the conservation case is crucial for avoiding any further destruction to the fabric as well as protecting its authentic tangible or intangible aspects.

Archaeological and architectural conservation concepts are complementary essentials for the success of conservation process. Architectural aspects are the means by which the cultural values are exposed in spatial and cultural resolutions. Thus, before embarking on the establishment of the conservation proposal for the City of Ugarit, it is essential to review some examples of the conservation process and its relevant architectural interventions within different contexts. Therefore, different types of architectural interventions and conservation proposals will be reviewed, analysed and discussed in the following chapter.
Chapter 5 Designing Approaches to Conservation: Review and Analysis

5.1 Introduction:

Conservation approaches to and architectural interventions in historic buildings and ruins are varied, as conservation is a process that has become more case-based. Thus, it is robustly governed by a critical judgement of the fabric valuable aspects, conditions and surrounding environment. Consequently, it can be recognised that architectural conservation approaches differ from one building to the other, regardless of whether they belong to the same period or are in the same location. Also, the level of interaction is decided by the knowledge or cultural values that need to be reflected. For instance, some projects involve the archaeological fabric in order to present the site’s stratigraphy in one place and allow visitors to recognise the historic transition between successive periods (Crypta Balbi Museum). In addition, other projects involve adding a shelter on top of the ruined structures. Installing a shelter usually aims to protect the ruins from environmental threats (Temple of Apollo Epikourios at Bassae, Olmeda Roman Villa at Pedrosa de la Vega in Spain, and Akrotiri at Thera-Santorini in Greece), to create suitable interior environment for in situ museum (Museum for Roman Ruins at Chur in Switzerland and Badalona Roman Museum in Spain), or to reconstruct the original volume of the ruins (Villa Romana del Casale outside Piazza Armerina, the Oratorio dei 40 Martiri in Room, and Dorchester Roman Town House in the UK). Taking into account the vast development of critical conservation approaches, scholars carried out various projects through which they applied conceptual interventions to highlight the cultural values of the fabric with full respect to its authenticity. Many of these projects have involved a conceptual reconstruction of the structure to facilitate its new function as well as people’s understanding of the ruins. The most well-known projects that follow this approach are, for instance, Kolumba Museum in Germany, Koldinghus Castle in Denmark, The Roman Villa of Veranes in Spain, and recently the conservation proposal for Clachtoll Broch in Scotland.

This chapter is dedicated to reviewing, analysing and discussing the conservation proposal of these examples. The main aim of these analyses is to highlight the
successful aspects of the projects in question, as also shed light on any inappropriate conservation principle that nowadays contribute to further decay or misinterpretation of these monuments and ruins.

Since this PhD study focuses on the City of Ugarit, a Bronze Age archaeological site, this chapter will enlarge the scale of the reviewed case studies and discuss the conservation proposals of some archaeological sites in different countries. Many examples can be considered in this part such as Hadrian wall (Vindolanda and Housesteads Fort) in the UK, Saint-Romain-en-Gal Museum and Archaeological Site outside Lyon in France, Knossos Palace in Greece, the Roman Temple of Apollo at Portonaccio, Italy, The Roman Ruins of Empúries, Can Tacó and Iesso in Spain, and the archaeological site of Skarkos in Ios, Greece.

Reviewing and discussing the different approaches of these projects will create a rich repository which will definitely contribute to the final conservation proposal of Ugarit and enable effective conservation choices and architectural interventions in each excavated area of the site. Henceforward, the reviewed case studies will be presented in four categories. Preserving and presenting the historic stratigraphy, installing a shelter, conceptual representation of the volume and conceptual approaches to archaeological site cases will be discussed respectively.

5.2 Preserving and presenting the historic stratigraphy

In situ preservation and presentation of historic stratifications is a well-known concept that establishes historic lessons in a spatial form. Thus, archaeological object, building or site is converted to a document mood where people can collect many of the historic periods and events that the object had undergone. This concept is sometimes problematic and leads to confusion and misinterpretation in the structure, especially if it is not applied properly. Therefore, a few examples are considered successful in applying such an approach, for instance, Crypta Balbi Museum in Italy.
5.2.1 Crypta Balbi museum

Crypta Balbi is considered an essential part of the National Roman Museums network. It is located at the site of Balbo Theatre between the Crypt and the theatre’s porch. The complex of Crypta Balbi comprises several medieval houses, workshops, monastery and the church of St Catherine. The available fabric faithfully reflects the development of the complex and the whole area over the centuries (figure 5.1).

![Figure 5.1: The Development of Crypta Balbi complex between 2nd and 14th century (Crypta Balbi, 2014).](image)

The complex also encompasses archaeology, history and landscape aspects of ancient Rome during the Middle Ages, in addition to the materials recovered by the excavation of the crypt from earlier phases. The 1960s excavation works had exposed the archaeological ruins of this complex, which hold economic activities and social aspects and highlight the historic movement of the place from Antiquity to the Middle Ages. The millenary stratigraphy exposed by these ruins allows visitors clearly to recognise the continuity of the place over time; archaeological layers and overlapping structures present strong evolutionary aspects in the architectural, technical and social life aspects of the area (figure 5.2).
The conservation project of this complex commenced in 1980s by Maria Letizia Conforto. It primarily focused on the Guidi House; this part of the project was completed in 2000. However, further attempts have sought to establish an effective urban conservation approach to the whole complex. These attempts have focused on linking all layers of the complex by inserting pathways that present the sophisticated historic lesson of the whole site in a comprehensible manner. Thus, the main aim of this project is to set up an exhibition (a sequential museum) that allows visitors to follow a sequence of findings, moving from one period to another. Presenting the buildings’ chronology in this way enables the visitors to grasp the transformation mode of the whole complex and, consequently, the urban development process in Rome over a long period of time. This complex is considered to be of high historic and educational significance. First of all, it enabled scholars to date the abandonment of the system in the 5th century. Also, the Museum of Medieval Archaeology, being part of the complex, has converted the archaeological and architectural fabric of the complex into a living architectural archive in the contemporary City of Rome. The research and conservation works have unveiled rich knowledge concerning the site’s stratigraphy, morphology and the understanding of historic process and construction. The main principle was to carefully consider all findings of the place and arrange them in sequential chronology. The project strongly focuses on connecting the ruins from previous phases in the basement, the crypt and Porticus Minucia, to the fabric from later periods (figure 5.3). The notion of this project will be useful for presenting historic transitions and evolutionary aspects that took place throughout the successive periods of the long history of Ugarit.
New materials (reinforced concrete and steel) and designs have been considered in some parts of the project to reconstruct missing elements and complete some destroyed buildings, preparing them for a new function. The relationship between the original and new materials creates a new composition that contributed to maximum use of the buildings, with minimal disturbance for people’s appreciation of the architectural fabric and the relationship between successive phases (figure 5.4, 5, 6).
The installed pathways guide visitors through an existing opening from one period to another, providing them with a comprehensive historic and cultural experience. These paths are reversible, distinguishable, and faithfully respect the varied architectural vocabularies of the complex (figure 5.7).
Some destroyed structures are reconstructed using new designs whose technical aspects and materiality seek to guarantee static connections with the original fabric and accommodate new spaces to facilitate the function of the museum and serve the visitors (figure 5.7), for example the new works to build the Museum of Medieval Archaeology in Lot I of the complex (figure 5.8, 9, 10).

Figure 5.8: Crypta Balbi, the insertion of new designs (Letizia-Conforto, 2014).

Figure 5.9: Crypta Balbi, the Museum of Medieval Archaeology, the compositions between old and new materials (Letizia-Conforto, 2014).

Figure 5.10: Crypta Balbi, the Museum of Medieval Archaeology, the new design within the original fabric (Letizia-Conforto, 2014).
To sum up, Crypta Balbi represents an astonishing example of how multi-phases archaeological sites can be presented to visitors as a lesson in the history and architectural history of the area. Saving all phases in one place did not place a restriction on the materials used. The new designs and materials have rather promoted the complex’s musealisation and people’s appreciation of the ruins from different periods. This project confirms the ability of architecture to present and recompose complex stories which generate or synthesise artistic, spatial, cultural and even economic values.

5.3 Installing a shelter
Since artefacts are usually moved to indoor museums after excavation and documentation works, scholars have considered the destiny of the immovable findings, the architectural fabric. The architectural ruins of any site are suffering from fast decay, destruction, and collapse because of their exposure to atmospheric weathering and human activities after a long time of having been in a stable condition under the soil. Therefore, more focus has been placed on establishing new conservation concepts that protect these ruins, especially those which are under environmental threats or in poor conditions. Thus, following the development of in situ preservation concepts, covering such ruins becomes essential for the creation of a proper environment in which conservation procedures are carried out without further destruction. The use of shelters has started with simple forms to protect the architectural ruins, but scholars have developed this concept and produced different forms and uses. The use of shelter, consequently, becomes not only a means to protect the ruins but also a tool that creates an in situ museum environment and, in some cases, reconstructs the original volume of the ruins using new materials.

5.3.1 Protect the fabric
In this case, shelters are mainly installed to protect the ruins under excavation, analysis or conservation works. The protection scale can be varied from a single building to an entire archaeological site. Therefore, the development of this concept has contributed to various forms.
Temple of Apollo Epikourios

This very important monument, the temple of Apollo Epikourios, was built during the 5th century BC on the ridge of Mount Kotylion at Bassae in Greece. It was dedicated to the god of healing and the sun. The area is characterised by high rainfall and cold winter and that, consequently, contributed to a continuous degradation in the temple’s fabric. Additionally, the temple is located in a seismic zone; the 1980s earthquakes had badly affected the original structure of the temple (figure 5.11).

Minor restoration works were carried out by the Greek Archaeological Society between 1902 and 1906. They used original fallen stones in reconstructing the destroyed columns and walls. However, the surrounding natural conditions had further degraded the monument and eventually the foundations became weak. Therefore, more focus has been placed on protecting the building from surrounding atmospheric conditions, freezing winter in particular, before commencing any conservation project. Consequently, a temporary protective canopy was erected in 1987 to protect the ruins from consequences of frost and rain (figure 5.12, 13).

Figure 5.11: (a) Temple of Apollo Epikourios (1966) (McGill, 2014). (b) View of the temple before the restoration work, 1891© Ministry of Culture and Sports (Odyssey, 2014).

Figure 5.12: (a) erection of the canopy in 1987 (Jeffreys, 2010). (b) the protective shelter (Odyssey, 2014).
The shelter was effective in reducing only 20% of the freezing hours inside and protecting the ruins from rainwater for around 30 years. This shelter has created suitable environment for scholars to carry out some consolidation and restoration works. However, the shelter has resulted in a highly humid environment around the ruins. Therefore, additional heating and better ventilation were proposed to enhance the interior environment of the protective canopy.

Figure 5.13: Temple of Apollo Epicurius, under restoration works © UNESCO.

At urban and landscape levels, this protective shelter does not work properly. It causes a disconnection between the ruins and surrounding landscape, which, in turn, results in less appreciation of these valuable structures. Also, after 30 years, the structural framework is now under erosion owing to rainfall and humidity. Consequently, more concern should be placed on a new proposal for this shelter that enables the ruins visibility and communication with the surrounding landscape and, simultaneously, improves the environmental condition around them. The new proposal should take into account the reinforcement of deteriorated foundations and fragmented architectural elements to ensure better stability for the structure.

**Olmeda Roman Villa**

Olmeda villa is considered one of the most important archaeological sites in Spain, originally built during the 4th century. Archaeological excavation had opened the site in 1968 and discovered the villa’s complex, ruins, monumental façade and the striking intact and preserved mosaics. These diversified findings have a substantial role in representing the Roman era of the area and enabling better appreciation and perception of the everyday life at that time. Since 1970, the main works have focused
on documenting the site’s ruins and improving its environmental conditions (figure 5.14). It was not until 1996 that scholars started to be concerned and planned for the preservation and restoration of the ruined fabric.

Figure 5.14: Olmeda Roman Villa: (a) The Villa’s hypocaust and mosaics (b) Monumental façade and mosaics © Paredes & Pedrosa Arquitectos.

In situ architectural intervention was planned by Paredes & Pedrosa Architects in 2009 to protect the ruins and precious mosaics and make possible a full-scale appreciation of the site. The proposed shelter has been designed to cover the whole site and control the interior daylight and environment. The main aim of this modern intervention is to relate all ruins to the past in a unitary character in comparison with modern design. Also, it enables in situ evocative representation of the villa using its original fabric with some additional transparent reconstructions (figure 5.14, 15).

Figure 5.15: Olmeda Roman Villa, the representation of the ruins using original and modern transparent materials © Paredes & Pedrosa Arquitectos.

The design of the shelter, a series of shallow barrel vaults made of steel, promotes the understanding of the whole site with minimal disturbance by the vertical supports of the modern structure (Theodossopoulos, 2012). Also, the whole complex has been
surrounded by perforated steel and polycarbonate sheets for light control. Consequently, visitors are able to read the area comprehensively (figure 5.16).

Figure 5.16: Olmeda Roman Villa: (a) Interior. (b) Exterior © Paredes & Pedrosa Arquitectos.

Under the shelter, the movement of visitors is organised allowing them to comprehensively absorb the ruins and the gradual complexity. Designated timber decking routes were set up at a higher level to connect between hall spaces around the courtyard. This guides the visitors to grasp the original experience of the place and discover its complexity. Installing the routes at a high level allows visitors to musealise the ruins and mosaics appropriately and establish communications between the ruins and surrounding landscape through the perforated transparent panels (figure 5.17).

Figure 5.17: Olmeda Roman Villa - Musealisation routes © Paredes & Pedrosa Arquitectos.
This intervention highly contributes to the understanding of the ruins. The established contrast between the ruins and added structures encourages visitors to interpret and read the ruins in their totality. Consequently, although it is made of contemporary material, the shelter facilitates the exploration of the place and its outstanding historic, cultural and artistic aspects.

**Akrotiri at Thera-Santorini**

Akrotiri, a well-known Bronze Age archaeological site, is located at the southern part of Thera, Santorini. The site was discovered in 1866 and the strategic location with the rich material culture has confirmed that the town of Akrotiri had functioned as a cosmopolitan harbour for the area, similar to the main case study of this PhD research. The town is very well preserved by volcanic ash, which covered the area after its final destruction; its buildings are embellished by unique works of art. These characteristics have, consequently, promoted the significance of this site which has become an attractive destination for people from all over the world (figure 5.18).

![Figure 5.18: The town of Akrotiri at Thera, Santorini (Eptakili, 2015).](image)

Therefore, a new intervention has been carried out on the site to protect the ruins which were considered exceptionally preserved on two storeys; the intervention facilitates the visitors’ movement within the architectural fabric. A shelter, made of durable materials, was installed over the ruins. At some point, the shelter was covered with volcanic soil from the surrounding area to guarantee the continuity of and better communication with the surrounding landscape. Special routes have been set up to facilitate the ruins’ musealisation and protect the fabric from visitation consequences (figure 5.19).
126               Chapter 5 Designing Approaches to Conservation: Review and Analysis

Figure 5.19: The town of Akrotiri at Thera - the shelter and musealisation routes (gtp-headlines, 2015).

The shelter has significantly stabilised the ruins condition and allowed scholars to carry out conservation and restoration works in a better environment. Consequently, different parts of the site were utilised to present scholars’ interpretations and the site’s cultural values using original and contemporary materials (figure 5.20).

Figure 5.20: The town of Akrotiri at Thera - some restoration works on the site (Cyclades24.gr, 2015).

5.3.2 Creating interior environment for in situ museum

This type of intervention involves the erection of a complete volume that envelops the ruins and simultaneously creates interior spaces for a museum. In some cases, this approach involves a faithful reconstruction of the original environment of the space for musealisation purposes. Two examples can comprehensively explain this sort of intervention as follows:
Chur Museum for the Roman Ruins

The museum is made of a composition of three lightweight wooden pavilions erected to shelter the Roman ruins discovered out of the historic centre of Chur, in the area nowadays known as Welschdörfli in Switzerland. Discovered ruins represent two adjacent Roman structures and part of a third building which has not been fully excavated yet. Peter Zumthor, the architect of the project, reconstructed the volume of these structures in an abstract, but creative, concept. His design strictly follows the borders of the structures, but the volume is conceptually reconstructed in a box shape. These pavilions function as protection and a museum for the original ruins (figure 5.21). The pavilions are provided with protruding windows to highlight the original access to the buildings; however, Zumthor’s design does not account for them as actual access to the museum. Actually, from the outside, they are perceived as widows to create visual communication with the interior spaces of the museum. Visitors come to understand Zumthor’s interpretation only when they are inside the museum.

![Figure 5.21: Chur Museum for the Roman Ruins. (a) Exterior. (b) Interior (Martin, 2013).](image)

The pavilions are provided with floating access to avoid any interaction with the original ruins. The shape of the proposed access in unusual; however, it is hidden from the main façade (figure 5.22). The access continues inside the museum using a metal footbridge at the same level, creating a floating musealisation network that covers the entire structure and allows visitors to move between the three parts without any adverse consequences to the original architectural fabric. At some point, visitors are permitted to go down onto the restored Roman soil.
Figure 5.22: Chur Museum for the Roman Ruins. (a) The museum's access. (b) The connections between pavilions at the same level of the entrance (Martin, 2013).

Figure 5.23: Chur Museum for the Roman Ruins. Interior and musealisation footbridge (Martin, 2013).

The proposal has successfully reconstructed part of the architectural experience in the place and, in the meantime, saved the original fabric. Although they are 30 years old, the installed structures are still looking well due to the correct choice of materiality and the regular maintenance. Zumthor has not only sheltered and protected the ruins, but also inserted a genuine architectural vocabulary, which transformed the site into a memorable and attractive museum.

**Badalona Roman Museum**

The museum accommodates the ruins of the Roman City of Baetulo at Badalona, which dates back to the 1st century BC. It is considered the largest covered archaeological site in Catalonia, which comprises Roman baths, houses and rich urban fabric. After excavation works commenced in 1955, it has been decided to
build a concrete-metal museum on top of the ruins to protect them and create suitable environment for visitation (figure 5.24, 25).

Figure 5.24: Badalona Roman Museum, the ruins with the concrete structure above (Guillén, 2014).

Figure 5.25: Badalona Roman Museum, the interaction between the ruins and the structural elements of the new building in the basement (Guillén, 2014).

The new addition has facilitated successful in situ preservation of the ruins protecting them from natural threats and city pollution. Furthermore, original ruins have been consolidated and restored exposing the valuable knowledge of the Roman era. Conservation works have benefited from the very important and diverse elements that the site includes, for instance, the Roman houses, baths, drainage system and urban network. The main aim was to enhance the musealisation and educational values of the ruins and, therefore, the everyday life and atmosphere of the Roman period were reconstructed. For that, conservators restored the original ground as much as possible and added pieces of furniture to enhance the presentation of each
ruin and its function. Furthermore, light and sound effects were added to enhance the perception of the reconstructed original environment (figure 5.26).

Figure 5.26: Badalona Roman Museum, restoring the original environment (Guillén, 2014).

The basement of the new structure also accommodates modern exhibition where unique collections of artefacts and statues from the site and surrounding excavated areas, such as Clos de la Torre, are exhibited (figure 5.27). An audio-visual presentation approach is applied to some parts of the ruins. Using computer graphics and modelling programs has allowed the presentation of some areas in their original Roman settings (figure 5.28).

Figure 5.27: Badalona Roman Museum, Exhibition area (Guillén, 2014).
Although Badalona is considered one of the most attractive museums, it is believed that the added concrete structure and its structural elements at the basement are overwhelming the original ruins. Thus, people’s perception and appreciation of the ruins are quite different from being open-air museum. The urban settings of the ruins were altered, especially with the absence of the natural light and the presence of the heavy columns everywhere within the ruins (figure 5.29).
5.3.3 Reconstruct the original volume

The original volume is sometimes associated with the historic building’s cultural or artistic values. Therefore, sheltering the ruins sometimes goes through a critical judgment of the place and seeks to complete the building volume using new and distinguishable materials and techniques. Respecting the original ruins is one of the most important governing aspects of this approach. Protecting the ruins and establishing in situ musealisation principles are also relevant procedures. Many contemporary examples follow this approach; they will be reviewed in the sections that follow.

Villa Romana del Casale

The 4th century Roman villa is located outside the town Piazza Armerina, Sicily. The original fabric is still in a good condition and clearly demonstrates the design and interior arrangement of the building. The world-wide reputation of this villa comes from the fact that it houses the largest collection of mosaic in the world. Therefore, Franco Minissi has built his proposal with the aim of protecting the ruins and precious mosaic collection, employing appropriate musealisation approach within the ruins, and at the same time reflecting the original volume of the building. Therefore, Minissi has reconstructed the volume of the villa using new materials which create sharp contrast with the original fabric (figure 5.30).

Figure 5.30: Villa Romana del Casale, reconstructing the volume of different parts on the site.

Moreover, the conservation proposal involved the reconstruction of some interior spaces and architectural geometries that contribute to the understanding of the space.
For instance, some walls were completed using metal and transparent polycarbonate (figure 5.31a). Also, the volume of the basilica was highlighted (figure 5.31b).

Figure 5.31: Villa Romana del Casale. (a) Completing some interior walls © UNESCO. (b) The reconstruction of the Basilica space (Seafaro, 2010).

Minissi’s approach involved the installation of light routes that guide the visitors inside the building, allow appropriate musealisation of the fabric and available mosaic, and protect both the archaeological findings and the visitors. Introducing these routes comes from Minissi’s belief that any object should be exhibited in its context. These routes are attached to the original walls, which is highly criticised given the proposal insensitivity towards the original fabric (figure 5.32).

Figure 5.32: Villa Romana del Casale, musealisation routes © UNESCO.

The condition of the new materials (metal framework and polycarbonate) of the 1950s proposal started to deteriorate. Also, in some parts of the villa, the added volume contributed to heat retention which consequently affected the precious mosaic, especially the mosaic floors and frescoed walls of the Basilica. Therefore, a new reconstruction proposal was carried out for this area by Guido Meli (figure
The new proposal has facilitated better ventilation for the space, which eliminated any further destruction of the fabric or the mosaic by the retained heat.

Figure 5.33: Villa Romana del Casale, the new proposal for the Basilica spaces © Stefano Brambilla.

Minissi’s proposal has many successful aspects in representing the historic structure, and, nowadays, many people are in favour of this reconstruction. However, using the new materials, the transparent one in particular, over the ruins needed special treatments to ensure control over the interior environment and temperature. Additionally, designing the musealisation routes should show more respect for the original fabric; otherwise, more destruction will be caused to the villa’s original walls. Reversibility is a very important aspect that characterises Minissi’s design. It facilitates any change to the original proposal and guarantees no destruction to the original fabric.

**The Oratorio dei 40 Martiri**

Oratorio dei 40 Martiri is located in Rome within the Roman Forum. The building dates back to the Trajan period and has been transformed into a church by adding a small apse, dedicating it to the 40 Christian soldiers martyred in Armenia. Its walls have well-preserved and beautiful frescos from the 8th century.
Figure 5.34: The Oratorio dei 40 Martiri, 8th century frescos (Del Monti, 2004).

The conservation proposal aimed to protect and present the preserved frescos in their architectural environment. Therefore, the recreation of the building original volume, which will also function as a shelter for the original fabric, was proposed. Based on architectural and archaeological analyses, the height of the crossed vault was identified for the reconstruction process. The reconstruction of the vault was carried out using glued laminated timber with independent support (figure 5.35). Also, the original walls were completed with a new coffered break to minimise additional loads as much as possible (Theodossopoulos, 2012) (figure 5.36).

Figure 5.35: The Oratorio dei 40 Martiri, reconstructing the crossed vault and original volume of the structure (Del Monti, 2004).
The reconstruction is successfully composed of the original structure with positive impacts of the chosen materials. The coffered brick lightens the addition and maintains good stiffness of the walls in order to guarantee stability and durability of the proposal. The outcome is a new contextualised structure (figure 5.37).

**Dorchester Roman Town House**

The Roman Town House was discovered in 1937 at the Colliton Park, Dorchester. The ruins consist of two blocks that in total accommodate 18 spaces (figure 5.38a). The west block contains mosaic flooring and, therefore, suitable intervention has become crucial to protecting the ruins and exposed mosaics (figure 5.38b).
The John Stark and partners’ scheme involves the erection of a shelter to cover the west block of the ruins. The framework is made of steel columns and stainless cables to ensure stability. The design aims to transfer all loads to the original foundation after the relevant tests have confirmed that these foundations are capable of resisting the extra load added by the new intervention. Therefore, the framework has been placed on concrete pads cast on top of the original walls and covered with Purbeck stone (figure 5.39).
The architects have been inspired by the original red colour found on the external walls of the house. Therefore, they added red paint to the steel framework and provided toughened glass panels to highlight the external walls of the block (figure 5.40a). The newly added roof is covered with handmade Purbeck stone roof tiles that match the original Roman type (figure 5.40b).

Figure 5.40: Dorchester Roman Town House. (a) The composition between the original walls and the new intervention. (b) The new roof tiles © John Stark and Crickmay - Architects in Dorset.

Figure 5.41: Dorchester Roman Town House, inside and outside musealisation © John Stark and Crickmay - Architects in Dorset.
The project is of a high educational value as it presents the original volume of Roman houses. It facilitates the musealisation of the ruins and, consequently, visitors can easily perceive the relationship between the interior spaces, as well as between the block and other surrounding ruins. The reversible design and materiality were critically chosen and no destructive loads were applied to the original walls and foundations. The new intervention maintains visual links between the ruins and surrounding landscape as well (figure 5.41).

5.4 Conceptual representation of the volume
This type of intervention does not intend to reconstruct the original volume of the ruins. It, rather, aims to envelop the ruins with a new volume, which follows contemporary architectural design principles and exposes the ruins’ cultural values. The new additions intend to recreate original environment and/or accommodate new functions of the ruins in order to improve the quality of the place. This approach constitutes a critical act that balances complex interactions of space, fabric, economy, safety, regulations, and aspirations. Achieving good composition between the original ruins and added structure is a fundamental aspect of this intervention, which advocates full respect of the original fabric. Some examples of this type of intervention are discussed in the following sections.

5.4.1 Kolumba Museum, Cologne
The museum was designed by Peter Zumthor and built on top the ruins of Late-Gothic church that was bombed during World War II. The project was carried out between 1999 and 2005, and involved adding a superstructure above the ruins of the site. In addition to the Gothic church, the site comprises Roman ruins, medieval brick and a 1650s chapel built by Gottfried Bohm. This, consequently, constituted a big challenge for Zumthor in terms of how to relate the new design to the architectural diversity of the site. Therefore, Zumthor’s design aimed to connect between all available fragments in one complete structure which would enable the musealisation of excavated ruins, the understanding of the ruins stratifications, the absorption of the church layout and the preservation of the 1950s chapel. Also, the new addition provides a gallery structure for the rich collection of art that span more than a thousand years. Zumthor has integrated the external walls of the church into the
design, with careful treatment at the interface between new and original structures. The result was Kolumba museum, a contemporary piece of art in the City of Cologne (figure 5.42).

Figure 5.42: Kolumba Museum. (a) Zumthor design's diagram. (b) External view (Brady, 2010).

The new intervention has completed the ruins’ external walls with grey brick and added two new storeys to accommodate galleries for the various collections (figure 5.43). This superstructure is held by reinforced concrete columns which were critically added within the ruins on pads (figure 5.44) which sometimes are aligned with some original piers. Also, the stiffness of original walls was manipulated in order to transfer the loads away from the critical areas. This clearly shows that structural solutions sometimes become architectural issues.

Figure 5.43: Kolumba Museum design drawings (Geschichte, 2008). (a) Ground floor. (b) First floor. (c) Second floor.
The new addition is built in grey brick with perforations which control a diffused light into the ruins, interior temperature and space ventilation in order to create a suitable interior environment for the preservation of the ruins. Thus, the ruins inside are treated as museum artefacts. For that purpose, and to protect the multi-period ruins, a zigzag route was installed over the ruins (figure 5.44) in order to enhance the visitors’ experience and their perception of the ruins’ valuable aspects (figure 5.45).

![Figure 5.44: Kolumba Museum: Installed musealisation route over the excavation work. (a) plan (Martínez, 2010). (b) View of the interior space, the route and the ruins (Geschichte, 2008).](image)

![Figure 5.45: Kolumba Museum: internal and external views of the perforated grey brick and the composition with original walls (Zeballos, 2012).](image)

The new material, the grey brick, is articulated in rows and complements the ruins’ materiality. Zumthor has seamlessly succeeded in integrating the ruined walls into the new structure; however, the ruins inside were detached from their place and appeared as artefacts in the contemporary museum (figure 5.46). This shed light on the critical issue of adding shelters over the ruins; transforming a shelter into a complete and intensive design needs high sensitivity and deep knowledge of the ruins stratigraphy, values and cultural context. These are essential elements for the
successful protection and presentation of all historic layers accordingly to their significance. Otherwise, the design will be no more than a prestigious presentation of the designer’s production.

Figure 5.46: Kolumba Museum: external and internal views (Zeballos, 2012).

5.4.2 Koldinghus Castle
The Koldinghus is a Danish royal castle that was originally built during the 13th century by King Christopher I, in the town of Kolding. Many developments took place in the castle during the 15th century by King Christopher III and 16th century by King Christian I. Several restoration works were carried out on the castle during the 18th century; however, the 1808 fire during the Napoleonic War destroyed different parts of the castle, which had been left in ruins until the second half of the 20th century (figure 5.47).

Figure 5.47: Koldinghus Castle: (a) Air-view before restoration works (Historisk-Atlas, 2015). (b) The castle after restoration project.

Although several minor restoration works had been carried out until 1970s, the main reviving project was conducted between 1972 and 1991; an impressive neo-Gothic
structure, made of glulam timber, was added to complete the castle’s volume and elevation. The new addition is completely independent from the castle’s original structure; it is held by a new framework that was added inside the castle and simply touches the head of original walls (figure 5.48, 49). Walking routes were added to establish good experience and allow visitors to understand the overall composition between original fabric and added structure in the building.

The design was inspired by L. Khan who considered the relationship between the essence of architecture and design (Theodossopoulos, 2012). The addition is reversible and respects the character of the original fabric. Using timber has major benefits to the architectural and structural compatibility between the original castle and the new addition (figure 5.49).

Figure 5.48: Koldinghus Castle, the overall intervention. (a) Schematic diagram © Johannes and Inger Exner. (b) Interior view shows the new framework © Wikipedia.

Figure 5.49: Koldinghus Castle, the composition between original structure and the new addition.
5.4.3 The Roman Villa of Veranes

The villa constitutes part of ruined Roman agglomeration which was built during the 4th century as part of the largest known rural Roman settlement in the north of Spain. The site nowadays includes a museum, archaeological ruins and the new structure which was constructed above the original reception room. A new zigzag concrete paved route was installed within the archaeological ruins to facilitate the musealisation of the agglomeration and people’s understanding of the site. This route includes different observation points, from which visitors can closely observe different rooms and spaces (figure 5.50).

Figure 5.50: The Roman Villa of Veranes: general view of the site (Caso de los Cobos, 2009).

The route ends with the original reception room which is paved by polychrome mosaics. The room and its mosaics are considered outstanding elements on the site. Therefore, a new shelter was proposed for the protection of these mosaics from further degradation. The design of this shelter was inspired by the original monumental character of the villa; the villa was known from ancient times as the “Big Tower”. Consequently, the shelter is designed in a cubic monumental volume to
evoke the original architectural characteristics of the place (figure 5.51). This new addition is surrounded by a corridor that creates some kind of platform on which the new intervention is seemingly set.

![Figure 5.51](image1.png)

Figure 5.51: The Roman Villa of Veranes: the new intervention over the original reception room (desta-sasturias, 2013).

Although adding a shelter in this example focuses on protecting the mosaics, a creative design was created to reflect some cultural and architectural aspects of the Roman period (the monumentality of its architecture). The new intervention takes into consideration the original Roman ruins in relation to materiality and placing the structural elements of this intervention away from the original fabric.

### 5.4.4 Clachtoll Broch

This spectacular Iron Age monument is situated on a rocky knoll near the sandy beach at Clachtoll, Northwest of Scotland. It constitutes an iconic monument within the surrounding distinctive landscape of the prehistoric settlement of Assynt. The broch still maintains a strong relationship with local people and surrounding built and landscape environment. In addition to its presence, scale, design and landscape (figure 5.52), this monument is of a strong cultural value. Therefore, there is a high demand for carrying out a conservation proposal for this broch through consultation and partnership with the stakeholders to ensure fulfilment of their requirements. The new design proposal has been carried out by the architect Cristina González-Longo and Dimitris Theodossopoulos from the University of Edinburgh. It is still going through a consultation process with stakeholders and the local community.
The conservation proposal aims to enhance visitors’ and locals’ experience and appreciation of the place and its landscape settings, providing them with means to access, view and understand the excavated ruins. Also, the proposal intends to conserve the broch with its cultural and landscape settings for future generations and, simultaneously, establish strong communication between the results of archaeological excavations and the visitors, allowing them thereby to understand and enjoy the site. The two scholars have come up with an innovative design which aims to protect the broch and improve its accessibility and presentation. The design has directly been linked to the results of archaeological excavations and analyses in order to create a sensible intervention on the site. Thus, the two scholars insist on respecting the original routes in approaching the broch. Therefore, they exclude modern facilities, car park for example, from the surrounding area and locate them at a fair distance from the broch in order to avoid any negative impact on the monument’s landscape settings. Moreover, the design proposal for the monument itself involves the addition of a lightweight spiral structure (figure 5.53, 54) that sits independently from the original fabric and promotes the visitors’ musealisation and appreciation of the original remains. The design considers the challenge in the broch’s accessibility and suggests the improvement of an ambulant access to the monument (figure 5.53, 54).
The main aim of this design is to highlight the presence, scale and tectonic settings of this monument with full respect for the ruins’ integrity into the landscape. Therefore, the proposal excludes creating an enclosed space over the remained structure. Thus, the design seeks visual communication with the Lewisian gneiss stonework and imaginary reconstruction of the geometry through the provided experience (figure 5.53, 54, 55). It is clear that the design goes beyond the conservation of the broch’s materiality to offering new cultural experience on the site.
The proposal strongly emphasises using lightweight, durable and visually non-intrusive materials. The added structure is designed to be entirely reversible, insisting that the location of supporting structural elements should be precisely identified after the excavation works are completed, and based on detailed archaeological and architectural analyses. The proposal successfully exposes the multilevel information concerning the cultural, historical and artistic aspects of this unique monument.

5.5 Conceptual approaches to archaeological sites

Since they are ruins in most cases, archaeological sites undergoing conservation present a unique process which mostly focuses on reflecting the embedded aspects of the excavated fabric: historic, cultural and artistic values of the place. Additionally, new conservation approaches are today insisting on the in situ reconstruction of the architectural and urban experience of the ruins. Respecting the original fabric is a key principle, so long as there is enough original material to make sense of the place. Therefore, anastylosis principles (reconstructing the available original ruins) dominate the process as the first and very important step. Afterwards, the key role of architecture is essential to unveil the embedded values and map them onto the ruins. Consequently, the proposed interventions are entirely governed by critical analysis and judgment of the tangible and intangible evidence of each case.
Henceforward, key proposed aspects and interventions of different archaeological sites will be discussed to highlight the conservation proposals' philosophy, purpose and contribution to the understanding of the excavated fabric.

5.5.1 Hadrian’s Wall Forts (Vindolanda and Housesteads)

Hadrian’s Wall was built during the first half of the 2nd century to fortify the Roman province in Britain during the reign of Emperor Hadrian. The wall was fitted with 16 auxiliary forts, of which Housesteads and Vindolanda are very well preserved and presented to the public. The richness in available original material was very helpful in promoting the reading of these two Roman forts (figure 5.56).

![Figure 5.56: Hadrian’s Wall Forts: (a) Housesteads. (b) Vindolanda.](image)

Both sites have a contemporary museum where original artefacts, reconstructions drawings, graphics, and physical models of the forts are presented to provide visitors with comprehensive understanding and knowledge of these sites (figure 5.57).

![Figure 5.57: Hadrian’s Wall Forts, Physical models: (a) Housesteads. (b) Vindolanda.](image)

Simple but reflective interventions were carried out at these sites, which contributed to better understanding of the fabric components and functions. In Housesteads, for
instance, the urban experience and the site’s morphology were reconstructed. Timber staircases were added to reconstruct the original streets and use them as routes for visitors’ movement (figure 5.58). In addition to anastylosis works and minor restoration procedures, many descriptive panels and signs were provided on the site to enhance visitors’ absorption of the arrangement, function and sometimes the volume of the relevant ruin (figure 5.59).

Figure 5.58: Housesteads Fort, the reconstruction of urban settings.

Figure 5.59: Housesteads Fort, the ruins of wall’s lookout tower.

In Vindolanda, creative interventions were proposed to reconstruct the cultural environment of the Roman period and unveil some educational values of the structures. Original routes were cleared to establish links between the fort’s
components and the contemporary museum. Opposite to the museum, the sense of Roman landscape was created by reconstructing specific elements of the area around a canal (figure 5.60). This area constitutes an appropriate environment that aids experiencing the Roman landscaping before accessing the contemporary museum inside which various original artefact are displayed.

Figure 5.60: Vindolanda Fort, the reconstruction of the sense of Roman landscape.

Additionally, the conservation proposal at Vindolanda focuses more on presenting visitors with certain educational values. In addition to the restoration of buildings’ borders and interior arrangements using original stones, two replicas of the wall’s lookout tower were built opposite to each other using different materials, timber and stones (figure 5.61). The main purpose of these reconstructions is, first of all, to highlight both the presence and the scale of this structure on the site. Secondly, it allows visitors to experience the appearance, performance and durability of each material within the site’s natural environment.

Figure 5.61: Vindolanda Fort, the replica reconstruction of wall’s lookout tower.
Another lesson to be learned on the site concerns the effectiveness of the conservation process that facilitates the reading of the ruins. For that, an entire excavated area on the site was left in its after-exavcation settings, opposite to a well-conserved and presented area (figure 5.62). This approach clearly manifests the role and the effectiveness of varied conservation procedures in transforming the area and making sense of the ruins. Both areas sit on either side of the main route and, therefore, visitors can easily recognise the difference and appreciate the influence of conservation process on the fabric.

Figure 5.62: Vindolanda Fort, display the after excavation settings opposite to conserved areas to highlight the role and effectiveness of the conservation process on ruins.

Although simple interventions were carried out on both sites, a rich experience is exposed to the visitors who can easily grasp the architectural and urban settings of the ruins and see (or imagine) their volumetric and functional characteristics.

Figure 5.63: Vindolanda Fort, making sense of the ruins.
5.5.2 Saint-Romain-en-Gal museum and archaeological site

It is the largest dedicated museum for Gallo-Roman civilisation in France and located in a 7-ha Culture Park which revives the residential area of Vienna. Due to the fragile condition of part of the ruins, a big museum was built to provide a shelter for these ruins and in the meantime accommodate original artefacts and some replicas. The structural supports were located carefully within the ruins and, afterwards, the whole fabric, under the contemporary structure, was covered with fine gravel for further protection (figure 5.64). This was the only solution to keep the ruins safe for future investigations, if required, as they were in a very bad condition.

![Figure 5.64: Saint-Romain-en-Gal Museum, the contemporary structure.](image)

The museum nowadays constitutes a permanent and complementary structure to the archaeological site. The design considers linking the contemporary structure to the urban network of the archaeological site by installing a metal-timber walkway to connect the museum to the original Main Street (figure 5.64). The contemporary museum houses original mosaics and replicas of various structures of the Roman time, which have a comprehensive educational value in demonstrating various aspects of original Roman architecture, art and everyday life (figure 5.65).

![Figure 5.65: Saint-Romain-en-Gal Museum, the variety of artefacts housed in the contemporary museum.](image)
Very simple procedures were carried out on the remaining part of the archaeological fabric; however, they were able to reconstruct parts of the original architectural and urban environment. Considering the absence of clear volumetric characteristics, the buildings’ footprint was essentially used to highlight specific values or arrangements. Therefore, new materials were added to complete the missing parts of the buildings’ footprint. Also, wide-ranging textures and colours were used for the ground pavements to differentiate between spaces’ functions or importance (figure 5.66).

![Figure 5.66: Saint-Romain-en-Gal Museum, simple restoration to highlight the building’s footprint and spaces of different use.](image)

Specific architectural elements were reconstructed to unveil the function or the architectural settings of the space. Original or new and distinguishable, but compatible, materials were used for these reconstructions (figure 5.67). The conservation process takes into account the visitors’ movement between the ruins. For that purpose, traditional paving methods were used to highlight the urban network of the site and offer the visitors proper routes to musealise the architectural and urban fabric. Ramps of different materials were installed to span the uncovered sub-layers of the building, water-ducts for instance (figure 5.68), and facilitate the movement between structures. Fixed and temporary shelters were erected in different areas of the site to protect the fabric and enable its display to the public. Some shelters, although temporary, are very simple in design and made of inappropriate materials which cause further damage to the fabric. However, fixed shelters are of elaborated designs with glass being included to protect the structures beneath and allow visitors to see through (figure 5.69)
Chapter 5 Designing Approaches to Conservation: Review and Analysis

Figure 5.67: Saint-Romain-en-Gal Museum, various restoration works.

Figure 5.68: Saint-Romain-en-Gal Museum, ramps to facilitate the site's musealisation.

Figure 5.69: Saint-Romain-en-Gal Museum, examples of temporary and fixed shelters in the site.
One of the educational values unveiled on the site is related to the Roman gardening and landscape concepts. The original form of several gardens was reconstructed (figure 5.70) highlighting the advanced experience which the Roman people had in gardening and landscape. These reconstructions highly contribute to the people’s knowledge about architectural landscaping during the ancient Roman era. They also contribute to the overall beauty of the site.

![Figure 5.70: Saint-Romain-en-Gal Museum, examples of reconstructing the Roman gardening concepts.](image)

### 5.5.3 Knossos Palace

The great “Palace of Minos” was found at the north-central part of Crete on a Neolithic site which dates back to 7000 BC. The palace itself dates back to 2000-1200 BC and comprises a succession of palatial structures, which was eventually destroyed during the LMIB period 1200 BC. Because of its richness in mosaics and frescos, some scholars referred to it in their publications as the Frescoed Palace (figure 5.71). The palace accommodates many long and narrow hallways organised around a central courtyard, with other ceremonial and ritual spaces.

![Figure 5.71: Minoan Palace at Knossos, examples of available Frescos © Theodossopoulos, 2013.](image)
The discovered town’s mosaics which depict some architectural facades had inspired the reconstruction works carried out at the Palace. Arthur Evans, the first archaeologist of the site, was motivated by these findings to reconstruct these architectural features in the aim of reconstructing and presenting the Palace to the Public. He was interested in presenting his thoughts concerning the original appearance of the palace to the public in spatial resolution using the original ruins and new materials. Thus, Evans built his interpretations of the palace assuming that the discovered mosaics represent faithful depiction of the original architecture of the building. Therefore, he set various reconstructions of the ruins that he excavated at the site (figure 5.72, 73).

The reconstruction of the palace has presented an educational lesson about people’s life at Knossos. However, today it cannot be confirmed that this reconstruction represents the real past of the place, taking into account later excavations at the site, which brought to light new facts about the typical multi-storey houses in the area. During the 1920s, Evans assigned the palatial function to the site based on its multi-storey character and the fragmentary or misunderstood interpretation of Minoan iconography. He did not consider that even houses at that time were built in multiple storeys. Unfortunately, Evans’ reconstructions have become the focus of successive works on the site, which perpetuate his uncertain interpretations and, further, obscure the ruins’ original characteristics. This type of reconstruction, “the Historicist reconstruction” that is, is of a substantial impact on archaeological ruins for it is irreversible. Therefore, amending Evans’ interpretation would be destructive. On the other hand, the palace has achieved very wide reputation around the world given the success of its reconstruction in transforming the ruins into an open-air museum full of artistic pieces. If Evan’s interpretation were correct and had considered scientific data besides the historic ones, this project would be credited as the most successful conservation project of its time.
It is crucial to differentiate between “Historicist” and “Critical” reconstruction of the ruins which are still not completely excavated, which is the case of Knossos and even Ugarit, the main case study of this research. Therefore, taking into account its impact on Knossos, the Historicist reconstruction approach cannot be applied in Ugarit.

5.5.4 The Roman Temple of Apollo at Portonaccio

It is the most ancient and venerated temple in Etruria region; it was built during the 6th century BC outside the city at the western part of Portonaccio sanctuary. Many
scholars believe that this temple was dedicated to the goddess Minerva; however, the
discovery of the Apollo statue in 1916 had misled archaeologists to assign the temple
to the god Apollo. The 2nd century BC landslide led to the destruction of this temple
and the dispersion of its materials downhill. The temple was discovered in 1913 via
archaeological excavation work in the area, which had lasted until 1944.

Discovering the statue of Apollo had attributed religious significance to the place and
consequently several restoration works were carried out to make sense of the
scattered fragments. Based on Vitruvius’ architectural writings, scholars have
described the original building and created its reconstruction model (figure 5.74a).
The building consists of two main parts, the portico with entrance staircase (the front
part) and the 3-cell hall behind which houses the central room flanked with two side-
rooms. Using this description, restoration works were carried out in 1939 to
consolidate the temple and rebuild its footprint using the original scattered materials;
columns’ foundations were also identified (figure 5.74b).

Figure 5.74: The Roman Temple of Apollo at Portonaccio. (a) Reconstruction model. (b) Ruins after the
1939 restoration works.

In 1993, architect Franco Ceschi and Francesca Boitani utilised the past restorations
and Vitruvius’ architectural description to promote a comprehensive conservation
proposal for the temple. The two scholars proposed a conceptual framework for
representing the temple’s geometry, and so part of the temple was reconstructed
using light and transparent steel framework that does not obscure the ruins (figure
5.75). Also, the shape of original gable roof and terracotta tiles decorations were
reconstructed for visual impressions and educational values germane to the
architecture history of the ancient Roman time. The portico’s columns and access to the temple were highlighted as well.

Figure 5.75: The Roman Temple of Apollo at Portonaccio, the implemented reconstruction proposal.

The reconstruction proposal, consequently, fully respects the nature of the place and does not overwhelm the original ruins. The reconstruction of the volume has a positive impact on the reading of the ruins within their landscape and evoking the original urban environment during the Roman period. Simultaneously, the proposal maintains the current relationship between the ruins and surrounding landscape, which is of a high cultural value for the present communities as well.

This project highlights a creative principle in conservation and stresses the fact that evoking the ruins geometry does not mean rebuilding the whole structure and compromising the new characteristics of the ruins; both original and new characteristics of any ruin contribute to the significance of the place. Therefore, reconstruction should critically balance between original and contemporary values of any archaeological site in order to achieve a comprehensive proposal that maintains the ruins’ cultural links with the modern communities.

5.5.5 Roman ruins of Empúries (Ampurias), Spain

The Roman city of Empúries was found during the early 1st century BC. The urban structure of the city followed the orthogonal planning pattern and was provided with fortifications. The 2009 conservation project focused on the city forum (figure 5.76), which accommodates the ruins of temples, Cryptoporticus, basilica and curia, various shops, etc. The importance of this area comes from the strategic location at the
intersection point between the two main roads in the city. Also, the successive evolutionary phases, established of this area as a result of excavation works and detailed archaeological and architectural analyses, promoted scholarly interest in conserving and presenting this part of the city.

![Figure 5.76: Roman city of Empúries, the city's forum © Archaeology Museum of Catalonia.](image)

The conservation project aimed to promote the accessibility and musealisation of the ruins and present the forum in its last phase. Therefore, proposed interventions varied from simple procedures, that preserve the original architectural elements, to some reconstructions where necessary for enhancing public understanding of the place.

The ruins were restored in place using original or new materials. Original walls were consolidated to restore the footprint of the buildings as much as possible. Pavements in different textures or colours were applied in order to promote people’s understanding and the differentiation between spaces in terms of importance and function. Furthermore, original mosaics were kept and preserved in place (figure 5.77). This is a very useful principle and only minimal intervention is permitted. The Cryptoporticus columns were restored to reconstruct the original circulation and highlight its shape in the last phase, the U-shape porch that represents the religious area. The northwest corner of the Cryptoporticus was reconstructed to promote the visitors’ imagination of the place and its volumetric settings (figure 5.77, 78).
For the religious area, the original ground level of the main temple was restored and a new staircase was installed to facilitate visitors’ access to the restored podium (figure 5.79). Later 1970s reconstructions on the secondary temples were removed and all walls were consolidated and preserved to boost the architectural reading of these buildings. Original pavements were preserved in place as well.
The project highly promotes people’s understanding of this architectural complex, its components and different functions. Minor and major restoration procedures together facilitate people’s appreciation of the place without overpowering the original fabric, which primarily governs the understanding of the forum’s structure.
5.5.6 The Roman ruins of Can Tacó and Iesso, Spain

The archaeological remains of Can Tacó are located in an environment which coexisted with the industry; they constitute an essential part of the natural and archaeological site “Els Turons De Les Tres Creus”. The area is of high natural and archaeological potential and, therefore, substantial demand has arisen to present some places and highlight the diverse outstanding values of the area. The starting point of this big project has focused on the Roman ruins in order to unveil the heritage values and utilise the site to reconstruct the outstanding natural values of the surrounding area, pointing out the mountain’s authenticity as a biodiverse natural and structural element.

The area comprises the ruins of a Roman palace, which was a terraced building partially built with local “licorella” stone. However, nowadays it constitutes a panoramic natural viewpoint from which the Catalan region “Vallès” can be admired. Therefore, the work started with the reconstruction of the original ground level of the available ruins, which creates a successive terracing platform. The project seeks to value the container of the space (the walls), which was kept empty, and emphasises the contents (the space). Therefore, the ground of interior spaces was restored by installing steel mesh that contains the excavation soil, rocks and gravels from nearby ancient quarry. Consequently, different levels of the original Roman terraces were reconstructed (figure 5.80, 81).

![Figure 5.80: The Roman Ruins of Can Tacó: before and after the implementation of the conservation proposal (Aravena, 2013).](image)

Steps were provided where necessary to make possible communication between different levels (figure 5.81). The reconstructed multilevel podium offers a good...
understanding of this settlement as well as a panoramic viewpoint to explore the natural settings of the valley. The use of corrugated steel bars containing ancient walls and the steel rods as protection elements aims focus the visitors’ attention on the Roman remains and highlight the value of environment-industry coexistence within the area. Mostly, one layer of steel mesh is used for building the container; however, a second denser and thinner steel mesh is installed as a background curtain to highlight different archaeological remains (figure 5.81). Steel is light materials and promotes easy differentiation between added structures and original Roman fabric.

![Image](image_url)

**Figure 5.81: The Roman Ruins of Can Tacóafter, the implementation of the conservation proposal (Aravena, 2013)**

A small information point (multipurpose space) is built inside the natural slope and covered with a concrete slab. This new intervention was directed to face the valley, which is gradually moving towards the Mediterranean Sea. This space creates a belvedere deck, which is partly covered with a large pine tree providing suitable environment and place for public activities (figure 5.82).
In some points at the site, the architect, Toni Girones, sought to reflect some volumetric expressions of the ruins. Therefore, framed cubic structures made of steel were installed at the eastern part of the ruins to highlight some geometries (figure 5.83). This principle is mostly used when there is uncertainty concerning the exact geometry of the structure. Thus, framed structure gives clues and helps to elaborate the visitors’ imagination of the associated volume with the ruins. This principle has been successfully applied to highlight the volume of tower structure at the Roman ruins of Iesso, based on understanding of the structure’s footprint and the site’s associations (figure 5.84).
In general, proposed interventions on the Roman Ruins of Can Tacó successfully promote the understanding of the daily use of the site and emphasise the exchange between industry and nature. The terraced palace has been converted to a multi-activity platform providing a distinctive view of the region.

5.5.7 Archaeological site of Skarkos in Ios, Greece

The Cycladic site of Skarkos is situated on top of the hill that mediates the western side of Ios. Excavation works, carried out on the site between 1984 and 1997, have brought to light a very important Early Bronze Age site in a good state of preservation. The site accommodates Middle and Late Bronze Age structures, which consequently highly contributed to the understanding of the area’s development process at that time.

A conservation project, carried out on the site between 2002 and 2007, aimed to conserve the Early Bronze Age settlement as part of a human-made environment, present these ruins within their cultural landscape, and establish connections between the site and the nearby modern villages. The ruins of the settlement were preserved through carrying out minor restoration procedures with minimal interventions. Some descriptive panels were added to facilitate the visitors’ appreciation of each part of the site. Most walls were consolidated and the excavation soil was cleared to restore the architectural footprint of the fabric. Stone steps were added to aid site topography and ease the movement within the fabric (figure 5.85). Leading routes were identified on the site to guide visitors from one area to another based on conservation...
objectives. The restoration of traditional footpath, which promotes access to the site, has established the original connections between the site and surrounding fields.

The conservation project also intended to reconstruct the terrace walls which created the surrounding agricultural field terraces before the destruction of the area most probably during the Late Bronze Age. This procedure restores the original morphology and landscape settings on the site and, in the meantime, guarantees an attractive appearance of the site, presenting it as an iconic artefact within the whole area (figure 5.86). Consequently, the site today has its natural connections with the surrounding contemporary villages and outstanding natural beauty.
5.6 Summary

The wide variety of conservation projects, revised throughout this chapter, provides a strong insight which will fertilise the conservation proposal of Ugarit with constructive principles. Putting all these examples in one chapter aimed to broaden the margin of architectural choices based on a comparative approach which further elaborates the cultural values of Ugarit and reflects some of the ancient people's architectural and cultural aspects. The inappropriate conservation procedures, used materials, etc., reviewed in some of these cases, further promote the researcher’s awareness and sensitivity in discussing any conservation case.

These international case studies have shown real applications of the reviewed archaeological and conservation approaches and principles in Chapter 3 & 4. Consequently, the judgement of different conservation proposals in the City of Ugarit will not only go through the established theoretical framework, but will also be compared to similar aspects in these case studies to make sense of the final proposal. This chapter concludes the theoretical framework section (part I of the thesis) and, henceforward, each area of the City of Ugarit will be comprehensively analysed and discussed in order to identify, preserve and present its cultural valuable aspects onto the original fabric.
PART II: THE CITY OF UGARIT, ANALYSIS AND CRITICAL CONSERVATION APPROACH
Chapter 6  The Conservation of the Royal Area in Ugarit

6.1 Introduction

The long-time development process at the City of Ugarit is not only represented by the vertical evolution that expresses the site’s movement from period to another; the site underwent horizontal expansion as well. The development of the city was accompanied with parallel developments of the economic resources and political structure. This eventually contributed to the establishment of the royal family, which is physically interpreted by the construction of the Royal Area. The location of the Royal Area (figure 6.1) distinguishes Ugarit from other surrounding Bronze Age cities, as it constitutes the main gate of the city and also the main city fortress against the outside threats which were common during the Bronze Age. This conclusively differentiates the urban complexity of Ugarit and exposes the development of its unique political system. Also, this location reflects the huge responsibility taken on by the royal family in order to protect the city. These special characteristics, as will be seen later, represent many of the full civilisation traits which will be explored and mapped onto the existing fabric. This chapter mainly focuses on the analysis of the Royal Area of the city in light of the development of the city’s political system and economic resources. The main aim is to map the establishment and growth of the Ugaritic political and economic systems onto the architectural and urban fabric and present it to the public in a comprehensible manner.

Figure 6.1: Schematic diagram and general aerial view of the City of Ugarit, showing the location of the Royal Area.
In investigating the Ugaritic civilisation’s history, the Royal Area of the city has been shown to contain very valuable evolutionary aspects regarding the political system and its unique and mature integration within the urban and architectural fabric. It is, therefore, very important to elaborate the scholarly and public understanding of how the material culture and scriptures had caused changes to the civilisation’s political system. Inferring the evolutionary aspects in any socio-political institution implies a good understanding of the origin and traits of this complexity in order to categorise it within its socio-political context. Therefore, the analyses of the Royal Area will be governed by the understanding of archaeological approaches and principles (see section 3.3.3) in order to highlight the outstanding evolutionary aspects of this area and its effects on the architectural and urban fabric. The effects of Ugaritic people’s governance, cosmological beliefs and rituals on the architectural principles and arrangement of the New Royal Zone will be highlighted based on the new architectural analysis and available materials.

Subsequently, suitable conservation approaches and architectural interventions will be proposed in the hope of conserving and presenting these evolutionary and other outstanding aspects as they have been specifically expressed in the Royal Area of Ugarit. The study is based on available archaeological reports and detailed in situ architectural analyses and observations of key areas, which will be looked at at both architectural and urban levels. Therefore, the concept of cultural routes (see section 4.3.3) is of great significance, taking into account the presentation of an urban development process of the Royal Area over time.

Henceforward, this chapter will be divided into two main parts, which will respectively discuss the detailed analyses of the area and the conservation proposal, aspects and architectural choices. In the following section, the analysis of the Royal Area will be explained in more detail.

### 6.2 The Royal Area: Analyses and identifying the cultural values

This part will shed useful light on the Royal Area of Ugarit, while defining substantial knowledge and values which need to be preserved and presented to the public via a comprehensive proposal and appropriate architectural interventions.
6.2.1 Area description

The Royal Area of Ugarit occupies the western side of the city (figure 6.1:1). It comprises many important buildings (figure 6.2) and is distributed into two main zones: the Old and New Royal Zones which are separated from each other by the Palace Street. The Royal Palace (1), the Pillared Building (2), Royal “Hurrian” Sanctuary (3), the check point (4) and the monumental entrance tower (5), which protected the city from the seaside, are organised around the New Royal Plaza. These structures form a secured area, the New Royal Zone, which was separated from the city by three secured accesses (figure 6.2). The Old Royal Zone on the other side accommodates Queen Mother’s House (6), guardians’ houses (7), building of the throne (8), named as the New Sanctuary (Callot, 2013a), and the so called North Palace (9). These structures form the Old Royal Plaza. The Royal Area is connected to the rest of the city via the Public Plaza to the east of the palace. Archaeological excavation reports can confirm that this plaza accommodated public everyday functions such as the Oven House (figure 6.2:10), the building with the stone vase (11), strongly believed to be a tavern, and shops agglomeration (bazar) (12) as part of the House of Alabasters.

The principal building material is sandstone, varied in size and condition. Most of the Old Royal Zone’s buildings had been built using large key stones at the entry and corners and small flag stones and rubble in between. There is one exception: the North Palace which was built with very large and good-condition stones. The building materials are much better in the New Royal Zone in which the monumentality and organisation of the buildings had been increased (figure 6.3). In addition to tangible evidence, the area’s buildings and urban fabric represent crucial knowledge regarding the civilisation’s political history and its evolution, which will be defined in the following section.
Figure 6.2: The Royal Area in Ugarit.

Figure 6.3: (a) General aerial view of the Royal Area in Ugarit (Margueron, 2000). (b) The high-quality material of buildings in the New Royal Zone, the entrance of the Royal Palace.
6.2.2 Defining the cultural values

The City of Ugarit presents a very good example of evolution, having progressed from a simple village to a well-structured city, which played the important role of political and economic capital for the Ugaritic civilisation. This evolution, also called vertical evolution (see section 4.2.2: Stratification), is represented in Schaeffer’s archaeological soundings (1962-1976), conducted in the highest part of the city, the Acropolis, so to speak (Curtis, 1985; Marchegay, 2008; Schaeffer, 1935; Yon, 2006). This evolution resulted from a set of developments that took place between chronological layers. Furthermore, it holds the emergence of the name of Ugarit, revealing the development from a Neolithic village to a fully structured city in the third millennium BC, to become a full civilisation in its prosperous period between 1600 and 1185 BC.

The second path of evolution, referred to as horizontal, took place in the last layer of the late Bronze Age 1600-1185 BC. It illustrates very divergent developments which cover all culture subsystems. This is considered a plausible result of the vertical evolution, and changes occur at the urban and architectural fabric in accordance with the new needs resulting from political, economic or social developments. These tangible changes constitute the substantial presented material, utilised in creating overall knowledge and narratives. Using architectural principles, these narratives will be exposed and mapped onto the fabric, constructing the main framework within which the political evolutionary aspects and other cultural values in the Royal Area of Ugarit will be conserved and presented to the public in an intelligible manner.

Preserving and presenting the evolution types in Ugarit imply comprehensive approaches that consider connecting the unearthed phases in a plausible manner in the future. This is conducted using suitable architectural interventions in the site’s fabric which help to present and re-frame the original material. Using critical approaches is fundamental here for the sake of establishing architectural choices on a strong information basis which has been discerned from vigilant analyses. It is crucial then to define the knowledge to be preserved and identify a strategic approach that enables an accurate selection of the presented pieces of the past. Other knowledge that is connected to the area’s past (narrative, indigenous and
contemplative) should be preserved too, taking into account the traditions and experiences of the ancient people as well as the most valuable aspects of the area for the modern local community.

Political evolution, which is one of the main focuses of this chapter, is represented by many archaeological and historical pieces of evidence. The huge amount of records, in both Akkadian and Ugaritic, discovered in the Royal Palace, demonstrates the strong external relationships Ugarit had with surrounding civilisations especially the Hittites and Egyptians (Yon, 2006). Although Ugaritic royalty had always been under the domination of other surrounding powers (Egyptian domination until 14th century BC and Hittites after that (Lackenbacher, 2000)), they could still build a strong and well organised political system which had resulted in the last phase of the monumental Royal Palace. This palace was considered unique in the area, as mentioned in a letter found in Amenophis III archive at Tell El-Amarna. This letter was sent by the King of Byblos (Yon, 2006), explaining his admiration of the Ugaritic palace. The discovered records in Ugarit, on the other hand, refer to the well-developed judiciary and administrative systems which Ugarit had at that time (Bordreuil, 2000a).

The building of the new Royal Palace (figure 6.2:1) between 15th and 13th century BC reveals Ugaritic people’s need for a separate political and administrative centre. The role of this centre was crucial in organising and carrying out political, administrative and economic works appropriately. Dividing the palace into sections with relevant archives had an essential role in the development of political and administrative system of the city; it is a clear evidence of a promoted cultural system in Ugarit that raised the civilisation’s ranking among the surrounding powers. Building the palace over two centuries (Schaeffer, 1962b) demonstrates the political evolution process in Ugarit; sections had been added gradually to fulfil the new requirements of the system as well as the royal family’s ambition (figure 6.4). Each added block seems to be a separated entity serving a specific function. Each section is connected to the surroundings via a door or foyer.
Figure 6.4: The development of building the Royal Palace over two centuries, in alphabetical order from the oldest.

Chapter 6 The Conservation of the Royal Area in Ugarit
The architecture of the palace also conveys the great influence of surrounding civilisations such as Hittites, Egyptians and even Minoans in Crete (figure 6.5). This faithfully reflects the extensive relationships which Ugaritic civilisation had with neighbouring cultures and even cultures overseas. Although the original core of the Royal Palace shows a clearly traditional Syrian architecture, some of the developed sections are visibly coloured by architectural concepts from neighbouring or dominant civilisations (Aruz et al., 2008). For instance, the throne with its foyer and courtyard are proof of axial organisation, an ultimate characteristic of Egyptian Architecture. Also, the courtyard with basin (swimming pool) to the south and the big eastern courtyard, the palace garden, are undoubtedly of Egyptian influence. This influence is natural, taking into account the development of the palace. These parts were added in the late 15th century BC and beginning of 14th Century BC when Ugarit was still under Egyptian control.

Figure 6.5: Cultural influence on the New Royal Zone.
The fact that Ugaritic life came under Hittites’ control in 14th century BC is not only manifested in written resources, but also in the city’s architecture, the Royal Palace in particular. The city’s monumental gate reflects Hittites’ architectural features. Some scholars think that the New Royal Plaza is of Hittite origin too; however, the open public or private space (the Plaza) is a new concept which Ugaritic People developed in many areas of the city as will be seen later on. It is most probably developed from the concept of courtyard which is a Syrian traditional concept; the Old Royal Plaza represents an old version of this concept.

Ugarit had also had strong relationships with other Mediterranean civilisations in Cyprus and Crete. The Pillared Building, the last development in the New Royal Zone, is believed to be influenced by the architecture of the Minoan Megaron. Also, the Royal Palace portico entrance is a common feature between Ugaritic and Minoan palaces. Some scholars presume that the Pillared Building and the portico entrance are characterised by Hittites architecture too. Actually, both hypotheses can be considered, taking into account the strong political and geographic relationships between Hittites and Minoan civilisations.

Consequently, the Ugaritic Royal Palace represents a unique case of cultural homogeneity, where the influence of each civilisation is clearly manifested. This better highlights the successive development phases of the building in line with the political changes in the city. This characteristic imposed the Palace as a unique artefact during ancient time whereas it is today of exceptional historic and educational value; it is a faithful representation of multicultural architectural production of ancient time but with a high level of homogeneity.

By building the palace with the monumental gate, people demonstrated their understanding of the notion of an independent political system and their approach to creating their own characteristic civilisation. This approach had become strong in the last phase by the construction of the Pillared Building (Figure 6.2:2) to the north of the New Royal Plaza. Building on this monumental scale marks, with more clarity, the royal dynasty’s desire to express their political and economic achievements in spatial terms. Also, building the monumental gate and rampart pointed out the desire to protect the city from external danger (figure 6.6a). Monumental architecture was
also used for interior spaces of the palace such as the eastern section around the
garden (figure 6.6b), the Throne (figure 6.7), banquet hall, and funeral courtyard and
podium (figure 6.8). During the last phase, the royal family became partly separated
from the Old Royal Zone and the other parts of the city by the checkpoint at Palace
Street (figure 6.2:4). This was done by the royalty in order to emphasise their
prestige, despite the fact that they had a very good relationship with their people.

Figure 6.6: The monumentality in Ugaritic royal structures (a) Artistic reconstruction of the New Royal
Zone including the monumental gate. (b) Artistic reconstruction of the Palace’s garden.

Figure 6.7: The Royal Palace: The Throne with the corresponding courtyard.

Figure 6.8: The Royal Palace: The podium at the Funeral department with the corresponding courtyard.
Additional architectural evidence of the political evolution in Ugarit is represented by the development of the city’s defence system which presents Ugarit as an independent political entity. The development of this structure can be identified in terms of three phases, ranging from a very basic entrance tower to a very complex and monumental gate, giving, thereby, access to the Royal Area. It is believed that the entrance started with a rectangular tower attached to the rampart which fortified the whole city during the end of the Middle Bronze Age. Thereafter, and during the construction of the new Royal Palace, transformations were applied to the city’s entrance and a postern gate was added as a secondary access to the Royal Palace between 15th and 14th centuries BC (Figure 6.9). In the 13th century BC, as the kingdom became more powerful, the city rampart was equipped with a new distinct defence system, a monumental gate (Figure 6.10) with a small external tower connected to it via a ramp (Yon, 2006). The new monumental gate, together with the Palace and pillared building, created the new royal compound in the city.

Figure 6.9: 15th-14th century entrance of the city. (a) (Yon, 2006) (b) In situ observation.

Figure 6.10: 13th -12th century entrance of the city. (a) (Yon, 2006). (b) In situ observation.
On the site, this evolution can be physically recognised due to the presence of the ruins of the old and new towers together with the postern gate (figure 6.9, 10). Although the royal compound was secured from the city by several accesses, its location gave it the privilege to be the city gate against the sea, the main source of threat at the time. Taking that into consideration, the royal family was deemed responsible for protecting the city and the people. That provided a good example of the democratic and good relations between the royal family and their people. It also distinguished the political system and the urban structure of Ugarit from those of other surrounding powers.

The political system of Ugarit, however, was not only promoted by the democratic stance of its royalty; the innovation of Ugaritic Alphabet and alphabetic writing in the 14th century BC firmly promoted the administrative and political system a great deal (Bordreuil, 2000c; Dalix, 2000). This event eventually established an educational process in the city, particularly in the palace. There are rich archives in the palace that provide extensive information about political, economic, religious and social life in Ugarit during the Late Bronze Age period. Revising the layout of the palace (figure 6.11), it can be recognised that these archives were distributed according to the function of their section. They were categorised as administrative and political (public) documents in the west (13&14), mythologies, economic, and private (16&17) in the eastern and southern sections. However, the discoveries of archives (15) show diverse political, religious and ritual documents. What is unique, as shown in (figure 6.11), is that the Palace sections follow the same line in privacy, which gradually increases from political and administrative functions in zones (A) and (B) in the west to private ones in the southern and eastern parts, which respectively comprise the swimming pool, salons and garden of the royal family. The ground floor of the Royal Place is connected to the royal family apartment on the first floor via 12 staircases distributed in all parts of the building.
Moreover, transferring the administrative and political activities from the Old Royal Zone to the Royal Palace highlighted the royal family’s desire to crystallise their political identity against neighbouring civilisations. On the other hand, Ugaritic people did not abandon the Old Royal Zone. They rather continued to use its buildings for other supporting functions. After the earthquake in the middle of 13th century BC, the entire Old Royal Zone was built except for the North Palace (Figure 6.2:9) whose interpretation is still vague owing to the shortage of detailed archaeological information found in the building. Special analysis will be devoted to this building owing to its large size, special arrangements and exceptional materiality; it was built with very large ashlar stones which were found to be similar to the ones in the Royal Palace (figure 6.12).
From historical resources, the Battle of Kadesh that occurred between Hittites and Egyptians in 1274 BC is a very concrete historical event that proves that Ugaritic people had more freedom and to an extent made their own decisions in the region. It is believed that this battle had played an important role in freeing the political system in Ugarit from immediate dominance. Justifying that, the battle resulted in that neither Hittites nor Egyptians had achieved complete victory by launching this war. However, Hittites’ power fell back to the north without extension of the Egyptian power over the freed land. This key event helped expand Ugaritic power over surrounding land, and gave Ugarit self-made decision ability. This freedom is represented in some letters from the Hittites king reminding the king of Ugarit of the tax and gifts the latter should send based on an old agreement. This evasion had occurred frequently in the late period of Ugarit during 13th and early 12th century BC. This strongly indicates the Ugaritic royalty’s desire for gaining full independence of the Hittites who were having some trouble at that time. In accordance with Gordon Childe and Kent Flannery’s norms (See section 3.3.3: Full Civilisation Traits), by the independence Ugarit had been promoted to full civilisation with an advanced political and administrative system.

The North Palace (figure 6.13:9) was likely affected by this development phase in the city. Ugaritic people had built most of the Old Royal Zone after the earthquake in 1250 BC except for this building, although from its structure it seemingly had a very important function in Ugarit. Abandoning the North Palace in the last phase of the city is a puzzle that scholars are still trying to solve. In his paper “Le Palais Nord d’Ougarit”, Sebastien Ray analysed the building and established his architectural interpretation based on the results of archaeological excavations and surveys. Ray’s interpretation was not far from Schaeffer’s proposition about the palatial function of
the building. He had built some of his ideas on hypotheses, particularly in proposing a courtyard function for space 18 (Ray, 2009b). This space houses a row of column stone bases, not common in Ugaritic open spaces. Olivier Callot (2013), on the other hand, rejected this proposition and recently published his paper “réflexions sur le palaisnord d'Ougarit” presenting his architectural interpretation of the building. Callot’s interpretation was based on the same archaeological surveys of the building, particularly the ones conducted by J. Mallet in 2000 and 2002. Callot believes that the building had functioned as a house, a unique one that is, in Ugarit. He built his interpretation on highlighting the characteristics of Ugaritic domestic architecture in the building. However, he did not logically answer the question of why Ugaritic people did not rebuild it after the earthquake, even though it was a very unique house as he proposed (Callot, 2013b).

Figure 6.13: The North Palace, Old Royal Zone in Ugarit.

Considering the location and urban context of the building, it can be agreed that this building was not a palace; the main entrance of the building is opened to a secondary street heading towards the Public Plaza, which mediates between the Royal Area and Residential Quarter. It is, therefore, in the opposite direction of the Old Royal Plaza.
and, consequently, from an urban point of view, the building cannot be considered for a palatial function, as it does not form an urban entity with other buildings of the Old Royal Zone. Ray proposed another access from the Old Royal Plaza to space 18 of the building. This access is still a hypothesis and cannot be considered in the presence of a more obvious and monumental one. Moreover, the presence of column bases in room 18 emphasises the fact that it is not a courtyard as Ray proposed. Instead, it is a big roofed hall equipped with other service spaces. Furthermore, recent archaeological and architectural analyses of the building (Callot, 2013b; Mallet, 2002) have confirmed that the construction of this building started during 15th century BC, simultaneously with the construction of the Royal Palace. This further insists on a non-palatial function for this building.

The presence of the big hall, the very special building material, and the nature of external walls - very thick, sometimes 140 cm - emphasise the public nature of this building, even though it had included some domestic functions. For that reason, Callot’s interpretation focusing on the merely domestic function cannot be accepted either. Consequently, this building has a public nature and comprises some domestic functions. In depth analysis of the architecture of the North Palace as well as answering the question of why Ugaritic people did not rebuild it after the earthquake hold the key that might reveal more clear interpretation of this building and decipher its secrets.

The building’s organisation and architecture are distinguished from all surrounding structure by the thick defence walls and columned hall. Having only one access demonstrates the importance of security for the users of this building who clearly used it as both public and domestic at the same time. From an architectural point of view, room 18, the great hall, clearly injects the building with Hittite influence. This type of space with a row of columns is quite common in many Hittites cities contemporary to Ugarit such as Hattusa (figure 6.14). The thickness of the external walls with monumental secured entrance and the organisation of the building strongly emphasise this influence too, as they are popular characteristic in Hittites architecture. Since these characteristics are not found in Ugaritic houses, even the very rich ones, it can be presumed that the users of this building were not the native
people of Ugarit. Eventually, in all likelihood, the Hittites had used this building; they built it similar to a contemporary embassy in order to accommodate their mission in Ugarit, an embassy that increased Hittites’ political and economic benefits in the city. That most likely justifies the fact that the building is characterised by Hittite architectural concepts and clarifies the mysterious fact of leaving the building abandoned after the earthquake. I believe that Hittite power started decreasing after the Battle of Kadesh 1274 BC and that their conflict with surrounding Mesopotamian powers during the last phase, before the kingdom’s destruction, promoted an exceptional chance for Ugaritic people to exploit these events and unveiled their desire to escape the Hittites. Consequently, the recession in Hittites’ power most probably encouraged Ugaritic people to leave the building abandoned after the earthquake 1250 BC and get over the bad memory of the Hittites’ long-time of control. They used the building’s land and stones to erect new structures that were related to their culture such as the New Sanctuary (figure 6.13:8).

![Figure 6.14: Some examples of buildings from Hattusa, the capital if Hittites empire (a) © UNESCO (b) (Sey, 1999).](image)

The overlapping between the two buildings (North Palace and New Sanctuary) is a faithful representation of historic periods in Ugarit. Also, it presents important evidence of the city’s political development and people’s attitudes towards em-powers that dominated their civilisation. The following section will highlight in more detail how people’s attitudes and rituals affected the architecture of the Royal Area.
6.2.3 The rituals and architecture in the Royal Area

This section discusses the effects of Ugaritic people’s political, ritualistic and social aspects on the architectural composition and arrangement of the New Royal Zone. Archaeological investigations and analyses, thus far, have not contributed much to the understanding of Ugaritic people’s governance, cosmological beliefs and rituals in their Royal Area, temples and the rest of the city. As mentioned before (see section 6.2.2), positioning the Royal Area at the city’s western edge differentiates Ugaritic people’s attitudes and principles from all surrounding cultures. Also, the analysis of Ugaritic funeral architecture (see section 7.3.3) and temples (see Chapter 8) confirms that Ugaritic people did not follow strict principles in the organisation and directions of their structures as was happening in surrounding civilizations. Therefore, it is not possible to use a comparative approach to interpret the relationship between Ugaritic architecture and people’s rituals and beliefs. For now, interpreting this relationship will be based on architectural analyses and available texts. However subjective this interpretation is, future investigation of Ugaritic text and material culture will establish a unique research line in future Ugaritic studies, similar to other studies carried out on Mesopotamian cultures by Peter Carl, Paul Ricoeur and Henri Frankfort (Frankfort, 1948; Gadamer and Ricœur, 1982; Ricoeur, 2005).

In the Royal Area, the royal family’s rituals strongly affected the architectural composition of their royal area and palace. The royal family, especially in the last phase of the city, intended to decrease the influence of surrounding political powers in the city and form a clear political attitude towards external relationships. On the other hand, the discovered texts in the Royal Palace show that the royal family had a good relationship with their people and formed two councils in which representatives of the public were involved. These aspects highly controlled the composition of the Royal Palace: a direct processional route to the throne of Royal Palace was established and very monumental structures were built along this route. This was most likely done to frame the public area and reconstruct a powerful image of the civilization. The route, which went through two towers, monumental royal plaza,
monumental palace access, ceremonial courtyard (I) and finally the throne, aimed to emphasise the political power that Ugarit had obtained during the 13th century BC. The construction of two towers on this route and the increasing in the size and complexity of these towers also projected the development occurring to the political and cultural systems. The New Royal Plaza, which was assigned as the first point for external visitors, was surrounded with monumental structures as a representation of the new obtained power during 13th century BC. On the other hand, the eastern part of the palace shows a completely different attitude; the structures have become simpler and started to have the same architectural features and constructional quality of the houses to the east. Also, the Royal Area was separated from the rest of the city with a small check point which clearly shows a low level of security between the palace and the rest of the city, a positive indication of a good relationship between the royal family and their people. In other words, the eastern part of the palace becomes very well integrated into the fabric of the city, which explicitly represents the royalty’s notions and beliefs.

Consequently, the composition of the Royal Palace shows clear separation between public and private lives (Figure 6.11). This separation is a true reflection of the political life in the city where civil and religious lives were most likely separated from the political system and decision making process; i.e. the temples had less influence on the city's political system than what was common in other surrounding cultures. This aspect will become clearer when analysing the domestic and religious architecture as well as the urban principles in the city later on. The successive monumental structures from the gate to the throne is a strong trigger for the understanding of the public and formal route to the city which is in contradiction with the other route from the throne to the city, which can be described as simple and friendly through a very simple, almost missing separation between the palace and the city to the east. These two routes are faithful representations of the two types of relationships that the royal family sought to establish; a formal relationship with the outside of the city, which shows the city’s power and advancements, as well as a friendly relation with their people inside the city. The building of the Pillared Building as a ceremonial hall by the end of 13th century BC reinforces the high potential of this interpretation.
The cult of ancestors and its associate chamber tombs had most probably affected the design of the Royal Palace: the royal tombs were accommodated in the Royal Palace, and the ceremonial event and banquet that accompanied burying or visiting the former kings’ tombs (Pardée, 2000) insisted on introducing new open (courtyard II) and close (banquet hall) spaces within the public area. The cult of ancestors (see section 7.3.3) sought to establish connections with the afterlife through the dead ancestors. In addition to being the father of the royal family, the king had political and religious significance to his people and other cultures; therefore, the location of the tombs and attached ceremonial spaces was chosen to facilitate access from public and private areas. This eventually divided the palace into three main parts: political (public), ritual (semi-public) and residential (private). This aspect did not only affect the royal palace, but also the everyday religious and domestic structure in the city as will be seen later on.

This interpretation cannot be taken further owing to the shortage in supporting information; however, and taking into consideration that only 30% of the site has been excavated and the old palace of the city has still not been found yet, future excavation and analysis works, particularly on Ugaritic literature, will bring stronger pieces of evidence to this argument and research avenue.

6.2.4 The cultural values of the Royal Area
Considering the comprehensive reading and analysis of the Royal Area’s fabric, addressed above, the cultural values of this area can be summarised as follows:

1- The evolution of Ugaritic political and cultural system was accompanied with spatial, architectural and urban developments represented by the great leap between the structures of Old and New Royal Zones;
2- The development of the concept of Plaza is well recognised in the city’s royal quarter. This is an obvious indication of the urban planning experience that the Ugaritic people had during the Bronze Age period;
3- The expansion of the Royal Palace embeds two centuries of political, cultural and architectural evolutions. Also, it is a unique example of faithful reflection
of successive cultural influences over the long history of Ugarit, but in an astonishing homogeneity;
4- The Royal Palace offers an invaluable lesson regarding the architectural experience and advanced stone technology obtained by the Ugaritic people;
5- The archaeological stratigraphy in some parts of the Royal Area provides rich information on the history of the city and the evolution of people’s attitudes.

6.3 Conservation proposal
6.3.1 Concepts and principles
This section mainly focuses on the conservation concept of the Royal Area’s fabric, preserving its cultural valuable aspects and presenting them to the public using an appropriate musealisation approach. Suitable conservation concepts and principles and some codes borrowed from international conservation charters (see section 4.3.3) will be chosen, based on the area’s characteristics.

To conserve the evolutionary aspects of the area, the resulting archaeological product (narratives) should be mapped onto its existing architectural and urban fabric using suitable conservation concepts and architectural principles. In such cases, the concept of cultural routes (see section 4.3.3) is very efficient; it works on presenting archaeological and architectural interpretations to the visitor in a plausible manner. Therefore, some routes will be identified with the aim of highlighting evidence of political evolution between different phases in the Royal Area.

Political evolution is part and parcel of the site’s cultural significance. Therefore, the presence of Burra Charter’s (1999) principles (see section 4.3.3) is fundamental for controlling the conservation policy. As a part of the City of Ugarit, the Royal Area cannot be conserved separately; rather, it is better to consider its associations with the surrounding fabric. The last phase 13-12th century BC is considered the main piece of the Ugaritic past to be conserved, and its ruins represent the great political advancements of the city. It also holds very significant cultural connections for modern and future generations with their ancestors’ history and experience, for it is a pure Syrian kingdom in its geographical lands. The previous phases will be highlighted in a way which allows people to understand the overlapping between
phases and presents evolutionary aspects among them. The area exhibits different types of building which vary in structures and building materials. Visitors will be able to recognise the differences between the Old and New Royal Zones regarding the structure, materials and space organisation. This evolutionary line must be strongly highlighted throughout the conservation approach. The New Royal Zone also represents the high political status that Ugarit reached in the last phase. The fortified political entity highlights the people’s understanding of the concept of kingdom with all its political and cultural ingredients.

Since the site has not been completely excavated, critical conservation approaches (see section 4.3.3) to align with the systematic investigation of each case should be applied. The notion of critical conservation allows flexibility and reversibility, especially when data from future excavations that might change the significance and narratives is concerned. Historical stratification principles are highly valuable here; they present the evolution line of the Royal Area that spans between its two zones. These thoughts will result in different levels of architectural interaction, which will be identified throughout each proposed route so as to present its specific significance.

Having discussed the chosen conservation concepts and principles, the following part will be fundamentally devoted to drawing upon the conservation proposal and architectural choices that could be suggested to preserve and present the identified cultural values, including the political and cultural evolution, on the architectural and urban fabric of the Royal Area.

6.3.2 Conservation procedure and architectural interventions

General aspects
The Royal Area is considered the best preserved part of the city. However, many general aspects should be considered before starting to implement the actual conservation proposal of the area. Recent inappropriate interventions should be removed to avoid any misinterpretation of the original fabric. For instance, in 2004, the General Director of the National Museum of Latakia had carried out a destructive, as noted by the French scholars, capping for the walls of the Royal Palace. Using inappropriate mix materials (white cement, lime, gravel and larger stones) and the wrong capping strategy had resulted in disturbance of and a negative
visual impact on the ruins (figure 6.15). Moreover, the added capping got the same
colour of the original stones over time, which would cause confusion for visitors.
Since it is harder than the original sandstones, this capping layer causes more
deterioration as it prevents natural expansion and contraction mechanism in the
original stones. Therefore, it is essential to carefully remove this layer and replace it
with appropriate capping; soft mortar that enables natural breathing of the original
stones and simultaneously prevents water from getting into the wall is a good choice.
Lime mortar will be a reversible material with easy maintenance. The new capping
layer will be only used to fill the spaces between original stones and facilitate the
flow of the rainwater on top of the walls. In this case, the original stones will be
protected, and the character of the original walls will be restored.

Figure 6.15: General views at the Royal Palace fabric showing the added capping layers on the walls. (a)
The palace original core (zone A) looking east. (b) The Palace’s wall on Palace Street.

Vegetation constitutes a serious problem for all unearthed structures in the city.
Before conducting any conservation procedure, all structures should be cleared of all
types of vegetation. Original walls are fragmented in many parts of the area (figure
6.16). Thus, it is very important to rectify and consolidate fragmented walls based on
a sensitive approach to present the architectural interpretation of each building and,
consequently, the entire area. Original stones available in the vicinity will be
repositioned into original place using simple and soft mortar, compatible with the
original in order to avoid damages to the original stones. This simple mortar consists
of soil, water and lime. This approach will undoubtedly enhance the overall reading
of the ruins and present a clearer footprint of the buildings, preparing them for other architectural interventions.

![Examples of fragmented walls at the Royal Area in Ugarit.](image)

**Proposed interventions**

The main aim is to benefit from architectural and urban settings in order to unveil the cultural evolutionary aspects at the Royal Area and the Royal Palace as a single structure. Therefore, two main routes are proposed to guide the visitors through the established interpretations; some secondary shorter routes will be added when the embodied narrative deems it necessary. Both routes have the same start point at the monumental gate, the main entrance of the city. They split out at the New Royal Plaza in order to express anticipated significance. Route 1 (Figure 6.17) is mainly proposed to convey the evolution between the two royal zones. It starts by using the old (15th – 14th century BC) access system, the rectangular tower and postern gate, to reach the New Royal Plaza. Afterwards, it passes the security checkpoint (4) to the Palace Street at which it turns left to enter the main plaza of the Old Royal Zone. Following that, it aligns to the eastern side of the North Palace (9) and guardian house (7). Nonetheless, it is not really known whether the Old Royal Zone stops here or not. The area to the northeast is not excavated yet so the proposal fundamentally focuses on the known parts. To present the evolution, the route continues to enter the Royal Palace (1) from the secondary access at the northeast corner, open to the Public Plaza. Then, the route passes the Royal Palace through its main courtyards to reach the New Royal Plaza yet again. The last part of this route, the exit from the city, will run through the new access system, the 13th century access system, the monumental gate. This route will allow visitors to experience both the public and private routes in the New Royal Zone (see section 6.2.3) and recognise the different
two types of connection, internal and external, which the royal family established for their palace.

Figure 6.17: The Royal Area: Route 1.

A secondary short path branches from this route at the Public Plaza before entering the Royal Palace. This branch heads west, passing the checkpoint in the Palace Street, and subsequently approaches the New Royal Plaza; this plaza is considered a unique urban component in the area due to its location and the surrounding monumental facades. This secondary route mainly re-proposes the original experience of the Ugaritic people when they used to approach the Royal Palace from
inside the city. The main purpose of Route 1 is to give the visitors a good understanding of the urban organisation and structure of the whole area. Also, this route allows visitors to recognise the differences in building architecture, materials, technology and conditions between Old and New Royal Zones and, equally, between the two defence systems.

Route 2 focuses on the developments of the New Royal Zone, as a very well organised and secured political entity for the city in the last phase. The evolutionary aspect inside and outside the Royal Palace are the main conservation motives. Starting from the New Royal Plaza, this route can be divided into three parts; the circular path, the secondary branches and the turning back route (figure 6.18). Once inside the Palace, a circular path connects the original core of the Palace zone A with the three first sections added around, which constitute zone B the political and administrative section of the palace. This circle allows visitors to run through zones A and B, realise the function of each part and also recognise the relationships between the core and added sections in pairs. Some secondary routes are branched from this circle linking each part of zone B with its additions and demonstrating how the palace had expanded, step by step, over the course of two centuries. The last part of the route uses the circular path to go back to the New Royal Plaza and head north to the Pillared Building which is believed to have been a fabulous monument occupying the northeast side of the plaza. The whole route is dedicated to presenting the expansion process of the palace and highlighting its different sections. Moreover, it enables people’s recognition of how the archives had been developed in line with the palace’s expansion - each added section had its own archive whose findings reflect the function of this part of the palace. The last part of this route is set up to underscore the royal family’s desire to move some public activities out of the palace into the ceremonial surroundings of their plaza; they aimed to show off their political and economic developments by building in a monumental scale around the plaza. Additionally, the circular path will invite visitors to experience the connection which the royal tombs and their facility spaces have with the public and political areas. On the other hand, the secondary routes to the east allow the visitors to experience the relationship between these tombs and the royal family’s private department to the east as well as on the first floor.
Both routes highlight the separation between the Old and New Royal Zones in the last phase of the city; this separation further presents ancient people’s understanding of the notion of political power and their willing to create a well identified political and administrative compound. Thus, required conservation procedures and architectural interventions will be suggested in line with each route propositions and requirements. The chosen materials should be light and flexible to maintain reversibility and avoid heavy structures that require big foundations.

Figure 6.18: The Royal Area: Route 2.

Route 1: The main aim of this route is to present the political, architectural and urban developments via a comparison between Old and New Royal Zones. Reconstructing
the facades of both Old and New Royal Plazas will display the changes in architectural and urban concepts, from a simple urban environment to a very monumental one, which indicates advanced civilisation in the last phase (figure 6.19, 20). After consolidating the collapsed walls in accordance with architectural interpretation of each building, the facades should be reconstructed using light and flexible materials. Steel framework and timber cladding are sufficient materials for the reconstruction works; they are easily manufactured off site and, simultaneously, distinguished from the original fabric. The reconstructed part, although light, should have its own separate foundations. However, when it is necessary, some loads can be transferred to the walls’ intersection points or corners as these key points of the buildings were built in ashlars and are in a very good condition. These key points originally constituted the building’s pillars (Callot, 1994, p.115-147) which held the roofs and transferred all produced loads from the two storeys to the foundations (figure 6.21). Most buildings in the New Royal Zone are built in Ashlars. Therefore, any point is sufficient to receive some loads of the added structures, if it is necessary.

In the New Royal Zone, the volume of the Royal Sanctuary will be represented in a framed steel structure. This proposal will be further explained in Chapter 8 which discusses the conservation proposal of religious buildings in Ugarit. There is nothing confirmed concerning the original height of the buildings in the city. Archaeological and architectural analyses have confirmed that these buildings were mostly two storeys and three storeys in exceptional cases. Therefore, all facades around the Old and New Royal Plazas will be reconstructed roughly to the height of two storeys in order to recreate the urban environment of the place. The podium in front of the Queen Mother House will be restored with timber platform (figure 6.19); the supports of this platform should be placed based on a detailed archaeological and architectural analysis of the original fabric. This platform will enhance the understanding of the urban settings at the Old Royal Plaza as well as restore the ancient people’s experience in accessing this house.
Figure 6.19: The reconstruction of the urban form: Old Royal Plaza.

Figure 6.20: The reconstruction of the urban form: New Royal Plaza.

Figure 6.21: Key points in Ugaritic building which might support the new additions when it is necessary.
The North Palace is a key and controversial element here and should, thus, not be intensively touched before having a very concrete interpretation of it through future excavations. For that, the only thing which can be done is to use the remaining stones to anastylose (i.e. assemble) the fragmented building and clearly present its layout and organisation. Also, the overlapping between the North Palace and the New Sanctuary must be highlighted for better historic and stratigraphic understanding. The ruins of the North Palace will be capped with a lime mortar layer for further differentiation from the ruins of the New Sanctuary (figure 6.22). This proposal will be further elaborated in Chapter 8 as well.

![Figure 6.22: Highlighting the stratification between the North Palace and the New Sanctuary.](image)

The Public Plaza, where the Royal Area is linked to other parts of the city, presents the extension of public civic but not political functioned buildings, somehow coloured with domestic aspects. Consequently, simple maintenance of the existing fabric will suffice for now. Conservation proposal includes rebuilding the fragmented walls using its original fallen stones to highlight the plaza’s boundaries and expose the buildings’ functions around it. The proposal of this plaza will be further developed in the next chapter, exploring the domestic architecture of the city.

The Royal Palace was built in monumental scale; however, the level of this monumentality is different between private, political and administrative sections. Route 1 accesses the Royal Palace via a small and simple door which opens to the Public Plaza. It goes through the private area in the east to approach the public
monumental section which constitutes the core of the palace with the monumental portico entrance in the western side. By so doing, the evolutionary aspects are strongly illustrated to the visitors, as the structure monumentality gradually increases towards the western part of the palace. In line with the above, conservation procedures will focus on simple repair and reconstruction of key structures such as the western entrance, throne room, feast hall, and family salons. This is robustly highlighting the increasing complexity between eastern and western parts which is the main purpose of this part of the route.

Figure 6.23: Conservation Proposal for the city gate: plan.

Regarding the city gate, where this route will start and end, the conservation proposal mainly follows the principle of stratification and aims to emphasise all phases of the defence system. Therefore, both towers will be reconstructed in a way, which demonstrates the overlapping that occurred in the past. To make it easily conceived
to the visitors, the routes will follow the same interpretation of the gate development (figure 6.23, 24): the routes will enter the gate through the old access system and depart using the new monumental tower. For that, a new metal-timber ramp will be added from the northern side, following the same original (15th -14th century BC) route. The postern gate (figure 6.25), too, will be returned to its original shape without adding any new materials, but possibly using some stones of the vault to re-roof it. The old tower will not be fully reconstructed; only the foundations will undergo reconstruction so as to highlight its presence. Also, a steel-glass balustrade will be added to highlight the borders of this tower and protect the visitors.

![Figure 6.24: Conservation Proposal for the city gate: Perspectives.](image)

![Figure 6.25: The postern gate at Ugarit: Current condition.](image)

On the other hand, the (13th -12th century BC) monumental gate will be reconstructed using light material and steel structural framework in order to give volumetric impression to the visitors (figure 6.24). The steel framework will be fitted inside the tower and then clad with light timber. Furthermore, the added structure will be equipped with a metal staircase, which guides a maximum of 5 visitors to the top giving them an opportunity to explore the expanded territory of the city, especially
Minet El-Beida, the main harbour. The ticket shop and reception will be added inside the new structure for management purposes. After the monumental gate, the route will exit the city heading south to the small tower outside the city, using a new metal ramp to evoke the original experience of the last phase of the city. The foundations of the simple external tower will be rebuilt using its original stone to highlight its presence.

The secondary route, connecting between the Public and New Royal Plazas, requires a special proposal. It is clear that the Palace Street, through which this route runs, had been dug 50-70 cm below the original level. A timber-decking route will be installed to recreate the original level. The foundations on both sides will be kept exposed, but after appropriate preservation. It is believed that leaving the foundation exposed is of a high educational value and provides strong evidence of the history of excavation on the site. Also, completing the walls to the original height will enhance the visitors’ experience of the urban scale. All proposed routes will be made of timber decks with detailed water channels to drain rainwater in a suitable manner which respects and protects the original fabric and its foundations.

As mentioned earlier, Route 2 presents the evolution of the New Royal Zone inside and outside the Royal Palace. Inside the Palace, restoring some key elements in each area will sufficiently highlight its function as well as architectural influence by other civilisations. To highlight the relationship between the successive sections, the original ground will be restored in different textures or colours, which enables differentiation between the successive sections (figure 6.26). This approach has been successfully applied to some archaeological sites such as Saint-Romain-en-Gal Museum in France and Roman ruins of Empuries in Spain (see sections 5.5.2 & 5.5.5). The palace consists of three main zones, the original core zone A, the political and administrative section zone B, and the private family section zone C. The conservation proposal will focus on highlighting the movement between these sections and between the palace and other parts of the city. Therefore, a self-supported timber door (figure 6.27) will be installed at the openings that facilitate the movement between the three sections of the palace, and between the palace and the city, as it is pointed out in figure 6.26. This will further enhance the visitors’
recognition of the evolution that occurred to the palace structure over two centuries. Highlighting the palace’s archives will be sufficient to present their evolution in line with the palace’s sections and functions. The Royal tombs and the neighbouring ceremonial courtyard and platform will be highlighted in order to promote the visitors’ recognition of their existence as well as their connection and relationship to both political and private parts of the Royal Palace.

Figure 6.26: New Royal Zone: Presenting the area’s evolution.

Figure 6.27: Design potential for the installed doors between different zones in the Royal Place and between the palace and other parts of the city.
After departing out from the Royal Palace, Route 2 will head to the Pillared Building to explore the final architectural evolution in the area. The main façade of this building, its portico entrance, and the front wall of its main hall will be reconstructed to visualise its monumental status. This reconstruction will highlight Hittites’ and Minoan’s architectural influences in the New Royal Zone and emphasise the separation occurring in the last period between the two royal zones.

Regarding materiality, proposed reconstructions will be made of steel framework and clad with light materials, for instance larch panels. Larch and oak timbers are traditional materials and locally available in the area since the ancient time. These two timber materials are related to the city’s history as Ugaritic people had intensively used them with stone to build their structures during the Bronze Age period. Furthermore, larch is an environmentally friendly material and good choice for cladding owing to its good performance in resisting the weather conditions in the area. Steel columns will be placed on steel pads; the location of steel columns will be decided based on intensive archaeological analysis of the walls to avoid destroying any original foundations. Using the above-mentioned materials allows for light and distinguishable reconstructions which conceptually evoke the original volumetric settings of the Royal Area’s structures.

6.4 Summary
The Royal Area in Ugarit not only occupies an exceptional location in the city but also constitutes an essential component in the political, social and cultural history of Ugaritic civilisation. The development of this area faithfully reflects the political history of the city and the diverse relationships the city had with surrounding cultures. The conservation proposal aims to highlight the political process that made Ugarit an important capital city at its time. The Royal Palace constitutes an important conservation motive as it manifests most of Ugarit’s political developments. Further, the presence of two royal zones provides rich indications for the great political, economic, architectural and urban evolutions which occurred in the city between 16th and 12th BC; the two zones also represent the type of public life at that time.
Based on the analysis of the North Palace, the original palace which was used before the Royal Palace has not been known yet. The archaeological mission to the city carried out several soundings within the Royal Area (Schaeffer, 1962a), but they could not identify more than simple Middle Bronze Age houses in the layer beneath the current fabric. Therefore, interesting questions should be raised here: where was the original palace located? Did it exist or not? And was it within the Royal Area? Future excavation in the city will definitely give the right answers to these questions. Finding the original palace not only amends the history of political evolution in Ugarit but also establishes a new interpretation of the urban reading of the area and even the entire city, taking into account the crucial role that the Royal Area plays in the understanding of the city’s urban structure, which will be discussed in detail in Chapter 9. Therefore, applying the principle of reversible reconstruction, one of the critical conservation principles, is highly significant, as the proposal leaves space for other future discoveries and interpretations. The political and economic evolution represented in the Royal Area resulted in valuable shifts in public people’s built environment, including their houses, funeral structures, as well as public and private open spaces. Therefore, the following chapter presents detailed reading and analysis of the domestic architecture in Ugarit on multiple scales.
Chapter 7  The Conservation of Domestic Architecture in Ugarit.

7.1 Introduction

During the Bronze Age, the house had constituted a multifunctional unit, used not only for living but also other activities such as industry and commerce. Moreover, this unit had sometimes accommodated an intellectual movement as people sought to document their economic, social and ritual aspects. In Ugarit, due to various reasons, domestic architecture is different from and pretty much advanced compared to the surrounding civilisations. The strategic location, political relationships and the innovation of the first alphabet and alphabetic writing system had nurtured the development of all aspects of domestic life in Ugarit and consequently promoted sophisticated architectural principles and techniques, particularly during the Late Bronze Age period.

Ugarit’s strategic location in northwest Syria, mediating between all surrounding civilisations and powers (figure 5.6) (see Chapter 2), enabled the city to benefit from international architectural, urban and lifestyle approaches and principles. Its political history confirms the strong relationships that Ugaritic royalty had with surrounding civilisations in Asia Minor, Mesopotamia, Egypt, Cyprus and Crete. This consequently differentiated the life style in Ugarit, being a multicultural city, from other surrounding kingdoms. The most important event in Ugarit’s history, the innovation of Alphabet and Alphabetic writing system, immensely promoted people’s life as it allowed them to deal with their political, industrial, commercial and social life in a more systematic manner. This innovation brought Ugarit to a new phase when everything started to be documented and Ugarit’s history started to be written for future generations. The fast developments that prevailed everywhere in the city did not overlook the public’s community life, areas and even their houses.

The so-called South City, Lower City, City Centre and Residential Quarter in Ugarit (figure 7.1) show a very good example of these developments in urban style, architectural principles and building techniques during the Middle and Late Bronze Age. Another domestic area was discovered in Ugarit, the South Acropolis Slope
(figure 7.1:9). This area is unfortunately not accessible due to intensive vegetation growth over and very fragile condition of the ruins. Additionally, this area shows similar architectural and urban settings to the houses of other areas such as the Lower City and South City, and does not add any information concerning the analysis of Ugarit’s domestic architecture. Therefore, the South Acropolis Slope will not be included in this chapter, as it is believed that the proposal of the four-studied area should be applicable to this area too. However, the Acropolis Slope will be connected to the urban conservation proposal for the entire city, which will be discussed in Chapter 9.

Figure 7.1: Schematic diagram of the City of Ugarit showing the location of discovered domestic areas.

This chapter focuses on urban and architectural principles, represented in the four areas mentioned above. The main aim is to conserve and present the most valuable architectural, urban, social and cultural aspects in these domestic areas of Ugarit. In addition, studying Ugaritic houses intends to bring these fragile structures, which
suffered from many structural and environmental problems, back to life and link them to the history of modern Syrian communities.

By reviewing the domestic architecture forms and typologies in Syria during the Bronze Age, this chapter will highlight specific characteristics of Ugaritic houses and present their concept of space, privacy and multi-functionality. Furthermore, the evolution in the architectural forms, techniques and urban organisation in the four areas will be explored particularly after the earthquake that hit the city in 1250 BC (Callot, 1986a; Mallet, 1987). Simultaneously, based on a comparative approach, the architectural and urban principles in Ugarit will be placed within its international sphere, comparing Ugaritic domestic architecture and techniques to other surrounding civilisations in Crete, Cyprus, Egypt, Asia Minor and Mesopotamia. This will point out how the city’s location within its political and economic international sphere had affected the principles of its domestic architecture.

The unique domestic, social, professional and ritual aspects of Ugaritic people’s life will be investigated and highlighted on the fabric, aiming to interpret how those people had lived and what they had achieved. This interpretation is mainly based on a critical analysis which has been developed through a combination of in situ surveys, analysis of literature, archaeological reports, and architecture analysis of the fabric. The architectural analysis will be conducted on a scale that shows micro architectural and macro urban elements; this analysis aims to establish the architectural and social values of the domestic fabric. Also, the analysis of a huge amount of scribes discovered everywhere in the city is also considerably beneficial. The analysis of the fabric will focus on evolutionary aspects in architecture and urban design and people’s attitudes towards their city, which is strongly encountered through the fabric stratigraphy. Therefore, this analysis aims to investigate the role of domestic architecture in reflecting Ugaritic people’s social life during the Late Bronze Age. This will be done by keeping track of the concept of hierarchical privacy in private and public spaces of the domestic areas. Other unique characteristics include the cult of ancestors and the resulting funeral architecture in Ugaritic houses will be discussed in their architectural, urban and cultural contexts to
improve the understanding of these integrated structures into Ugaritic houses and their development over time.

The conservation of the domestic fabric will ultimately present the people who inhabited them and their ideology, economy, social position and experiences. This knowledge constitutes the core of the conservation and presentation process. Conservation concepts, codes and principles (see section 4.3.3) will be applied afterwards to handle the architectural complexities of interventions in the studied areas based fundamentally on critical approaches. The main aim is to map the established values onto the existing fabric in order to protect it and present its values to the public for social, cultural and educational purposes.

Henceforward, this chapter will be divided into three main parts. The first part describes the domestic architecture while the second carries out archaeological reading and architectural analysis of the fabric in order to identify the most valuable aspects. The last part will be dedicated to the conservation proposal and determining the architectural choices.

7.2 Domestic architecture in Ugarit

7.2.1 General review

Four domestic areas have been extensively excavated and analysed (figure 7.1); they are the South City, Lower City (East and West), City Centre and Residential Quarter. Starting with the South City (figure 7.1:7), it had been excavated in 1959-1960, but its main analysis and publication works commenced in 1978 when the fabric started to suffer erosion. Olivier Callot, the French mission architect to the site, studied in detail the whole area and his book “La tranchee ‘Ville Sud’: Etudes d'architecture domestique” which will be of a great importance for the pre-conservation analysis in this chapter. The South City covers 5700 square meters in a south-north tranche of approximately 190*30 meters. The revealed urban elements (streets, plazas and enlargements) divide the area into 14 blocks (figure 7.2a, b), and Callot numbered them I to XIV (Callot, 1994). This area is considered to be the best example of urban design and domestic architecture principles in Ugarit during the Late Bronze Age (figure 7.3), although it still has not been entirely uncovered.
Figure 7.2: South City area in Ugarit (Callot, 1994). (a) Blocks. (b) Houses. (c) The area’s map showing the two phases before and after the earthquake 1250 BC.

Figure 7.3: South City area in 1960 – 1979 (Callot, 1994).

The South City is the richest discovered area in terms of urban knowledge. The recovered 37 houses in the South City distinctly articulate the life of Ugaritic people during the city’s last phase. Since block VI (figure 7.4) is the only complete excavated block in the area, the analysis of this block will also provide some useful links to the relationships between houses from the same block and how the residential block was structured internally. It will also reveal some aspects of the
social life common in the city then. An event with major consequences to be considered in Ugarit is the earthquake in 1250 BC. Resulting damage and reconstructions hugely affected the city fabric and was, most probably, the main reason for applying new architectural principles in the city (Callot, 1994; Callot and Yon, 1995; Yon, 2006). Callot has demonstrated the effects of the earthquake on the South City and presented the two phases of the area, before and after the earthquake, on the area’s map (figure 7.2c).

![Figure 7.4: Block VI, South City, shows the architectural and urban settings of full-excavated block.](image)

Moving on to the Lower City of Ugarit (figure 7.1:10), or the Hyksos quarter as had been attributed by Claude Schaeffer, the excavator of the site, this area was the main focus of the 7th, 8th and 9th excavation campaigns on the site (1935-37). Unfortunately, the interest afterwards moved to the western part (the Royal Area) considered to be a more promising area. Therefore, the abandonment had caused damage to the remains of the Lower City, before the research started again in 1994. The Lower City consists of two main parts Lower City West and Lower City East, linked together with the so-called Rampart Street (figure 7.5). The whole area covers approximately 7000 square meters and mainly comprises small domestic houses incorporating some professional workshops. After excavation, Schaeffer dated the area back to the Middle Bronze Age, based on the dates of some uncovered tombs and foundations. This assumption was not ultimately precise and it has been corrected by further researches and detailed architectural and stratigraphic analyses.
which were conducted between 1994 and 1997 by Corinne Castel. The work consequently confirmed that the exposed structures in the area, with many tombs, date back to the last phase of the city, the Late Bronze Age (Castel, 2000; 2001; 2004). Some tombs and foundations are indeed from the Middle Bronze Age and that caused Schaeffer’s confusion. This stratigraphic study displayed a very important value of the area, i.e. its continuous habitation from earlier periods. The architectural and organisational features of the exposed structures are similar to other domestic areas in Ugarit, which further confirms their dating back to the Late Bronze Age phase.

Figure 7.5: The Lower City in Ugarit.

This area, especially the eastern part, presents a different type of urban organisation due to its topographical settings, for it was built on a slope connecting the city edge to the highest part, the Acropolis. The urban platform is represented by the Rampart Street, which is parallel to the topographical contours, perpendicular narrow streets and dead-end lanes; these secondary streets connect the main Rampart Street to the houses and sometimes go further to reach the top area, the Acropolis. Also, this area, as all areas in Ugarit, was subject to huge alterations in the middle of 13th century
BC. Due to the on-growing vegetation, the area nowadays is in a very bad condition and the best part to be examined is Block 1 (figure 7.6), House B in particular (Castel, 2000; 2004).

Figure 7.6: Block I, Lower City East. The block map and fabric condition during 1994 (Castel, 2004).

The City Centre (figure 7.1:5), whose name is merely derived from its topographic location in the centre of the site, covers approximately 1800 square meters. The uncovered area 30*60 meters is divided by Street 35 into two main blocks, the northern and southern blocks (figure 7.7). The first impression of this area is that it might have been used as a residential district during the last phase (Yon, 1987).

Figure 7.7: The City Centre in Ugarit. (a) Map. (b) The area's fabric condition in 1984 (Yon, 1987).
The northern and southern blocks mainly consist of houses which include private professional workshops and shops on the ground floor. On the other hand, the almost complete absence of tombs in these houses (only one tomb has been found in the whole excavated part which is very different from other, uncovered, domestic areas in Ugarit) as well as the presence of the cult centre, the Sanctuary of Rhytons, give the area a character that is very different from other domestic residential districts in the city (figure 7.7). Therefore, it can be assumed that this area had been used for some public activities in addition to its original residential function.

The last domestic area to be studied is the Residential Quarter (figure 7.1:2), differentiated from other areas by its better materiality and well-preserved structures. The very good condition of the buildings led to the assumption that the buildings formed a residential district for Ugarit’s officials and the king’s people. Different names had been assigned to this area such as Aristocratic area, Aegean area and Residential Quarter. In this study, the name of Residential Quarter will be assigned to this area as was done in the majority of recent pieces of research. Residential Quarter is located directly to the east of the Royal Palace and separated from the Royal Area by only a narrow street and the Public Plaza. It covers approximately 10000 square meters including the North Residence (figure 7.1:12). The area was excavated between 1953 and 1973, but only its western boundary has been delimited so far. For that reason, it does not present obvious urban organisation and principles, as the excavation campaigns only uncovered two streets surrounded by three blocks of houses (figure 7.8). Some structures looking over the Public Plaza (figure 7.8, 9) are thought to be of public or commercial use; such is the building with the stone vase which, most probably, functioned as a tavern (figure 7.8:a, 9a), Oven House to the north (figure 7.8:b, 9b) and shops agglomeration (bazar) to the south (figure 7.8:c).

The Eastern Palace Street is the continuation of the west-east Palace Street, running along the northern edge of the Royal Palace. This street penetrates the residential area from northwest to southeast side, thereby creating blocks I and II. The street is considered relatively wide compared with other areas; its width varies between 2.5 and 4.3m, and ends with a small square (possibly enlargement). The other street, Merneptah Street, runs parallel to the Eastern Palace Street and is flanked from both
sides by houses from blocks II and III. Both streets, as in all areas of Ugarit, are intersected with perpendicular dead-ends which are linked to specific units (houses).

Figure 7.8: Residential Quarter in Ugarit.

Figure 7.9: (a) The Building with the stone vase. (b) Oven House.

The most important houses discovered in the Residential Quarter are the House of Rasapabu (figure 7.8:d), House of Rapanu (figure 7.8:e), House of the Scholar (figure 7.8:f), House of Armorer (figure 7.8:g) and the House with a Portico (figure 7.8:h). All names and more additional information have been derived from the incredible amount of tablets found in the houses’ archives (Rasapabu, Rapanu and
Scholar houses in particular). Although these houses (figure 7.10) seem to be rich and well-constructed, they are diverse in their size. They vary in plot area between 80 and 800 square meters, as it is manifested in the difference between House of Rasapabu (figure 7.8:d) and House of the Alabaster vessels (figure 7.8:i).

![Figure 7.10: (a) House of Rasapabu. (b) House with the portico. (c) House of Armorer](image)

### 7.2.2 The archaeological mission reading of Ugaritic houses

Marguerite Yon, the director of the French mission in Ugarit (1978-1998), and Olivier Callot, the mission’s architect for more than 40 years, proposed some conclusions concerning the domestic architecture in Ugarit. In their paper “Urbanisme et Architecture”, they emphasised the characteristic of diversity that distinguishes the domestic houses in Ugarit and presented some of their architectural features. However, their analyses concluded that there is no single house comprising all identified architectural features. Rather, each house has its own mix of specific features, resulting in a unique diversity in the city. The courtyard, ventilation and light well, tombs area, and staircase are the main architectural elements distributed in Ugaritic houses. The courtyard was a very important architectural element, especially in the second half of 13th century BC, and varied in size and position. It played a very important role in letting light in and ventilating as many parts of the house as possible. Moreover, it had a crucial function in organising the movement between rooms around it. House A, Block VI in the South City comprises most of these architectural features and represents the domestic architectural concepts during the last phase of Ugarit’s history (figure 7.11).
The staircase in Ugaritic houses is considered a very important feature especially that it helped in confirming the existence and layout of the first floor (sometimes second floor too). It existed almost in all houses in the city and it is always accompanied with a vestibule that organises the traffic distribution between the house departments (residential, professional and, sometimes, commercial). Yon and Callot concluded their research by presenting several classifications of Ugaritic houses. Regarding typology, they identified three main house typologies in Ugarit (figure 7.12); rectangular shape (e.g. house C, Block XIV, south city), L shape (house B, city centre) and triangular shape (House of Alabaster vessels). Also, they considered the courtyard and tombs area as variables on which they established other classifications. Therefore, they classified houses into two categories houses with courtyard and houses without courtyard, and the same applies to the tombs area.
Although the ground floor is the only surviving part, the analyses carried out by the mission outlined several uses in the house besides the definite residential use. This conclusion is provided by some features found on the ground floor such as pits, silos, sumps, and other artefacts. The staircase, as mentioned before, verifies the continuity of the residential apartment on the first floor. Professional uses have also been attested by the presence of fixed elements such as the oil press and mill distributed all over the domestic areas, which are very rare (almost absent) in the Residential Quarter. Moreover, some houses comprised a commercial compartment, usually shops looking over the street; examples include House C block VI, South City (figure 7.13a) and the Triple House, City Centre (figure 7.13b). These shops sometimes constituted bazars (figure 7.13c) looking over the Public Plaza and main streets in the Residential Quarter.
Technical aspects were also under discussion by many scholars of the mission to the site. These aspects constitute interesting characteristics in Ugaritic houses and highlight the experience of ancient builders in Ugarit. The first technical aspect in Ugaritic architecture can be seen in the houses’ foundations. Since the city is built on a hill whose highest point is 20 meters above the surrounding plain, builders had to find a way to improve the foundations’ resistance to not only the vertical but also the lateral thrust. The analyses of City Centre (Yon et al., 1987) and the South City (Callot, 1983; 1994) identified a new system whereby Ugaritic builders guaranteed building stability. Ugaritic masons built the foundation in boxes, creating a regular or irregular mesh (figure 7.14) which helped to transform and resist the lateral thrust. Before constructing the house, they dig down a box, the same as the house footprint. Afterwards, primary foundations are placed parallel to the city topography, while secondary foundations are inserted in intervals to transfer the loads between the primary ones. This technique, moreover, enabled the planning and construction of the family tomb in the basement before building the house (Callot and Yon, 1995).
Building the walls in a stone and timber composition was not a common technique in Syria. This aspect was used in Aegean Architecture (Crete in particular), and Ugarit had the privilege of introducing it in Syria. The mission’s scholars had intensively discussed this technique regarding building materials and construction mode (figure 7.15) (Callot, 1983; 1994; Yon et al., 1987). The use of timber framework within the stone wall allowed Ugaritic builders to erect two-storey houses in rubbles with guaranteed stability. Key points (corners and intersections between walls) were built in ashlar; that enhanced the structural performance of the walls and provided bracing elements for the timber framework. This technique promoted the structural resistance of these walls which were placed on a slope. Also, having a timber framework within the wall helped the builders to identify the locations of doors and windows; the framework’s studs and horizontal beams were used as supporting elements on which doors and windows were installed (figure 7.15).
Having presented the French mission’s observations and their conclusions about the domestic architecture in Ugarit, the following part will be devoted to present a new reading of Ugaritic houses and domestic areas using some archaeological approaches and comparing Ugarit to other surrounding civilisations at that time.

**7.2.3 Broader reading of the domestic architecture in Ugarit:**

The ancient house, as many archaeologists (post-processualists in particular) suggested, is the place from where all social, cultural and epistemological information about ancient people’s life can be obtained. Although there is no single interpretation of the past, post-processualists put great effort into directing their interpretations towards the real past as much as possible. For that, they specified some characteristics that differentiate the domestic buildings (the houses) from buildings for public use; modesty, simplicity, irregularity and average quality in construction and materials are the main traits that characterise domestic architecture of the prehistoric period. However, this approach has been criticised for its subjectivity and relativism which contributed to some uncertain interpretations of Late Bronze Age structures in Alalakh, Emar, Munbaqa and Tell Hadidi in Syria. Thus, thorough architectural and archaeologically analyses are crucial; a wider review of domestic architecture in the Middle East can place Ugaritic houses within this
international network and expose its unique features which will be highly useful in classifying the type of new uncovered structures (public/domestic) (professional/residential) in future excavations.

In his paper “House and Households in North Syria during the Late Bronze Age”, Thomas L. McClellan presented some house forms that were common in Syria. His analysis had been conducted on several Late Bronze Age sites in North Syria such as Alalakh, Emar, Munbaqa, and Tell Hadidi. He observed three main forms: central-room houses (figure 7.16a), front-room houses (figure 7.16b) and Alalakh houses (figure 7.16c). Central-room house also has subaltern forms (e.g. side room, central room, U-shape and L-shape houses). Alalakh houses are also distinguished by the presence of a file string or row string of small rooms used as small spaces and at the same time a corridor giving access to bigger rooms in the house (McClellan, 1997).

![Figure 7.16: Houses forms common in North Syria (McClellan, 1997).](image)

Detailed observation at the domestic areas in Ugarit makes it clear that all these forms are represented in the city, albeit not identically. For example, the principle of a string of small rooms (Alalakh influence) can be found in House A, Block I of the South City, House of Armorer and House of Alabaster vessels at the Residential Quarter (figure 7.17). The concept of front-room house (Hittites’ influence) is also presented in Ugarit but owing to the continuous evolution in the city, some other elements were added. However, the form is still recognised as seen in the tombs section in the House of Rasapabu and in the Adjacent House (before adding the staircase with the vestibule) in the Residential Quarter (figure 7.18).

Many examples of central-room houses can be found in Ugarit. This concept is derived not only from North Syria; it also came with some principles from Egypt, as it will be seen later on. The most appropriate examples of this form are the southern...
part of house B, block IV (side room) and House A, block VI (U shape) in the South City. The House with a Portico in the Residential Quarter represents this type in its two blocks (figure 7.19c). The southern part of the house is a normal central-room form whereas the northern part is of the L-shape central-room form.

Figure 7.17: Alalakh houses form in Ugarit’s domestic architecture. (a) House of Alabaster Vessels, Residential Quarter. (a) House A, Block I of the South City. (c) House of Armorer, Residential Quarter.

Figure 7.18: Front Room form in Ugarit's domestic architecture. (A) House of Rasapabu, Residential Quarter. (b) Adjacent House Residential Quarter.

Figure 7.19: Central Room form in Ugarit's domestic architecture. (a) House B, block IV, South City. (b) House A, block VI, South City. (c) House with a Portico, Residential Quarter.
Moreover, the City Centre and Lower City include some examples of this type. Although both areas are of a fragmented fabric and it was very hard to distinguish the house borders, it can be said that House B in the City Centre and House B in the Lower City East represent the L-shape central-room form (figure 7.20).

![Figure 7.20: (a) House B, City Centre. (b) House B, Lower City East.](image)

Although all the above-mentioned forms are represented in Ugarit, the continuous evolution in the city caused many successive transformations in the house’s typology and that consequently resulted in many houses which do not follow any of these forms. Sometimes a very specific part, possibly the original core of the house, represents one of the popular forms mentioned before.

It has been seen that the Hittites’ influence in Ugaritic houses is distinct, especially during the last phase. This is a result of the political domination and the strong relationship they had with the kingdom of Ugarit until mid-13th century BC. The architectural principles from Alalakh (string file rooms) as well as from Hattusa (Courtyard Houses and Hall-room houses, referred to earlier as central room houses) are strongly represented in Ugarit’s domestic houses from all social classes. Hall-room house is, more specifically, a developed version of the central room concept which can be identified in Hattusa and Ugarit’s domestic architecture (figure 7.21).

Mesopotamian influence is not that strong in Ugarit, but the concept of courtyard started there and had been distributed elsewhere. However, the concept of courtyard is considered to be a traditional Syrian concept taking into account that the eastern part of Syria constitutes a part of the Mesopotamia. Many houses in all domestic...
areas of Ugarit had a courtyard and these varied in size. As mentioned earlier, the small courtyard was only used for lighting and ventilation purposes. These houses cannot be considered as appropriate examples for the courtyard-house form: House C, block XIV, block I and House B, block II in the South City (figure 7.22). On the other hand, House A, block VI, House A and House B, block X in the South City show the best example of the courtyard concept and how it was involved in the house design in Ugarit (figure 7.23). Influence of the Egyptian civilisation, the former power that dominated Ugarit, is less focused on the domestic architecture; however, some architectural principles can be attributed to the Egyptians, such as the central room with a column from Tell El-Amarna and Deir el-Medina Workmen village (figure 7.24). Also, the concept of the semi-public space, as will be seen later, can be attributed to the Egyptian influence, but with a unique development in Ugarit.

---

**Figure 7.21:** (a) Hall-Room form in Ugarit. (b) Hall-Room form in Hattusa.

**Figure 7.22:** The use of the light well in Ugarit’s domestic architecture. (a) Block I, South City. (b) House C, block XIV, South City. (c) House B, block II, South City.
The strongest link in domestic architecture principles to Ugarit can be found in Aegean archaeological sites such as Enkomi in Cyprus and Thera in Crete. In her paper “The Cosmopolitan Harbour Town of Ugarit and the Aegean Aspects of its Domestic Architecture”, Clairy Palyvou had compared the domestic architecture aspects between Ugarit and Thera, proposing that Ugarit was influenced by Minoan domestic architecture (Palyvou et al., 2007). The comparison concluded with astonishing similarities, in forms, techniques and architectural elements, between houses of the two sites (figure 7.25); one could not believe they were related to different civilisations. Actually, it is not possible to confirm that the influence is of a Minoan origin particularly since Ugarit had been influenced by the domestic architectural aspects of other civilisations. On the other hand, the Minoans’ architectural influence cannot be denied in Ugarit as it has been clearly seen in the
Royal Area (see section 6.2.2); the Pillared Building form was obviously of a Minoan origin.

Figure 7.25: Similarities in domestic architectural aspect between Ugarit in Syria and Akrotiri, Thera in Crete (Palyvou et al., 2007).

This astonishing similarity is most probably related to a general phenomenon that characterised these merchant civilisations, which created their own aspects and principles differently from the big states around them. Since both cities had functioned as harbours, it was a good opportunity for them to play the role of navigating points, mingle with all kingdoms around them, and always refresh their culture with new aspects and principles. That most likely resulted in them sharing similar architectural aspects. In a detailed discussion which the author had with Prof. Palyvou, she has agreed that this interpretation is possible.

To sum up, regarding the houses classification conducted by the French mission, it has been seen that the courtyard was a very important variable that contributed to the classification of Ugaritic houses. This classification was generic especially since, first of all, it depends on one variable (the courtyard) whose role is to carry out a specific function in the house; the courtyard does not exist in the houses where it is considered to be useless. Secondly, what was believed to be a courtyard in some
houses turns out to be a big central room. The typological classification does not make strong relevance to Ugarit’s domestic architecture either. There are many houses with irregular shape which do not fall under the proposed categories. Also, the triangular form, as pointed out in the House of Alabaster Vessels at the Residential Quarter, cannot be accepted based on the acute angle the house block has. The specific part that constitutes the acute angle was used for commercial purposes (shops agglomeration, bazar) and it was partly separated from the actual house and opened directly on to the Public Plaza and corresponding streets (figure 7.12c). Thus, it can be said that the block of this house is of an irregular, but closer to a rectangular, shape.

Ugaritic people established strong links with most of the surrounding civilisations (Hittites, Egyptians and Mesopotamians), mainly due to the strategic location of their kingdom among them. Also, they went beyond the land borders and set up a unique relationship with Aegean cultures in Cyprus and Greece. Consequently, Ugaritic people could always enrich and refresh their architecture with new principles and aspects; meanwhile, they also developed some other principles appropriate for their cultural and social life, such as the tomb area which was added to the houses in Residential Quarter and South City and the semi-public space dedicated to houses from the same block (most probably from the same family or clan) in the South City.

These influences, along with the evolutionary aspects in the city, contributed to the final forms of Ugaritic houses, rich with variables and architectural principles. That subsequently made it difficult to find a specific classification that covers all domestic houses in the city. Thus, the domestic architecture in Ugarit can be considered as a mixture of original cultural principles and international influences from surrounding powers. This trait confirms the important interaction position that Ugarit had in the political and social international network during the Late Bronze Age and its cosmopolitan character. Therefore, the domestic architecture in Ugarit is of a universal value for Syrian people as well as specialists from all over the world.

The Kingdom’s (the city’s) location among these political powers made it always susceptible to successive changes, which allowed the culture to be in line with the permanently renewed political, economic and even social environment. The
following section will draw upon archaeological and architectural reading of the city’s domestic areas in order to show how evolutionary aspects and other significances are represented in their fabric.

7.3 Identifying the cultural values
A detailed analysis of four domestic areas in Ugarit has been carried out to identify their most valuable architectural, urban and cultural aspects and how they manifest in the ruins. The analysis will commence with single houses and then extend to cover entire areas in order to reveal important urban principles. A comprehensive conservation concept will be proposed afterwards to preserve these values and project them onto the existing excavated structures.

7.3.1 Evolutionary aspects
The in situ analyses and observations show that the evolutionary aspects highlighted in the Royal Area have their extensions to the domestic areas too, which is a very important value. The key event in Ugarit’s history is the earthquake in 1250 BC, which forced the undertaking of reconstruction projects all over the city. Most studies in the domestic areas of Ugarit mentioned the extensive destruction and refurbishment that took place afterwards. In some areas (Residential Quarter, City Centre), the refurbishment works mainly focused on rebuilding the original forms of the houses but with better materials and techniques. These areas did not have an immense transformation in their typology.

Houses division and architectural stratification
In some houses, scholars recognised the attempt of Ugaritic people to benefit from the earthquake and rearrange the family residential blocks into enough number of houses for the family members. That can be clearly seen in Houses B and C in the City Centre (figure 7.26a), which formed one house before the division. This house was perhaps used by more than one family without division; however, rebuilding it after the earthquake was a good opportunity to offer extra privacy for each family. The same can be said of the House of Rapanu whose original block was probably divided into two separated houses. The new composition of the joint well (figure 7.26b) which is located at the dividing wall confirms that the well was still used after
the division to supply water for both houses. This house was subdivided again to allocate a private compartment for each family (figure 7.26c).

Figure 7.26: Division of houses after the earthquake 1250 BC. (a) House B&C, City Centre. (b) Joint well in House of Rapanu. (c) The subdivision of House of Rapanu, Residential Quarter.

In the Lower City, the destruction was massive owing to the topographical character of the area (a much more sloped area) and fragile building materials. In addition to Ugaritic workmen, the Lower City was most probably inhabited by people from other sites working in the capital. Rebuilding this area on terraces and inserting a wide street, the Rampart Street, parallel to the contour of this sloped area represent new principles of careful planning in the city. New techniques were used for the foundation to resist the lateral thrusts of the slope, which became a common feature in Late Bronze Age houses of Ugarit (see section 7.2.2). The architectural analysis, conducted by Corinne Castel in 1994-97, confirmed the long history of the area which was characterised by continuous habitation. The main remaining structures date back to the Later Bronze Age; however, some foundations and tombs are from Middle Bronze Age II (figure 7.27). Consequently, the area presents a very interesting example of archaeological stratification and composition of Middle and
Late Bronze Age structures; the Late Bronze Age fabric also presents two phases: before and after the earthquake of 1250 BC. This stratification is clearer in other areas such as the South City. Based on a comparative approach to other houses of the city, scholars could identify some complete houses (block I) of the Lower City; however, these are in a very fragile condition. It is clearly recognised that the Lower City accommodates more modest houses than other areas, but similar architectural concepts were applied in its houses and new elements such as the staircase with vestibule and the courtyard which were inserted wherever it was possible.

Figure 7.27: Block I, Lower City East, an example of archaeological stratification during Middle and Late Bronze Age periods.

The South City, the best explored and analysed area, shows the major shifts that occurred in Ugarit after the earthquake. In his book “La tranchée "Ville Sud": études d'architecture domestique”, Olivier Callot presents a very detailed architectural analysis of this area and its houses (Callot, 1994). It is thought that a major reconstruction project occurred, and the analysis below will present the main
evolutionary steps of the phase, based on data derived from the mission publication. A brand new architectural analysis is conducted here for some new excavated houses in the South City and the Residential Quarter, complementing and extending other analyses which were conducted earlier on old excavated structures in these two areas.

**Form and space regularity**

As mentioned above, the evolutionary aspects are much clearer in the South City, most likely because of the major reconstruction post-1250 BC. Examples from the other areas highlight further shifts during the Late Bronze Age, resulting in a very particular variety of domestic architecture. The analysis carried out on the four domestic areas highlights the step-by-step development of the house in Ugarit until it obtained its most elaborated form. Starting with House C, block XIII in the South City (figure 3.28a), the house represents the oldest and basic house form in the city. The house dates back to before the earthquake and had had no changes or modifications after it. It basically consists of three rooms with tombs beneath, without any additional architectural elements such as a staircase, courtyard or even light well. This house shows the basic domestic architecture that existed before evolution took a strong hold. Comparing this house to House A, block V and House C block XIV (figure 3.28b, c) sheds light on the successive developments that the house’s form had undergone in Ugarit.

![Figure 7.28: The development of house form and space regularity of the domestic architecture in Ugarit. (a) House C, block XIII, South City. (b) House A, block V, South City. (c) House C, block XIV, South City.](image)

These developments were stimulated by the need for additional architectural features that would enhance the interior environment and the use of the house such as the
light well, courtyards and the staircase with the vestibule. Also, there is a significant increase in the space regularity between the two phases, before and after 1250 BC, which reflects an improvement in Ugaritic people’s perception of the space.

**The concept of courtyard**

The need for light and good ventilation necessitated the introduction of the concept of light well in many houses in Ugarit: House A, block V and House C, block XIV in the South City (Fig 7.28b, c). In many houses, this well was big enough to be considered as a courtyard, whose function had exceeded the normal daylighting and ventilation. Courtyards had different sizes and positions in the houses, which was most probably related to the time during which they were installed, the organisation of the house, or to the functions accommodated in the house. In the City Centre, for example, in House B (figure 7.29a), the courtyard seems to be of less value as its position in the eastern side is not useful for the bigger western part of the house. This can be attributed, first of all, to the division of the original house into parts B and C (figure 7.26a). Secondly, the idea of courtyard was not perhaps mature enough and initially used to create open spaces without perceived planning as a mediated position for the house departments. Other examples show how this concept became well understood afterwards and the house got the highest benefit from it.

Figure 7.29: The development of the courtyard concept in the domestic architecture of Ugarit. (a) House B, City Centre. (b) House A, City Centre.

Comparing house B to House A in the City Centre (figure 7.29a, b) projects a totally different perception of the concept of the courtyard which in House A was moved to
the centre of the house to ventilate and illuminate as many spaces as possible. The same situation can be seen in House A, Block X and also House A, block VI in the South City and the House with a Portico in the Residential Quarter (figure 7.30) where the courtyard sits in the very middle of the house and is surrounded by spaces from all sides.

![Figure 7.30: The development of the courtyard concept in the domestic architecture of Ugarit. (a) House A, block X, South City. (b) House A, block VI, South City. (c) House with a Portico, Residential Quarter.](image)

House of Rapanu (the big original house prior to its division) in Residential Quarter shows how the concept of courtyard became essential in Ugarit and was repeated many times to ensure best lighting, ventilation and organisation for all spaces in big houses (figure 7.31a). This contributes to understanding the house as an agglomeration of several units each of which is flanked around a courtyard. This concept reveals some social dimensions which will be discussed later on. The most elaborate concept used for the courtyard is seen in House B, block X of the South City. The big courtyard, with a surrounding colonnade, presents the latest Ugaritic people’s perception of this concept. Also, it shows the influence of Mesopotamian
and Egyptian courtyards in Ugarit (figure 7.31b). This house accommodated professional (mill, oil press and bronze workshop), commercial (shops), storage, educational, and residential units. The big courtyard which was inserted in the southern section of the house had immensely improved the organisation of these functions and ensured a better interior circulation.

Therefore, the courtyard, as mentioned before, was not only useful for lighting and ventilation purposes; this concept became an essential stimulator to the house’s arrangement, which improved the structure’s segregation into private distinct sections to accommodate more families or include different professional and craftsmanship activities in the same house.

**Houses’ accessibility**

The multiuse principle of the house had also resulted in another architectural shift; first floor was added to the majority of the houses, while second floor was rare. This required adding new architectural elements to the house, like the staircase and its

Figure 7.31: The role of the courtyard in segregating the house and organising the functions. (a) House of Rapanu, Residential Quarter. (b) House B, block X, South City.
domestic vestibule (figure 7.32). The entrance vestibule was the first used space in the house, which facilitates movement into professional, trade or residential sections, distributed on the ground and first floors. It is one of the main characteristics of Ugaritic domestic architecture, which can help to differentiate these houses from other public buildings in the city.

Figure 7.32: Example of Ugaritic houses access (Staircase with a vestibule). (a) House A, City Centre. (b) House B, City Centre. (c) House A block V, South City.

Thus, the house in Ugarit initially had one entrance (the composition of the staircase with its vestibule) giving access to all sections. Some examples of single access houses in Ugarit are House B, block II and House B, block VI of the South City and Adjacent House in the Residential Quarter (figure 7.33).

Figure 7.33: Examples of single access houses in Ugarit. (a) House B, block II, South City. (b) House B, block VI, South City. (c) Adjacent House, Residential Quarter.
The development of trade and craftsmanship required additional accesses into different sections of the house while maintaining the internal links between sections. Thus, some houses had two accesses (figure 7.32) one to the residential vestibule and another to the workshops. For example, in House A, City Centre (figure 7.32a), the dedicated entrance to the staircase links to a storage room, and the other access was for the workshop area. In House B in the City Centre (figure 7.32b), the staircase access, too, links to a workshop area; however, there is another access to the tomb area. Both houses maintained internal links between the house sections. Many examples of double-access houses can be seen in other areas such as House B in the Lower City, House A, Blok V, house C, block XIV and House D, block XIII of the South City (figure 7.34).

Figure 7.34: Examples of double-access houses in Ugarit. (a) House B, Lower City East. (b) House A, block V, South City. (c) House C, block XIV, South City.

The development of the city had introduced different crafts and commercial functions, such as mills, oil presses, bronze manufacturing, shops, etc. This variety required a higher level of organisation in the house and that contributed to increasing the number of accesses corresponding to the accommodated functions. The internal links between functions have still been maintained, except for some spaces that were used as shops (commercial use) with directed access from the street. The Triple House in the City Centre (figure 7.35a) seems to be the oldest example of this type. The house name is derived from its three separated accesses to each part with internal links between all departments in the house. Also, House C, block VI (figure 7.35b) is composed of three sections, professional, residential and commercial, with a dedicated access for each section. In this house, the internal links are still
maintained between the professional and residential sections, whereas the commercial section is totally separated from the house with direct access from the Public Plaza. In special cases, some houses had up to five accesses as is the case of House B, block X of the South City (figure 7.35c). The five accesses with the two courtyards were of essential importance for organising this multifunctional house in order to adapt the best interior environment for the users.

Figure 7.35: Examples of multiple-access houses in Ugarit and the effects of the number of access on the house organisation, internal and external circulation. (a) Triple House, City Centre. (b) House C, block VI, South City. (c) House B, block X, South City.

Thus, the access is an essential element in the understanding of the house’s organisation and functionality. The development of using two, three and even more accesses in Ugaritic houses had immensely contributed to the house’s internal performance as well as connection to the surrounding urban fabric. In line with the development of other architectural elements (e.g. the courtyard), the principle of multiple access in Ugaritic houses contributed to the self-satisfaction of the house users in establishing private sections for each function, and simultaneously offered
flexible internal links between different sections in the house. This firmly highlights an interesting architectural concept in Ugaritic houses, the concept of privacy, which will be discussed in more detail later on. However, the following part will be dedicated to drawing upon the developments in architectural and urban planning of domestic areas over time. Understanding these evolutionary aspects will reveal Ugaritic people’s perceptions and attitudes towards their city; this will also unveil the development of architectural and urban experience in Ugarit in line with its people’s social and cultural views.

**Architectural and urban developments**

The earthquake that occurred in 1250 BC resulted in different scales of reconstruction in all domestic areas of Ugarit. Intensive reconstruction works were carried out in the South City after this catastrophic event. Comparing houses before and after 1250 BC clearly presents various architectural changes concerning the organisation of the house and its interior spaces; three case studies will be analysed, House A, block VI, House A, block V and House F, block XIII in the South City (figure 7.36). House A, block VI (figure 7.36a) became more organised around an appropriate courtyard in orthogonal grid and followed a new form (U-shape of central-room). Spaces also turned out to be bigger, with clear relationships and obvious separations between the house’s departments.

Furthermore, the relationships between neighbouring houses started to be considered and new open spaces (lighting wells) were inserted in between for light and
ventilation purposes; e.g. between House A and B, block VI of the South City (figure 7.36a). That clearly presents some promoted architectural skills and a new perception of space in Ugarit.

In terms of single architectural unit, studying the stratigraphy of house B, block X and house C block VI of the South City shows that a part of each house, which dates back to before 1250 BC, was kept; however, the rest of the house was reconstructed or added afterwards (figure 7.37, 38). In house B (figure 7.37), the original structure pre-1250 BC is marked by space numbers 7, 9, 11, 12, 13 and 17. Detailed architectural reading of the stratigraphy of this house shows that there is a major organisation shift between the old and new parts. Spaces became more regular based on an orthogonal grid. In the southern part, the original and new additions were linked properly by inserting a big colonnade courtyard. This section of the house had been well organised around the new courtyard which contributed to achieving a proper organisation for such a mega multifunctional house. To the north, a complete three-storey domestic unit with its own courtyard was added for educational use on ground floor and residential use on first and second. It is linked to the southern professional and commercial areas by means of one wide door which provided proper segregation between residential and professional departments.

Figure 7.37: Architectural developments in Ugaritic Houses: House B, block X, South City.
The other case study, House C block VI, also presents the same evolutionary aspects with a clear differentiation between the old and new structure (figure 7.38). The architectural stratifications of these two examples precisely project Ugaritic people’s perception of space and how it was changed after the major destruction caused by the 1250 BC earthquake.

Moving on to a larger scale, urban principles in the city also show evolutionary aspects which were accelerated after 1250 BC. The so-called semi-public open space is a unique urban concept in Ugarit among the surrounding civilisations. A similar idea can be found in Tell El-Amarna in Egypt (figure 7.39a), albeit the perception is different: the semi-public space was an open space through which people can have access to their houses from the street. In contrast, Ugaritic people promoted the use of this concept to suit their social and cultural life aspects, the privacy concept in particular. Thus, the semi-public space in Ugarit turned out to be the rear open space among all houses from the same block (figure 7.39b). This space comprised some common services for the block (e.g. a well and baking oven). This open space was also dedicated to residents’ everyday activities and entertainment.

Owing to the large discovered area, the South City is considered the best domestic area to be analysed for its urban evolutionary aspects. Two case studies (blocks) will be analysed to show how the concept of semi-public space evolved; they are blocks XIII and XIV (figure 7.40).
Figure 7.39: The concept of Semi-public open space. (a) In Tell El-Amarna, Egypt. (b) In Ugarit, Syria.

The analysed blocks present totally different urban characteristics that showcase rich evolutionary urban aspects. Approximately, 90% of the excavated part of block XIV was reconstructed after 1250 BC and only house G remained standing. Thus, people could exercise their new concepts. Consequently, the semi-public space started to have a regular shape in the very middle of the block. On the other hand, only 50% of block XIII was reconstructed, so that many of the pre-1250 BC houses controlled people’s choices in this block, allowing only irregular semi-public open spaces among old and new houses (figure 7.40). The same irregular space can be seen in block VI, most likely for the same reason (figure 7.39b).
It is now obvious that, during the second half of 13th century BC, Ugaritic people had had major shifts in their architectural and urban principles. The regularity, space enlargement and recognising the relationship between spaces were their most important new traits. This highlights how architecture and urban environment had been revolutionised, as had the population’s thinking and perceptions. In addition, the creation of the big Public Plaza in the South City (figure 7.41) reflects an extraordinary movement and change in Ugaritic urban aspects. This does not only affect the urban typology of the city, but also people’s attitudes towards it: all people living around the plaza had extended their houses using regular footprint, finer structure and better materials. Zooming into the houses, the northern part of House A and B, block X and the southern part of House C, block VI had been reconstructed using a high quality structure in materiality, wall thickness and organisation forms (figure 7.42). This clearly presents progress in the hope of looking over the new unique urban element, the Public Plaza, using exceptional structure.
Figure 7.41: Urban development: the creation of the Public Plaza in the South City.

Figure 7.42: The development of People’s attitudes towards new urban elements in the South City. (a) House A, block X. (b) House C, block VI. (c) House B, block X.

One of these houses, House B or what is also referred to as House of the Literate Man, had looked over the Public Plaza with a three-storey structure in its northern part, while the rest of the house to the south consisted of two storeys (figure 7.42c, 43). The wall thickness and materiality were also different. Moreover, a new well-structured extension had been added to house A, block X (figure 7.42a) with two accesses that opened directly on to the plaza. The same case can be recognised in the
southern part of house C, but additionally the householder adapted his commercial function opening directly to the Public Plaza (figure 7.42b); this plaza is thought to be dedicated to temporary commercial uses during specific times of the year. The creation of this big Public Plaza insists on a stronger social cohesion, recognising public space as a part of everyday life. This ultimately reflects on the understanding of social life in Ugarit at varied scales, such as the house, block, neighbourhood and even the entire city.

Figure 7.43: Artistic reconstruction of House B, block X, South City (Callot, 1994).

To expose the social dimensions of architectural and urban developments in the City of Ugarit, I carried out a detailed in situ analysis at an architectural and urban level in 2013. The main aim was to determine how the ruined fabric of the present could reflect Ugaritic social and cultural life aspects in the Late Bronze Age. This analysis is supported by information acquired from the tablets discovered in the city's houses and Royal Palace. From an urban point of view, it is easy to recognise that each area has been divided into blocks which, in turn, accommodated several houses. This is a very strong representation of life styles in Ugarit, organised as clans or families with a head person who was representing them in the city councils and also addressing their issues (Rainey, 1965; Vita, 1999). The relationship between houses from the same block is represented in varied forms between different domestic areas of the city (figure 7.44). However, analysing this relationship in blocks from the South City, City Centre and Residential Quarter confirms that houses from the same block had a strong relationship; they surrounded semi-public open space which was
dedicated to the block’s inhabitants. This consequently reflects the strong relationships between individuals inhabiting this social unit. This conclusion can be emphasised by studying the relationship between houses from different blocks, showing no links or relationships. This is because each block is surrounded by streets from all sides and was built partly closed to the outside streets, with only necessary accesses to the houses. On the other hand, all houses were opened inwards onto the semi-public space with intimate relationships within the block. It is worth mentioning that the semi-public space had varied forms and spatial settings owing to the block or the area’s characteristics (figure 7.44).

![Figure 7.44: Examples of Residential blocks from different domestic areas in Ugarit. (a) Block XIV, South City. (b) House of Rapanu, Residential Quarter (c) Northern block, City Centre.](image)

Reviewing some studies dealing with Ugaritic society and social structure, it can be anticipated that each family or clan had setup its boundaries and defined the streets corresponding with their neighbouring blocks. The main aim was to have their own private urban zone and divide it into houses corresponding to the number of family members (figure 7.45). Scribes’ translations and social studies (Rainey, 1965; Vita, 1999) confirmed the clan or family life style in Ugarit and that their land could not be owned by anyone from outside the family. These rules had been applied to living properties inside and farming lands outside the city. Therefore, dividing the domestic areas into blocks was a reasonable reflection of their life types and social rules.
On the other hand, living in a separated block does not mean that Ugaritic people from different clans did not have a strong social relationship. In fact, the relationships between Ugaritic people seemed to be strong regardless of their social class or wealth. The strong social relationship is clearly presented in all domestic areas of the city, where small and poor as well as big and elaborate houses were located in the same context and fabric; sometimes, they were facing each other. For example, in the South City, House A, block VI, which is big and seems to have been owned by a rich person, is located opposite to a small and normal House A, block V (figure 7.46). Similarly, the biggest and most elaborate house in the South City, House B, block X, neighbours a small and normal House A, block XIII (figure 7.46).
In the residential quarter, this variety is more pronounced as house sizes vary from 80 square meters in Adjacent House (figure 7.47:a) to 800 square meters in the House of Alabaster Vessels (figure 7.47:b) and House of Rapanu (figure 7.47:c). This strong relationship did not only exist between public people, but also between them and their royal family (see section 6.2.2, 6.2.3).

Furthermore, although each family (clan) tried to have its own enclosure, Ugaritic people thought reasonably about their urban public spaces. Their ambition to have a proper public social life was expressed in developing their urban principles and introducing new urban elements to their domestic areas, such as the squares and the enlargement of streets distributed across the fabric. The South City, in which the biggest reconstruction project was carried out after the earthquake, presents the advanced urban experience which Ugaritic people had during the last phase of the city. The unique urban element (the Public Plaza) was created during 13th century, and that strongly emphasises the high-level public relationships between Ugaritic people. Consequently, reading the urban fabric of the South City (figure 7.46) points out that Ugaritic people refreshed their urban principles on varied scales: block, neighbourhood, district and even the entire city.
Figure 7.46: Houses, blocks and urban elements in the South City of Ugarit.
Some questions that still need to be answered are: why did Ugaritic people from the same clan live in one separated enclosure from others? How did they structure their block? And did they apply any particular concept? Tracking the concept of privacy at architectural and urban levels would establish clear answers. Thus, the analysis of the level of social interaction between spaces at architectural and urban levels will constitute the fundamental focus of the following section.

7.3.2 The concept of privacy

It has been discussed before that built environment plays an essential role in reflecting people’s social life and cultural aspects (see section 3.3.5). Thus, a qualitative analysis is applied on Ugaritic houses using Access Analysis method, from Space Syntax approach (see section 3.3.5), to highlight the relationship between interior spaces of the same house or block and estimate the level of integration and social interaction of each space with other spaces in the house. The planned diagram will simultaneously enable the reading of spaces’ hierarchy, if any.
Having applied the method on 22 houses from the four studied areas (Appendix 1), it was seen that central spaces (courtyards and central room) encounter a high level of social interaction and play an axial role in the traffic distribution in the house. This level decreases gradually afterwards till approaching the deepest point in each section of the house (figure 7.48, 49, 50 & Appendix 1). This explains how Ugaritic people understood the concept of privacy in each section. They organised their house spaces based on a hieratical concept, where going deeper in the structure (in any section) results in a decrease in the social interaction level and, consequently, an increase in privacy. During the last phase, the everyday life of Ugaritic family had been moved upstairs and connected directly to the staircase and vestibule without any interaction with other functions that were accommodated on the ground floor. Moving the family upstairs and disconnecting any interaction with the workshops, apart from the vestibule space and some domestic facilities, represents Ugaritic people’s attempts to achieve the highest level of privacy for their living spaces.

The graph, which represents the House of Rapanu at the Residential Quarter (figure 7.48), clearly reflects the division of the house (the big original structure) into four main sections. In each section, spaces surround a focal point (the courtyard [9, 37] or the central room [21, 26]) which has the highest level of social interaction; this level is decreasing to reach the most private points [6, 7, 41, 42, 30, 31]. Furthermore, one of the four sections centralises the structure and plays an essential role in distributing traffic into the other sections. Thus, there are two hierarchies in this house: between sections and between spaces from each section. The same case is recognised in the graph of House B, block X of the South City (figure 7.49). The two sections are clearly separated (only linked via space 8) and the focal spaces [5, 12] are strongly represented in the graph with a very high social interaction level. The graduation in privacy is clear from space [1] to [7] and from [13] to [19 and 11]. The graph also presents the important position of space [12], the courtyard, and how it organises the entire southern part of the house, the professional section (see section 7.3.1: the concept of courtyard). The other examples, such as house A, block VI, South City, House B, City Centre, House B, block I, Lower City East (figure 5.50), and many other houses from all domestic areas in Ugarit (see Appendix 1), are represented in graphs which distinctly display the privacy line for each structure.
Figure 7.48: Rapanu House, Residential Area: the Diagram shows the level of spaces’ integration, social interaction and hierarchy by applying Access Analysis method.
Figure 7.49: House B, block X South City: the Diagram shows the level of spaces’ integration, social interaction and hierarchy by applying Access Analysis method.
Figure 7.50: The Diagrams show the level of spaces’ integration, social interaction and hierarchy by applying Access Analysis method. (a) House A, block VI, South City. (b) House B, City Centre. (c) House B, Lower City East.

On a larger scale, the urban design of the domestic area also exposes specific hierarchy for its urban elements and people’s privacy. As mentioned before, the South City is considered to be the best-explored domestic area that can reveal urban design principles. The area shows an interesting hierarchy in open spaces, which ranges from very public spaces, the Public Plaza, to private ones inside the house, the courtyard. This also confirms the previous assumption that isolating the family in one block did not affect Ugaritic people’s public engagement; rather, people created their open public spaces to communicate in the city. The relationship between open spaces and the graduation in people’s privacy are displayed in the South City (figure 7.46). The most evident example can be seen in block VI and its relationship with the outside public spaces (figure 7.51).
Consequently, it can be assumed that Ugaritic people planned the construction of their houses in order to express their cultural aspects; the development of these aspects contributed to an evolution in the city’s architectural and urban principles. Establishing very complicated residential blocks, like House of Rapanu - albeit with clear privacy line for each section - points out Ugaritic people’s proficiency and architectural and urban experience. Pre-planning their construction works will be further confirmed through exploring the last, and equally unique, cultural and architectural aspect which is highlighted in Ugaritic domestic architecture. It is the cult of ancestors, strongly represented in Ugarit by its funerary architecture, the chamber tombs which is an integrated part of Ugaritic house.
7.3.3 The cult of ancestors: Chamber tombs

The ‘cult of ancestors’ is a ritualistic aspect that was practiced to glorify and propitiate the spirit of dead ancestors and maintain strong ties with them after death. It was based on a common belief that the ancestors had a continuous existence. It was believed that they were the potential links to the after-life and the family intercessors to the gods. This cult, which was among the most important Bronze Age social aspects, is represented by dedicating a space in the house to burying family members. The presence of a tomb or a chamber tomb within the ruins of domestic houses is an inevitable evidence of this cult. The use of a stone chamber tomb started during the Early Bronze Age, or even before that, and had been influenced by the urbanisation process. This chamber had been built in different forms under the house’s ground floor and provided with a vertical access and staircase to facilitate people’s entry. Ancient people used this chamber to accommodate their burials, offerings and some votive goods. Thus, it was the sacred space in the house where funerary and veneration rites took place.

Recent researches (Yilmaz, 2006) had explored Syrian and Mesopotamian influences in all south Anatolian cultures in introducing the chamber tomb structures into their customs. These chamber tombs started to be used in both intramural burials within the house and extramural burials. The occurrence of the extramural burials had considerably increased in South Anatolia and North Syria during the end of the Early Bronze Age period, in response to the urbanisation developments and cultural connections between Anatolia, Near East and Mesopotamia’s civilisations (Mazzoni et al., 2000). Furthermore, the huge and diverse amount of offered objects which were sometimes brought from distant locations highlights the community’s customs as well as social and cultural relationships. Many Syrian civilisations had followed the chamber tomb burying custom during the Bronze Age period, but Ugarit is well recognised for adopting an approach that was characterised by a very elaborate level of astonishing stone technology until the city’s destruction in the beginning of 12th century BC. It is believed that the strategic location enabled Ugarit to export its social and cultural characteristics, including burial customs and their structures. Excavation works brought to light very elaborate funeral architecture of the chamber tombs which were found everywhere in the city (figure 7.52).
This phenomenon highlights very interesting cultural and architectural aspects in the cult of ancestors. It is worth mentioning that both intramural and extramural burial types were used in Ugarit during the Middle Bronze Age period. The necropolis discovered to the east of the Temple of Baal in the Acropolis area (figure 7.52:8) as well as the Middle Bronze Age chamber tombs in the Acropolis and the Lower City (figure 7.52:10) confirm this fact.
During the Late Bronze Age of the city, the use of intramural chamber tombs had increased while the extramural cemeteries started to disappear. This clearly shows how Ugarit’s inhabitants kept using the chamber tombs as integrated parts of their houses - almost one tomb in every two houses - during the Late Bronze Age period, when the extramural cemeteries became common in other neighbouring civilisations in Mesopotamia and south Anatolia. This trend characterises Ugaritic domestic architecture and social life differently. The discovered tombs present considerable developments in these structures’ typology, space resolution and building techniques.

**Archaeological and architectural reading**

Ugaritic tombs, Late Bronze Age ones in particular, are distinguished from all surrounding sites by their quality and quantity; they are very interesting structures in their architectural diversity and funeral arrangements. Excavation works had uncovered a large number (214) of stone-built tombs, many of which are very elaborate in terms of space resolution, typology, and building technology.

Tomb distribution in Ugarit has urban and social dimensions, as it reflects the density of domestic areas during the last phase (figure 7.52). The Residential Quarter with the North Residence, approximately 10000 square meters, accommodate only 12 tombs while there are 14 tombs in the South City (5700 square meters) and 31 tombs in the Lower City (7000 square meters) (Marchegay, 2009). A systematic analysis has been conducted by the author on the most valuable aspects of domestic funerary architecture and how they had been integrated into the entire structure of the house. This analysis intended to combine the results of previous works by the French Mission (Callot, 1983; 1986b; 1994; Callot and Yon, 1995; Castel, 2000; 2001; Marchegay, 1999b; a; Marchegay, 1999c; 2000; 2003; Marchegay, 2008; Salles, 1987; Salles, 1995; Schaeffer, 1939) and the in-situ architectural analysis and observation which the author carried out in May 2013.

Almost 50% of Ugaritic houses have chamber tombs, varying from basic pits to elaborate vaulted chambers. Most of the simple fragile types (pits, in a jar) have now disappeared without any traces. Therefore, only two types can be recognised now. The first type is a chamber tomb with corbelled walls built with rubble stones and covered with slabs. Approximately 85% (181 of 214) of the discovered tombs in
Ugarit follow this type and it is considered an old version of funeral architecture. Tombs 103 (figure 7.53), 104, and 105 of the Acropolis area, tombs 56 and 57 (figure 7.61, 62) of the Lower City, and tomb 1068 (figure 7.59, 64) of the City Centre represent good and varied examples of this type.

Figure 7.53: Tomb 103, Acropolis Area (Yon, 1987).

The second type, which constitutes 15% of the discovered tombs, is the stone-built vaulted chamber which represents a huge advancement in stone-building technology. Many examples of this type can be seen in different domestic areas of Ugarit. For example, in the Acropolis area, the construction of tombs 1, 2 and 101 (figure 7.54) follows this type. Also, Tomb 50 in the Queen Mother House, Old Royal Zone (figure 7.55), and all the discovered tombs in the Residential Quarter - the tombs of House of Rapanu (figure 7.67) and North Residence (figure 7.56, 58) - are exquisite examples of this type.
In many cases, the tomb occupied the basement of the house and was provided with a direct access from the street as in House A, block V of the South City (figure 7.57a). In some notable houses, an entire part of the house with separate entrance was dedicated as a funeral department to the chamber tomb and its related ceremonies and rites. This type can be seen in House of Rasapabu (figure 7.57b) of the
Residential Quarter, and House A, block VI of the South City (figure 7.57c). This funeral section of the house was always linked to the residential unit from inside.

Figure 7.56: Tomb 202, the North Residence Residential Quarter Area.

Figure 7.57: Tombs’ location (a) House A, Block V, South City (b) House of Rasapabu, Residential Quarter (c) House A, Block VI, South City.
In general, all discovered tombs in Ugarit date back to the period between the 18th century and the beginning of 12th century BC and have almost the same scheme (footprint), varying in size and regularity. Although it is believed that chamber tombs in Ugarit are much earlier than the Middle Bronze Age, there are unfortunately no discovered tombs yet that date back to as early as the 18th century BC. Nevertheless, the current discoveries clearly show that integrating the tomb within the domestic unit had systematically developed during the known six centuries of Ugarit’s history. These developments have also affected the tomb’s scheme, size and materiality. Thus, it can be recognised that tombs in Ugarit, albeit belonging to the same period, had different orientations. From an architectural point of view, this indicates that Ugaritic people sought to achieve the best integration for the tomb in their houses regardless of the final orientation of the tomb.

It is worth mentioning that tomb’s location had been decided in advance, before the construction process commenced. Since builders had to dig a huge pit, identical to the house footprint, to place the house’s foundations (see section 7.2.2), they had the chance to choose tomb location and build the tomb simultaneously with these foundations (Callot and Yon, 1995). Some tombs were placed near the external walls in order to facilitate separate access where necessary and when communities or other family members needed to visit the tomb. Funeral architecture of Ugarit still requires a more detailed analysis of historical, social and anthropological aspects; however, for the purposes of this research, the following analysis will place more focus on the architectural and spatial aspects of these tombs and their evolution throughout 600 years of the city’s history.

**Tomb architectural typology**

In-advance planning of the tomb, especially in the last two centuries of Ugarit’s history, had allowed the builders to freely develop their concepts in funeral architecture. High variety of tomb patterns had been discovered on the site, although it is clear that they are successive developed versions of the original one. Mostly, tombs are built in symmetric footprint and characterised by primary architectural features that vary between tombs belonging to different periods. Starting with the access, it was the only recognised part of the tomb on the ground floor, as the whole
tomb was constructed in the basement. It is a rectangular opening that gives a vertical access to the tomb. It was covered with a slab (or a number of slabs) which is believed to be hidden under a timber platform to ease access in every funeral event (figure 7.56). The access is leading to a passage with a stairway that consequently guides to the burial chamber. This passage is a key variable that helps to differentiate tombs from successive periods. Its evolution is well recognised in the city from a simple short passage whose length is almost equal to the tomb access (figure 7.61, 62) to a more elaborate long passage fitted with a regular stairway (figure 7.56, 58).

The burial chamber constitutes the biggest part in Ugaritic tomb. It is mainly represented in two forms in the city, the corbelled wall chamber and the vaulted chamber. Mixed construction using rubble and dressed stones can be found in some of the city’s tombs, such as tomb 1068, the City Centre (figure 7.59, 64, 65).

The tomb’s chamber is equipped with a door, ranging from very simple rectangular access, in tomb 1068 of the City Centre (figure 7.59) and tombs 56 and 57 of the Lower City (figure 7.61, 62), to various elaborated arched doors in many of the Late Bronze Age tombs (figure 7.60).

The two typologies of Ugaritic tomb had been covered with slabs whose types varied in dimension and shape. There were several slabs, one or two pieces in the corbelled-
wall tombs, which constituted the main roof that closes the whole tomb (figure 7.53, 61). On the other hand, these slabs were more rectangular and in one piece in the vaulted chamber tombs. They varied between rectangular slabs, roofing the passage, and T-shape ones that functioned as key stones to hold the vault and close the chamber (figure 7.54, 55, 58, 66, 67). The burying chamber had also been equipped with niches in lateral walls, located against each other, and sometimes in the back wall too. They were mainly used for placing lighting or offerings when funerary rites took place (figure 7.59, 60b, 67).

Figure 7.59: Tomb 1068, the City Centre (Yon, 1987).

Figure 7.60: Chamber’s Doors. (a) North Residence. (b) House of Rapanu. (c) House of the Armorer. (d) House of Alabaster Vessels.

**Tomb architectural evolution**

The development of tomb architecture in Ugarit was stimulated by social, economic and functional factors that promoted larger tombs with clear access and long-lasting materials. It was ultimately to ensure longer functionality as well as to accommodate a bigger number of the family’s burials. In order to highlight the evolutionary line of funeral architecture in Ugarit, this study will apply a comparative approach to several tombs. The analysis will draw upon the architecture of the tombs, their materiality and relationship to the surrounding architectural context, analysing by doing so tombs from different periods and areas of the city.
The oldest discovered tombs in the City of Ugarit are tombs 56 and 57 (figure 7.61, 62) in the Lower City West. They had been unearthed by Claude Schaeffer during the ninth campaign and dated back to the 18th century BC (Schaeffer, 1938). These two tombs represent a Middle Bronze Age domestic funeral structure. The irregular plan, section, and location within the domestic unit manifest the primitive design principles and organisation of the tombs. Also, the fragile materiality reveals the modest building techniques common during the Middle Bronze Age at the site.

The two tombs are clearly different in their construction, space and materiality. Since they are accessed from different houses but connected on the underground level, an evolution between the two tombs is obvious, although there is not a long time-span between them; both of them dated back to the Middle Bronze Age period (18th and early 17th century BC) (Marchegay, 2008; Schaeffer, 1939). Consequently, they were assigned to the same family, and tomb 56 is most probably an expansion of the older one, tomb 57. The two chambers are constructed using corbelled stone walls and covering slabs. Tomb 56 is better in materiality and space resolution and height; its chamber is 30 cm higher than that of tomb 57 (figure 7.61a). On the other hand, having the same access system via a rectangular opening, the small passage and simple rectangular opening which give access to the burial chamber confirms that both are related to the same period, the Middle Bronze Age.

On a larger scale, it is possible to recognise the similarity in the location of the tombs within their domestic units; both tombs take a corner section of the house leaving the rest of the house for residential, or perhaps, other professional usage (figure 7.61b). The location of the two tombs does not have a direct relationship with the street; the tombs are preceded by a common space (vestibule, perhaps). Tomb 56 has its own, albeit small, space, and shows more integration within the other ground floor spaces than tomb 57 which occupies the corner of the big room which was also most likely used for another function. This reflects how Ugaritic people started to think about specific private spaces for their tombs. It is clear here that the sense of evolution was not only present between tombs from different periods. Instead, there were slight shifts in materiality, space concepts and techniques between tombs from the same period, and that is what tombs 56 and 57 reveal.
The nearby Acropolis area is considered the starting point of the city and, therefore, the tombs’ diversity in design and materiality is a very strong indicator of the multi-periodical stratigraphy and long history of this area. Three tombs, whose materiality is so fragile given their simple design and structure, had been unearthed in the so-called House of the High Priest (southern part). The relationship between the last phase ruins and the tombs indicates that two of these tombs (103 and 105) are related to earlier phases of this house (figure 7.63a). Tomb 103, for example, is clearly not related to the last phase of the house, as the northern wall of the room, which accommodates the tomb, is placed in part of the tomb’s wall and clearly shows that this tomb was not used after this last development in the house. Also, the analysis carried out by Jacques-Claude Courtois in 1959, concerning the position of tomb 105

Figure 7.61: Tomb 56 and 57, the Lower City West: (a) detailed drawings (Schaeffer, 1939a). (b) Location.

Figure 7.62: Tomb 56 and 57, the Lower City West in 1983 © J.-F. Salles: Mission of Ras Shamra-Ugarit.
under the foundation of the house, has confirmed that this tomb is related to an earlier phase than that of the house. Thus, the first tomb 103 belongs to the first phase of the House of the High Priest and the other one 105 dates back to a period that preceded the construction of this house. This confirms that the use of chamber tombs is very much steeped in Ugarit’s history; consequently, a new significance can be attributed to Ugaritic architecture as the place where the origin of chamber tombs would have started.

The third tomb 104 seems to correspond more with the existing ruins of the house, although its structural typology and techniques as well as building materials are not much different from other tombs (103 and 105) in the house. In fact, the third tomb 104 seems to embody the general characteristics of Ugaritic tombs and the main architectural elements, location, and spatial relationships that underlie their construction. Similar to tombs 103 and 105, tomb 104 is built of corbelled stone walls using dry stone techniques. The anatomy of this tomb is more obvious than the other two in terms of the main architectural elements used. It consists of an entrance, a small passage and the tomb chamber whose door has a rectangular shape and is flanked with two vertical stone jambs. The tomb is located below two rooms, similar to the majority of Ugaritic tombs (figure 7.63a). It can be accessed from room (D) where the removal slab is installed near the door in the southern corner of the room. The tomb’s chamber is located under the other room to the south and covered with rectangular slabs. The house occupies a large area and can initially be divided into three sections. The tomb is located among these sections and strongly connected to them through space (B) to the southeast and space (C) to the west (figure 7.63a). The eastern part of the house is in a very fragile condition and its footprint is not clear. Therefore, it cannot be predicted if there is access to it from the east or not. Assuming that there is, the tomb can be connected to either the secondary street to the east or the main Library Street to the south. Both streets have direct links to space (B), courtyard maybe, where people can have access to the tomb’s space. It is clear that the relationship to space (C) is stronger as the tomb’s access is located in room (D). In this case, the tomb had been constructed relatively far from the street and the house boundaries, occupying the heart of the house, which is different to what will be seen in later tombs.
In the northern part of the House of the High Priest, substantial development in tomb architecture can be seen. The 14th century BC tomb 101 occupies the northwest part of its domestic unit (figure 7.63b). It is easy to observe the improvements in size and materiality of the tomb, compared to other tombs in the southern part. The tomb, with its vaulted chamber (figure 7.54), represents the second type of tomb architecture in Ugarit. The tomb was installed after the construction of the house. Therefore, one can see how it occupies one big room with offset distance from the surrounding walls (figure 7.63b). This situation was common in Ugarit during that time and highlighted the increasing need for new and spacious tombs to accommodate the family burials. Unlike previous tombs in the southern part of the House of the High Priest, tomb 101 had been built with carved stones in a regular rectangular footprint. It shows all architectural elements which characterise Ugaritic tombs. Thus, it can be said that tombs from this phase represent a turning point at which Ugaritic people started to focus on the regularity of their spaces and building with big cut stones and new techniques. The tomb is well connected to the surrounding spaces and occupies an obvious private part of the house, although it is possible that the section had another function as well (figure 7.63b). The tomb also corresponds to the surrounding streets via space (A) whose function is most likely to be an intermediate open or roofed vestibule. The southern entrance of the house (figure 7.63b) provides a direct link connecting Dagan Street to space (A) which, in turn, gives access to the funeral area. Also, to the east, another entrance of the house connects the secondary street with space (A). Thus, it can be said that although this
tomb is located deeply in the residential block, it is well connected to the house’s sections as well as its assigned streets.

Additionally, tomb 1068 in the City Centre also represents a key stage in the development of Ugaritic funeral architecture. The enhancement in the space regularity is quite clear, particularly if the effects of soil pressure on the western wall and floor are overlooked. The tomb’s chamber clearly shows two phases of building materials and techniques (figure 7.59, 64a).

Figure 7.64: Tomb 1068, the City Centre: (a) Detailed drawings (Yon, 1987). (b) Location

It is a corbelled-wall chamber built in rubbles in the lower part with a height of 110 cm, while in the upper part it is built with bigger and more regularly cut-stones. This might be owing to renovation works that were carried out in the house and its tomb. Tracking down these two phases in one tomb is very important for the understanding of Ugaritic architectural renovation concepts on their existing fabric. Also, it gives enough clues for the exposure of evolutionary aspects in one tomb. The chamber’s door still has a simple rectangular opening, but has also undergone some improvements. In addition to the vertical stone jambs that are usually found in such doors, this door is provided with another two horizontal, carefully cut stones that defined the door and were, most probably, used to hold a timber door (figure 7.59). Furthermore, this tomb shows rectangular niches added in the new cut-stone part. The tomb occupied a separate section, the northwest part of the house (figure 7.64b, 65). It was linked to the main vestibule of the house and simultaneously had an independent direct entrance from the street. Regardless of whether the section was
used for another function or not, as will be seen later in other studied tombs, providing a separate access for the funeral area was a new concept in Ugarit at that time and meant to facilitate the connection of the tomb to the surrounding context. Consequently, Ugaritic people became more aware of how to strongly connect their funeral structure to the surrounding architectural and urban fabric.

Figure 7.65: Tomb 1068, the City Centre (Yon, 1987).

Funeral structures in Ugarit had undergone decisive successive changes afterwards; for example, studying the tomb in House A, block V of the South City confirms that building tombs went through a well-planned process (see section 7.2.2) right from the beginning of house construction (Callot, 1983). Thus, the location of the tomb had already been decided to be close to the external walls in order to provide it with its own direct access from the street. This consequently exposes Ugaritic masons’ experience in architectural planning as well as an increase in people’s desire to assign a separate part to their burials. In House A, block V of the South City (figure 7.57a), a separate entrance from the street was provided to the space that accommodates access to the tomb, whereas the main burying chamber was located under the neighbouring room. For that, the house inhabitants or visitors could use the tomb without any interaction with the house functions. This principle could solve a huge problem when the house owner decided to sell the property. In this case, he could continue to use his family tomb via an agreement with the new owners and while guaranteeing total respect for their privacy.

Tomb 50 in the Queen Mother House of the Old Royal Zone also shows the same approach (figure 7.55) but with substantial development to the tombs geometry and building techniques. The vaulted chamber had been built with carefully carved stones and an elegant interior space consisting of three vaulted walls which make this tomb
different from other vaulted chambers in the city. Also, the exposed capping stones show the massive structure of this tomb under the ground floor (figure 7.66).

Figure 7.66: Tomb 50, Queen Mother House, Old Royal Zone.

The developments of funeral architectural concepts did not stop in Ugarit. Ugaritic people in different domestic areas built a separate funeral section that was strongly linked to other domestic departments in the house, but only when they could afford it. Many examples in the city represent this concept, such as House of Rapanu (figure 7.67) and House of Rasapabu (figure 7.57b) of Residential Quarter as well as House A, block V and House A, block VI of the South City (figure 7.57a, c).

Figure 7.67: House of Rapanu’s Tomb, Residential Quarter. (a) Plan. (b) The interior space of tomb R2.
The Residential Quarter in general is distinguished from all domestic areas in the city by the materiality and constructional quality of its houses. Tombs there also had the same progress during the Late Bronze Age when they had been built in an elaborate vaulted chamber type using ashlar carved stones, as in the tomb at House of Rapanu (figure 7.60b, 67). This house presents another sense of short time-span evolution, but during the Late Bronze Age period in this case. The house comprises two tombs (figure 7.67a) successively built and located in the same section of the house. The space resolution and the shape and arrangement of the covering slabs are much better in the later tomb R2 (figure 7.67), considered to be the best complete discovered tomb in the city so far. Thus, the two tombs in the House of Rapanu provide visitors with the potential to see short time-span evolution between two funeral structures from the Late Bronze Age period.

This comparative study frames the overall development line of funeral structures in Ugarit between the 18th and the beginning of the 12th century BC. Tomb 57 which represents the Middle Bronze Age funeral structure can be considered the starting point of this line, whereas the Late Bronze Age vaulted chambers mark its end. These structures had been wrongly attributed by Schaeffer in the beginning to a Mycenaean or Aegean influence. Sophie Marchegay, on the other hand (Marchegay, 1999c), rectified Schaeffer’s interpretation and assigned a crucial role to these tombs in characterising original Ugaritic architectural concepts and techniques. Considering the studied tombs, it can be established that the vaulted chamber tombs, which represent the latest version of funeral architecture in Ugarit, had already had their roots at the site from the Middle Bronze Age period and, most likely, before even assuming that only 30% of the site has been excavated so far. These roots are represented on the site by tombs 56 and 57 of the Lower City area and other tombs from the Acropolis. The originality of the tombs found on the site is supported by the fact that these tombs are schematically similar but the consecutive developments differentiated them in accordance with the assigned period.
7.3.4 Cultural valuable aspects of the domestic architecture in Ugarit

Based on the intensive analysis presented above, the cultural values of domestic architecture in Ugarit can be summarised and prioritised as follows:

1. The cosmopolitan character of Ugarit’s domestic architecture;
2. A strong sense of evolution in architectural design principles and techniques;
3. Constant evolution in urban design principles;
4. The shifts in people’s thinking towards their architecture and urban spaces;
5. Domestic architecture in Ugarit is a strong representative of people’s social life and relationships during the Late Bronze Age;
6. The concept of privacy at architectural and urban levels and the hierarchy of urban open spaces;
7. The cult of ancestors as a social and cultural aspect;
8. The evolution of funeral structures represents architectural, historic and cultural values with due appreciation of Ugaritic people’s rituals and thoughts of their ancestors;
9. Tomb architecture reflects the architectural and planning experiences and skills which Ugaritic people had during the Bronze Age period;
10. Late Bronze Age tombs have a high artistic value. They are elaborate artefacts in their mass and interior and represent the advanced architectural and technical level which Ugaritic People had reached during the last phase of the city’s history;
11. The city’s fabric is authentic as it holds the genuine aspects of Ugaritic social life during the Bronze Age, and brings them to the 21st century AD. This is a crucial cultural value for modern Syrian communities, which represents their deep roots in history and their ancestors’ life and achievements.
7.4 Conservation proposal for domestic architecture in Ugarit

Having analysed the four domestic areas of Ugarit, this part will propose conservation principles and appropriate architectural interventions for preserving the fabric and exposing the extracted cultural values. Although some common observations and characteristics could be recognised in all areas, each area also has its own absolute characteristics and values that differentiate it from others. Therefore, the conservation proposal for the domestic architecture in Ugarit will start by covering general conservation principles that can be applied to the four studied areas. Afterwards, it will move on to focusing on each area separately and discuss its specific principles and proposed architectural intervention. Reflecting the architectural reading of the archaeology of domestic areas would require an intensive involvement of creative architectural concepts that should respect the fabric, enhance the visitors’ comfort and reveal to them the principles, secrets and values of Ugaritic everyday life.

The excavation works revealed many houses in Ugarit in their original 12th century BC arrangement. Consequently, the undisturbed ruins are a faithful reflection of the everyday life of the past, so conservation works should seek a full reflection of this original social life. This should be one of the dominant considerations of any intervention. Since the conservation proposal here is dealing with smaller scales than in the Royal Area, the concept of cultural routes, used in the Royal Area, is not sufficiently workable here. The four selected areas incorporate different aspects of the everyday life of local communities in Ugarit. Moreover, they are physically fragmented. Therefore, there are no specific routes to reflect the complete narrative of the areas and project the cultural values of Ugaritic domestic architecture. Involving physical routes in the proposal will aim to enhance visitors’ access within each area. Also, routes will be used to facilitate the connections between domestic areas on the site, which will be discussed in more details in Chapter 9. The conservation proposal intends to cover all studied domestic areas, depending on diverse architectural priorities, varying from simple maintenance to complete reconstruction. All choices will be critical (see section 4.3.3), taking into account the fabric’s physical condition, stratification and authenticity. Furthermore, considering
the role of architecture in exposing the cultural values is fundamental for creative and legible output of the conservation proposal.

7.4.1 General principles

Domestic architecture (Ugaritic houses)

It is very important, first of all, to highlight the relationship between the main urban elements in the domestic areas, (e.g. blocks, houses, streets, squares, etc). Following that, procedures will carry on inside the domestic unit (the house) and all possible relationships that are manifest there, such as domestic/professional, open/close, and so on, will be highlighted and represented by specific interventions. Therefore, the first conservation procedure will be to restore a sense of space and orientation by bringing the demolished walls back up to some height and clarifying the original layout. This can be achieved through applying an anastylosis approach to the fragmented fabric using the original stones which had fallen beside the wall. It is essential not to use scattered stones far away from the wall in order to avoid any falsification. To complete this consolidation properly, rectified stone walls should be repointed using the same original lime mortar (see section 6.3.2) in order to protect the original wall from further damage and bring back a sense of its original appearance.

Providing the visitors with some urban experience requires highlighting the relationship between urban elements in the domestic areas. For that purpose, the external walls of each residential block should be completed to a height of approximately 2m in order to strongly mark the street border and obscure the internal spaces and the houses inside the block from visitors’ vision. That is meant to reflect the original relationship between the street and the connected residential block. If the available original materials (stones) are not sufficient, new stone structure, matching the same type of original stone below (rubbles or ashlars), should be added on top of the walls in order to achieve the required height. Before adding the new stone structure, the original walls should be water proofed by adding a thick layer (5cm) of mortar to protect the wall-head from water penetrating the walls and to make a net separation from the original. The new added stones will also be pointed or dressed in a way which is different from the originals in order to distinguish the addition.
This procedure reflects the specific urban experience of Ugaritic people: their houses communicated to the street only through the main access (doors) on the ground floor. This draws the visitor’s attention to differentiating between what was public (the street) and what was private (what is hidden behind the walls). Where these walls constitute a semi-public space, they will be reconstructed using timber panels instead of stone in order to promote better recognition of the different nature of the open space as semi-public. Inside the block, adding double steel bars on the party walls that separate the houses will give a comprehensive understanding of the division of the block into houses and the relationship between these houses (figure 7.68, 69).

Figure 7.68: Highlighting the division of the residential block and its relationship to the public urban element, the street. (a) House of Rapanu, Residential Quarter. (b) Block VI, South City.

Figure 7.69: Virtual Reconstruction of the proposal for House of Rapanu, Residential Quarter.
Part of the block’s external walls will be plastered using the original plaster characteristics (Margueron, 2004; Galliano and Calvet, 2004, p. 22-27) which cause no damage to the original stones. This procedure is of a high educational significance for it helps to reflect the original urban environment of the street and allows visitors to see external walls with and without cladding, which enhances their understanding of the original layering (figure 7.70).

![Figure 7.70: Reconstruct the original urban environment. Virtual reconstruction.](image)

Since less evidence is available about the volume and original storeys, some aspects will be marked on the ground to enhance visitors’ experience and recognition on the site. This principle has been successfully applied to different archaeological sites in Europe, such as Saint-Romain-en-Gal Museum and Archaeological Site and Roman ruins of Empuries (Ampurias) (see section 5.5). Post-excavation Archaeological and architectural analyses in Ugarit could not confirm whether the streets were paved during the Bronze Age period. The extensive excavation that Schaeffer carried out went below the actual level of the last phase and that had damaged any potential evidence about the material of the street surface. Therefore, the original level of the streets in the last phase of the city, which was removed by Schaeffer’s intensive excavation, will be reconstructed using timber decking (figure 7.70, 71) in order to differentiate them as a public urban space from the private spaces inside the residential blocks. Also, the colour or the texture of this timber decking should be changed when moving from a main street to a secondary one. This enhances visitors’ recognition of the hierarchy of this urban element in the city.
Based on Olivier Callot’s interpretations (1994) and the brand new in-situ analysis (2013), the house’s entrance was the main outlet to communicate with the corresponding street. The rest of the house was totally blocked without any other openings on the ground floor, through which someone would communicate with the interior spaces. Therefore, it is important to reconstruct the entrance showing its original building techniques and materials. Using the original door jambs is necessary where available, and the rest will be reconstructed using carved sandstones which should emulate the size and structure of originals as much as possible with obvious differentiation between original and new materials; a 5 cm mortar layer will be added as well to enhance the differentiation between the original and addition over time (figure 7.71). Reconstructing the access to correspond with the walls’ height will restore the experience for visitors about how Ugaritic people approached their (private) houses from the (public) streets.

![Figure 7.71: Reconstruct the access structure. Virtual reconstruction.](image)

Inside the house, it is important to highlight the vestibule with the staircase area, as it is a common feature among all Ugaritic houses. Rectifying the demolished staircase as much as possible and highlighting the vestibule by emulating the original paving with new material can give the right impression of what was essential architectural elements in Ugaritic houses; i.e. not only a focal point between public and private, but also a practical joint of a house’s functions, from where ancient people accessed each section through separate routes.
Another very important architectural element to be highlighted in Ugaritic houses is the courtyard. Since it is not possible to reconstruct all houses, this can be done by differentiating the courtyard’s pavement and restoring some architectural features and artefacts relevant to this space. It will additionally give the visitors clues to recognise the differences in its size from one house to another and notice the development of its features, position and function. Therefore, the courtyards should be paved by stones similarly to the open spaces of the Royal Palace. Although they are not at the same level of importance, paving the courtyard will still allow visitors to easily recognise it as an open space, differentiating it from surrounding closed spaces (figure 7.72). The new pavement with the reconstruction of some common features in the courtyards of Ugarit, such as well, basin and water ducts, will work sufficiently together to improve understanding of its use and evolutionary line.

Figure 7.72: Using different pavements to highlight the different functions in Ugaritic houses. (a) House C, block XIV, South City. (b) House B, City Centre. (c) House A, block VI, South City. (d) House B, block X, South City.
To enhance the reading of the house’s multi-functionality, it is crucial to differentiate domestic spaces from professional spaces on the ground floor. It was confirmed that the family apartment was mostly located on the first floor; highlighting the staircase, as seen before, can give a clue of the continuing residential facilities upstairs. However, there were still some spaces on the ground floor supporting the residential function. Differentiating the texture or colour of space paving, which is made of compact fine soil as a referral to close spaces, will provide a good solution. This allows visitors to recognise the different functions and the relationship between them inside the house (figure 7.72). The paving of close spaces should not subsequently cause any ambiguity to the exposure of the courtyard pavement, which should be strongly distinguishable. Also, restoring available features to the professional section, such as the mill and the oil press stones, will be key to regenerating the professional sense and evoking the original environment of the space. In some houses, reconstructing the whole process of the mill and the oil press will be very useful for educational purposes as well.

**Funeral architecture (Ugaritic tombs)**

Funeral architecture is an integral part of domestic architecture in Ugarit. The tomb’s location in the house, the relationship it has with the house’s spaces and its marvellous building techniques and interior space expose how the cult of ancestors was an essential part of Ugaritic social life and architectural expression. Therefore, tomb conservation should be perceived as an integral complementary action within the overall conservation proposal of domestic architecture in the city. As seen before, tombs had been built underneath the house with the foundations (see section 7.3.3) and, therefore, only little evidence can be seen above the ground. Schaeffer’s extensive excavation, which went beyond the original ground level, often disclosed the tomb’s slabs to the public. This offers a good potential for keeping some of these tombs uncovered where it does not affect the overall conservation proposal of the house’s ground floor. Exposing the tomb’s slabs to the public will be of a high educational value as it provides them with knowledge about what was going on under the ground pavement in Ugaritic houses. Such knowledge includes the hidden architectural elements of the tombs, differences between the old and new styles, and the quality of covering slabs. For this purpose, some tombs, from different areas and
periods, will be chosen to keep their slabs exposed. On the other hand, keeping the slabs exposed to the public must in no way affect the overall restoration work on the house ground. The tomb’s footprint is the only part which should be kept uncovered (figure 7.72b, c); this is where people can recognise the layers with which the ground of Ugaritic houses had been paved. Tomb 50 in the Queen Mother house (figure 7.55, 66) should follow this procedure, as it additionally reveals the heaviness and monumentality of these structures, although they are located in the basement.

Since other tombs will eventually be covered by the restored layers of the house’s ground floor, the only evidence for their presence is their access. It is quite important to shed light on how the tomb’s access communicates with the overall structure of the house; this offers more understanding of the integration of funeral part within the domestic architecture and exhibits Ugaritic people’s attitudes towards their ancestors. Restoring the moveable slab(s) (figure 7.75a), which gives access to the tomb, will give a strong clue to the visitors to recognise the existence of the funeral part in the house and the way to approach it, just as the original inhabitants of the house did. In case of separate funeral section, its entrance from the street will be reconstructed in a way that is different from how the entrances of both residential and work spaces were reconstructed for the sake of enhancing its recognition. Completing the entrance with a steel framework and, giving it the expected real volume (Door’s jambs threshold and lintel), will first of all draw people’s attention to the special space behind this entrance. Also, inserting a timber door into this entrance will highlight the private (sacred) function of the spaces behind this door and further enhance visitors’ curiosity for exploring them (figure 7.73, 74). Secondly, it will offer a strong differentiation between what is original and what is added to this structure. The steel framework will create a self-supported structure which envelopes and completes the original jambs of the door, without adding further loads to the original structure. The timber used for the door and its lintel and studs is a traditional Oak which is available in the area and had been originally used in Ugarit. That consequently relates the intervention to the site and surrounding area, while the steel framework keeps the whole intervention recognisable over time. The tombs’ original slabs are still located in the vicinity (figure 7.75b) and, therefore, the tombs could be restored to exhibit their last-phase structure.
For the easily-accessible tombs, particularly the Residential Quarter ones, the passage and burying chamber downstairs should be equipped with screens, showing virtual reconstruction videos of the funeral structure and its interior environment, in order to provide the visitors with the original experience of funerals custom. The most appropriate location for carrying this out is the tomb’s area in the House of Rapanu (figure 7.67) and House of Rasapabu (figure 7.57b, 73, 74) where people can easily have access to the full knowledge and experience of Ugaritic funeral cult, starting with the street and ending with the most private space, the tomb’s chamber. The pavement of the funeral part, if existing in the house, will be differentiated from that of the residential and work space ground for the sake of establishing higher recognition of this area (figure 7.72, 74).
Regarding the evolution of these structures, there are three levels the conservation proposal will highlight: evolution in one structure, within the same house (successive periods), and over a long period of time. As to evolution within one structure, tomb 1068 in House B of the City Centre represents the best choice for exposing this value. Later refurbishment works during the Late Bronze Age period resulted in a unique interior space for the chamber whose walls are almost equally divided into two (rubbles and cut-stone) layers. On the other hand, some structural problems, which were most probably caused by the soil lateral pressure that occurred after refurbishment works were carried out, affect the overall reading of the tomb (figure 7.59, 64, 65). Nevertheless, the tomb still shows interesting stratifications and conservation experience of the Ugaritic people during the Bronze Age period. To achieve the best reading of this tomb with its stratifications, the structural errors should be rectified (figure 7.76). This will be achieved through the reconstruction of the tomb’s interior using its original materials. After a detailed documentation, the tomb’s slabs will be removed and the western walls of the chamber and passage will be disassembled in order to resolve their structural failure. To avoid the effects of lateral pressure of the slope, an embedded steel framework will be added behind the
reconstructed original wall to resist the lateral pressure and keep it away from the wall. Steel structure should be isolated for protection purposes and to ensure its separation from the original stone. The next step will be to properly rebuild the disassembled walls using the detailed documentation and the eastern wall structure as a reference for inclination. The chamber floor also needs to be restored to its original level after providing proper stone-bed supports.

Figure 7.76: Rectifying the structural errors in the western wall and the ground of tomb 1068, House B, City Centre.

Comparing this case to the tombs in House of Rasapabu and House of Rapanu promotes visitors’ recognition of the huge evolutionary span between tomb 1068 and the two tombs through self-experience. Furthermore, involving tomb 56 and 57 of the Lower City (figure 7.61, 62), the oldest discovered tombs in Ugarit, will be very useful in extending this evolutionary line back to the 18th century BC, the Middle Bronze Age. These tombs (56 & 57) are very important examples and further reflect Ugaritic funeral architecture and people’s experience at that time. The access to these Middle Bronze Age tombs will be difficult considering their small height and fragility. Therefore, their conservation proposal will include restoring the access of each tomb and fitting it with a screen, which shows a virtual tour inside the two tombs. Each screen should present a different path through the two tombs, which correlates with the used access. The virtual tour will allow people to explore the
overall footprint, the interior space, and the tombs’ materiality and construction techniques. Also, it will consider highlighting the development process that characterises tomb 56’s materiality and interior space as an extension for tomb 57.

Therefore, highlighting the evolution here will be achieved at two levels. Firstly, comparing tomb 57 and its extension, tomb 56, will show the short-span evolution during the Middle Bronze Age period. The broader evolutionary line from 18th to early 12th century BC, will be presented via comparing these two tombs (56 & 57) with tomb 1068 in the City Centre and the tombs in House of Rapanu, House of Rasapabu and the North Residence of the Residential Quarter, displaying the interesting transition between Middle and Late Bronze Age tombs.

Figure 7.77: Virtual reconstruction of the two tombs in House of Rapanu, Residential Quarter.

Applying the historical stratification approach, which enables the conservator to differentiate the phases to which each tomb is related, on the three examples is an appropriate choice. For example, the considerable difference in the shape and regularity of the covering slabs between these tombs is a very good indicator of the improvements in the funeral architecture of Ugarit and confirms the long history of habitation at this site. Moreover, drawing an analogy between the two tombs in House of Rapanu will highlight another short-span evolution, but during the Late Bronze Age in this case (figure 7.77). The historical stratification approach, too, is sufficient here in presenting this short-span evolutionary aspect. It is worth mentioning that establishing connections between these selected tombs, which promote the visitors’ perception of architectural and spatial developments on the site.
over time, is part of the urban conservation proposal and management strategy for the entire city, which will be discussed in chapter 9. The domestic funeral architecture is an integral part of this broader discussion.

Having discussed general principles which are applicable to all domestic areas of Ugarit and their funeral structures, the following part will establish conservation principles and design approaches for each area separately, which will include some of the general principles mentioned above.

7.4.2 Dedicated conservation proposals

Residential Quarter:
Considering this area as a developed version of other domestic areas in Ugarit is the strongest potential interpretation. The Residential Quarter accommodates the same domestic architectural principles of other areas, but with better building materials, techniques and regularity. The western part constitutes its connection with the Royal Area via the Public Plaza which is formed between the two areas (figure 7.78). The dedication of all buildings around this plaza to public use (Oven House, Tavern and the shops area, bazar) is a very significant aspect to be preserved and presented. On the one hand, in addition to the Public Plaza in the South City, the constitution of Residential Quarter’s Public Plaza promotes another evidence of an evolution in Ugaritic people’s appreciation of their public spaces. Also, the concept of Public Plaza in Ugarit constitutes a historical anchor linking modern Syrian community with their ancestors in terms of the use of public plazas with their public facilities around it, which is a common urban aspect in all 19th and early 20th century cities in Syria. Therefore, similar to the Royal Area proposal (see section 6.3.2), reconstructing all facades around the Public Plaza will, above all, give the real volumetric impression of this urban element and highlight the public nature of the buildings behind these facades (figure 7.79). Differentiating the added fabric is very important; it should apply no further loads on the original structure. Also, the pavement of these public facilities around the Public Plaza will be differentiated from residential spaces correspondingly with the aforementioned general conservation principles.
The first daily life exhibition will be created in the Tavern (figure 7.80) (the Building with the Stone Vase). An enveloping box, made of timber, will be added on top of the building ruins (figure 7.81). The main aim is to reconstruct the original interior environment of the building as a tavern using natural light, especially since many original artefacts are still there. Therefore, some perforations will be added to the new structure (the timber box) in order to control the natural light coming into the
building’s interior; this principle has been successfully applied in the conservation proposal of Badalona Roman Museum (see section 5.3.2) and Kolumba Museum (see section 5.4.1). The added structure should be an abstract and conceptual choice, without restoring any anticipated architectural details from the Bronze Age period. The location of structural supports of the new addition will be identified based on a detailed archaeological and architectural analysis. Restoring the tavern interior environment, especially with the presence of the original vase, most probably used as a wine container, will allow visitors to explore the original environment of the interior spaces of an entertaining public building from the Bronze Age period. It will also enhance visitors’ appreciation of the Public Plaza as a focal point that hosted everyday public and entertaining activities.

Figure 7.80: The Building with the Stone Vase: the conditions of the ruins in 2013.

Figure 7.81: Virtual reconstruction of the conservation proposal for the Building with the Stone Vase.
The presence of some shop agglomerations in this area (figure 7.78) characterises it differently from other domestic areas in Ugarit. The professional workshops which are usually found in the Ugaritic House are replaced here with these shop agglomerations, similarly to what is known as bazar in Middle Eastern cities. Restoring these agglomerations as much as possible and differentiating them from the rest of the structures is very sufficient in that it serves to highlight the relationship between these compounds and the surrounding fabric. It would also give a clue about how these shops worked together in each agglomeration and had been linked to the assigned streets and their residential block.

Courtyard in some houses was not only playing the role of open space that provides light and airing to the internal spaces around. It was also a focal point around which an assembly of spaces is organised to constitute a private plot (unit) within the house and, as a consequence, the big house can be divided into private units for the growing family members. This is a pure reflection of the social life of Ugaritic people, where each family (clan) sought to live connected in the same block, guaranteeing a good level of privacy for each small subordinate family. In the Residential Quarter, the House of Rapanu represents the best example of how the growing number of the family members contributed to the division of the big house to private but connected units, and how the courtyards played an essential role in this successful division that guaranteed strong connections between the house’s units. After reconstructing the outer walls of the house and highlighting the courtyards with a differentiated pavement, as mentioned above in the general principles section, adding the double steel bars over the conjoint walls to define unit borders will be a sufficient principle helping to restore the original block’s division and perceive the relationship between resulted units (figure 7.68a, 69).
Figure 7.82: House of Rapanu: virtual reconstruction of the conservation proposal reflecting original light-shadow (open-closed spaces) experience and highlighting the role of the courtyard inside the house.
In this house, enhancing experience of open-closed spaces is quite important to allow the public to understand how ancient people already had a concept of privacy, and what the courtyard’s role was. Inserting a horizontal timber roof over closed spaces, while keeping the courtyards open, can become a paradigm for visitors of the difference between shadow and light (open and closed) as it originally was. In this sense, people will easily realise the function of the courtyard regarding lighting, ventilation as well as sub-dividing the block into private units (figure 7.82).

![Figure 7.82: House of Rapanu: virtual reconstruction of the conservation proposal of the funeral section.](image)

This house accommodates a big funeral department which comprises two Late Bronze Age tombs. This department allowed the family members to practice funeral rituals and demonstrate their strongest relationship to their ancestors, which they would pass onto their future generation with the best possible appreciation. As mentioned in the general principles, full reconstruction of this department’s access and inserting a timber door will enable a visitor to distinguish it from other accesses, recognise the high privacy of the apartment behind, and understand the sacred and ritualistic function for which this entrance stands. Internally, differentiating the pavement of this part from the rest of the house also enhances people’s recognition that they are moving from one function to another inside the house (figure 7.83).
City Centre

Since a small area has been excavated, the City Centre cannot be comprehensively understood at an urban level; only two main streets are uncovered. The shortage in tomb chambers and the presence of a public sanctuary suggest a public use for this area, even though there is substantial evidence for residential use on the ground floor, which is believed to have been continued on the first floor as well. Thus, the conservation concept of this area is limited to specific principles and architectural procedures, in addition to the general ones. It is worth mentioning that the presence of the public sanctuary (Sanctuary of Rhytons) brings up another opportunity in this area to offer people an experience in public, but sacred, Bronze Age spaces of Ugarit. The final conservation proposal for this building will be liaised with the study of religious buildings in the following chapter.

Figure 7.84: Conservation Proposal of the Sanctuary of Rhytons, City Centre: virtual model.

The temple volume will be represented in a subtle framed steel structure (figure 7.84). This further highlights the relationship between the sanctuary, as a focal point, and its surrounding fabric. Also, the conservation proposal will focus on projecting the relationship between the sanctuary and its annexes onto the original fabric. The conservation proposal of this part of the area will enhance the understanding of the sanctuary’s exact function, its relationship to the urban fabric and how distinct it is, compared to the main temples of the city. This will further point out the importance
of this sanctuary for the ancient local community. A conclusive proposal for this building will be made after a detailed analysis of the religious buildings in Chapter 8.

Since this study does not propose major interventions in the northern block of this area, it is a good opportunity to highlight some technical aspects of the domestic architecture in Ugarit. Pillar-like reinforcements (piers) and the foundation system are the fundamental technical characteristics of the city. The primary (west-east) foundation, laid parallel to the site topography, worked as terrace walls that resist the thrusts from the slope. The secondary (north-south) ones were not too long and their role was mainly to distribute the loads between the terrace walls. Therefore, exposing these foundations with good preservation will confer a good understanding of the high technical level which Ugaritic people achieved and how they adapted their buildings to the sloping topography. Exposing the foundation system to the public will not be possible without further excavation in specific houses of the area, like house B, C, D and F because of their topography (figure 7.85).

It is essential at this point to conduct a detailed documentation of the current conditions and a geotechnical analysis. Exposing the foundations must be accompanied with an extensively detailed protection or even under-pinning to guarantee structure stability. Thereafter, retaining the original level of the ground floor is essential and will be achieved by inserting new timber-decking ground that allows visitors to move safely over the exposed foundations and, at the same time, recognise how primary and secondary foundations work and communicate.

Regarding the pillar-like reinforcements, they are located at the junctions between primary and secondary foundations and walls above. It is believed that they had a very important structural role in reinforcing the rubble stonewalls as well as receiving directly and shedding loads from the building’s ceiling or roof. Highlighting these points within the Ugaritic house, together with the foundations, would offer good comprehension of the structural frame of the Ugaritic house, and how the loads were distributed to key points. Therefore, completing these piers to a height of 1.30 m, with the exposed foundations, will be an appropriate concept towards a volumetric representation and experience of the structural system in Ugaritic house (figure 7.85). Furthermore, choosing parts of these three houses,
where the whole structural framework could be completed (piers, joists, ceiling), can comprehensively display to the public the entire structural framework of Ugaritic house. It is of a unique educational value for current and future generations.

**Figure 7.85: Representing the structural elements in the northern block of the City Centre: virtual reconstruction.**

**Lower City**

The very fragmented structure of this area requires a very cautious conservation approach, as the area’s structures cannot afford any further damage or heavy procedures. Therefore, simple conservation procedures and architectural interventions will be enough to expose key values in this area. Schaeffer and Castel’s works on this area confirmed that most houses relate to the Late Bronze Age period, although there is still some evidence (foundations and tombs) from the Middle Bronze Age. These facts insist on the importance of applying a stratification approach which makes different phases distinguishable. Differentiating the Middle
Bronze Age foundations with a revocable coating will allow people to understand the succession of phases, possible improvements, trends, the ambition of the owners, etc.

Regarding funeral architecture, this area is where the oldest discovered tombs are found, such as tombs 56, 57, 58, 92, 109, and 152 (figure 7.86), which motivated Schaeffer to date the whole area back to the Middle Bronze Age. Therefore, it is fundamental to apply a specific stratigraphic principle to ensure that these tombs are distinguishable from the Late Bronze Age ones which, sometimes, exist in the same house. Restoring the tomb access and covering slabs is essential to differentiate these Middle Bronze Age tombs from Late Bronze age ones, either belonging to the same area (tombs 75 & 24) or found elsewhere in the city. The irregular plan and roofing stones are key variables for the assignment of each tomb to its specific period.

At an urban level, the Rampart Street is the main vein in the area, connecting its eastern and western parts. Therefore, this street should be highlighted as a primary urban element. The street is covered by a pile of excavation soil and, subsequently, the original level of this street should be exposed along its length. This will be done by removing the excavation soil and paving the street with timber decks in order to differentiate it from other secondary arteries, going up and down to give access to the residential units in this sloping area. The terrace foundations walls will be consolidated and completed to emphasise the unique urban morphology of this very sloped area, built on terraces. This will clearly show how secondary streets were used specifically to link the main Rampart street and residential units; some of them continued up to link this area to the Acropolis. Representing the different urban morphology of this area contributes to showcasing the diverse urban principles applied in the city, and displays outstanding cultural values to the modern Syrian society about their ancestors’ achievements in the field of urban design (figure 7.86).
Figure 7.86: Conservation proposal for the Lower City.
Chapter 7 The Conservation of Domestic Architecture in Ugarit
To provide visitors with a complete urban experience in this area, some of the secondary streets (closed lanes or the ones heading towards the Acropolis) will be reconstructed using timber steps, and perhaps with steel handrails for safety purposes, similarly to what has been done to Housesteads Roman Fort on Hadrian’s Wall (figure 7.87) (see section 5.5.1). This concept will be further elaborated in the following two chapters, exploring the temples on the Acropolis area and the urban reading and conservation proposal of the entire city.

Figure 7.87: The reconstruction of original sloped routes in Housesteads Roman Fort on Hadrian’s Wall.

South City
The South City is considered as the best representative of all Ugaritic domestic aspects at architectural, urban and social levels. It is the only domestic area that reveals clear urban terms of reference for the domestic architecture in Ugarit, but also examples of cultural values are represented in its structures. Therefore, the conservation proposal should be comprehensive to establish and present, in addition to architectural and urban advancements, the Ugaritic ethos as well as social and cultural aspects that are embedded in, but form an integral part of, the existing ruins.

The earthquake of 1250 BC is a milestone that forced the city to develop in more modern ways. The impacts of this event are more obvious in this area, unlike other ones. For that reason, it will be a key aspect to display how architectural, urban and even social aspects had produced the upgrade of the area.
At an urban level, one of the general principles was to cover the streets with timber decks differentiating main streets from secondary ones and improving understanding of the streets hierarchy. Since this area incorporates a full range of urban elements (main streets, secondary streets, closes, enlargements, squares and plaza), the general principles are not enough to allow people to recognise its urban complexity. Therefore, in addition to highlighting the streets, it is important to re-establish their relationships to the squares or enlargements where they meet. Restoring the original level of the squares (square 1, for example) (figure 7.88) and completing the original height of surrounding facades and relevant streets would restore the original urban environment of the area and give people a proper experience about the volumetric aspects of public network in the city. Also, differentiating the square’s pavement (e.g. stone and compacted soil) will enhance people’s recognition of these urban elements in the city and how they had been connected.

The unique urban and public element in this area, the Public Plaza, is evidence of a high advancement in urban terms in Ugaritic architecture. It is a strong representation of the people’s attempts to involve new urban concepts that reflect the requirements of their social life in the city. All surrounding facades should be reconstructed to the expected original height to boldly mark its borders and restore its urban characteristics and environment (figure 7.89). The reconstruction will be carried out using the same principle for completing the plazas facades at the Royal Area (see section 6.3.2: Proposed interventions) and Residential Quarter (see section 7.4.2: Residential Quarter). This huge urban element will be the suitable place for carrying out any event celebrating the history of the area or social life of its people. Thus, the conservation proposal should consider the addition of some light structures corresponding with possible events. A neutral reconstruction approach should be applied to this plaza to install the moveable market environment, as it is believed to be functioning at certain times of the year. All added structures must be light and removable to emphasise the plaza’s impermanent use as a market, and secondly to adapt it for some other possible events during the year.
Figure 7.88: Highlighting urban elements and their relationships in South City, Ugarit.
It is believed that this plaza was created during the 13th century BC by removing some old structures. Therefore, it will be essential to further excavate some parts of the plaza in order to expose as many traces (foundations) of old structures as possible. This will help to display the history of this urban element as a clue of urban evolution in Ugarit during the 13th century BC. After preserving and highlighting traces of the old structures, a steel framework equipped with transparent glass panels should be installed over the excavated part(s), corresponding with the original level of the plaza, to keep the traces below protected and presented to the public. This concept has been applied in various forms to new excavated and fragile ruins at Saint-Romain-en-Gal archaeological site in Lyon, France for further protection (see section 5.5.2). The new installation in the Public Plaza will consider the application of a natural ventilation process to overcome the humidity and heat retention and keep the ruined foundation within a well-preserving environment. Also, shading these foundations will be a potential choice during summer sunny days to maintain the controlling of the environment surrounding the exposed foundations. The original level of the last phase of the plaza should be restored through paving it with stones and compact soil, as a reference to a public and open space.

Figure 7.89: Conservation proposal for the Public Plaza at the South City.

Block VI of the South City, with its relationship to other urban elements around, represents the best example of the hierarchy of open spaces in Ugarit. It is already
proposed to complete the block’s borders to an approximate height of 2 m. Therefore, to present a specific hierarchy it is essential to use the concept of cultural routes but on a smaller scale here. The installed route (figure 7.90) will start from the Public Plaza (very public) and go through street VI-VII approaching square 2. Both, the street and the square, are considered as public open spaces. Afterwards, the route will enter the semi-public space of block VI, whose conservation proposal allows visitors’ to recognise their movement towards a more private space.

Figure 7.90: Conservation Proposal to present the hierarchy of urban open spaces in domestic architecture at the South City of Ugarit

Semi-public spaces, as unique and original Ugaritic development, require special conservation proposal. The surrounding walls of semi-public space will be completed using timber panels as mentioned in the general principles. The main aim is to achieve better differentiation from the external walls of the block. Some architectural
interventions should be added to allow people to recognise that they are still in a shared area, but not for the public. Restoring the shared facilities in such semi-public spaces (baking oven, well, storage, and house doors) can emphasise that further. Also, inserting a course of horizontal timber beams to surround the whole internal periphery of the space will constitute a kind of strap that encircles the space and interrupts at the houses’ accesses and the main access of this semi-public space. That strongly reconstructs the relationship between this space and surrounding houses as well as emphasises the semi-public nature of this space (figure 7.91). Adding horizontal timber boards (1.5 m wide, and at 3.00 m height) as roofs for surrounding private rooms of the semi-public space enhances visitors’ speculation and experience of the relationship between open and closed spaces and also reflects that this space is open. Using a mixed pavement of timber decks and compact soil further highlights the intermediate position of this space between public (streets, paved in timber) and private (closed spaces paved in compact soil) (figure 7.91, 92). This conservation approach will also be applied to the semi-public space at block XIII and XIV in order to allow visitors to recognise the evolution of this urban element in Ugarit.

Then, the route (figure 7.90) will continue to the very private open space (the courtyard of house A in the block). This element already had a proposal that highlights it as a private house open space. In addition to exposing the hierarchy in the privacy of open spaces throughout this route, visitors would get a substantial experience of how Ugaritic people used their houses and protected their privacy using advanced urban principles for the time. It is possible to make the route continue and exit the house from the main door to street IV-VI which leads it back to the Public Plaza. This part of the route would highlight the direct relationship between a private open space (the courtyard) and the street as public open space without the presence of the semi-public space between them. Consequently, the proposed route shows two types of hierarchy within open spaces in the city. This, in turn, emphasises the fact that, although Ugaritic people had lived as a clan or family in the residential block without any public intervention into their private life and that they had closed their block borders to the outside, they had very strong social relationships and public life reflected in the urban organisation and public elements which are scattered around the area.
Figure 7.91: Proposed intervention for semi-public spaces.
Consequently, the Public Plaza was not the only representative of urban evolution in Ugarit. There is also the development of semi-public spaces on the site, which clearly shows a huge improvement in both the organisation and perception of this concept. The best clue about this evolution would be presented by carrying out suitable interventions to the semi-public space of blocks XIII and XIV in the area (figure 7.92, 93, 94). Using the same approach of the semi-public space in block VI will allow people to recognise the semi-public nature of these two spaces. Establishing a specific route for visitors is quite important for offering them good experience in approaching this type of space and recognising the remarkable difference between the two phases which are represented by the two mentioned semi-public spaces.

Figure 7.92: Conservation proposal of the semi-public spaces in South City. (a) Plan. (b) Semi-public space in block XIII: virtual reconstruction. (c) Semi-public space in block XIV: virtual reconstruction.

The route will start from street X-XIII entering the semi-public space of block XIII, from the northern side (figure 92), through which it will exist to the outside of the first semi-public space at street XIII-XIV. Thereafter, it will head to the semi-public space of block XIV through House B. The added course of horizontal timber beam on the internal periphery of the semi-public space makes it easy to recognise the flow of the space and its regularity level. This flow will be interrupted when the visitors are moving out of the space on the street and into house B. In addition to
characterising the semi-public spaces differently from others, this concept gives the visitors more experience about the original routes between public, semi-public and private spaces. It guides them to explore how the ancient people of Ugarit approached their semi-public space through their private houses. For this purpose, the volume of house B, block XIV, will be reconstructed using steel mesh and timber platforms that highlight the house’s volume (figure 7.95). The main aim is to shade the house and reconstruct the original darkness of the interior environment. Consequently, the conservation proposal will enable the visitors to explore the two phases of semi-public spaces and recognise the new urban principles and huge improvement that occurred to the organisation and regularity of these urban elements (figure 7.93, 94) after the city’s destruction as a result of the 1250 BC earthquake.

Figure 7.93: Virtual reconstruction of the conservation proposal for the semi-public space in block XIII.

Figure 7.94: Virtual reconstruction of the conservation proposal for the semi-public space in block XIV.
Since evolution was not only in urban principles, it is crucial to highlight the improvements in architectural principles and people’s thoughts towards their spaces and buildings. First of all, considering specific houses whose complex comprises the two phases, before and after the earthquake (figure 7.42), capping the rectified walls from the after earthquake phase would be sufficient to make them recognisable as added parts via the reconstruction project which was carried out after the earthquake. Also, it will allow visitors to notice the difference in the regularity, size and construction quality of spaces. The most appropriate examples to which this concept may be applied are houses D and C in block VI (figure 7.96a) and Houses A and B in block X (figure 7.96b). However, House B in block X is a rich case of stratification and other social, cultural and professional aspects. Therefore, a different conservation proposal is to be applied to this specific house. The capping will be a timber structure that covers the exact thickness of the wall-head in order to avoid any misleading interpretation (figure 7.96). Consequently, the walls will be protected and differentiated from walls from the old phase with their current thicknesses and heights. This stratification approach will enhance the visitors’ readings of the two phases of the city houses (before and after 1250 BC).
Figure 7.96: Proposal to differentiate between the two phases (before and after the earthquake) in Ugaritic houses in the South City. (a) Houses D&C, block VI. (b) Houses A&B, block X.
The second everyday life exhibition on the site will be held in house B, block X. A complete reconstruction project will be conducted over the existing ruins of this house for architectural, social and educational purposes. The reconstruction of the house should consider its stratification and the evolution of its complex as explained earlier (see section 7.3.1). It is very important to provide the visitors with a comprehensive experience about social life, architecture, construction and all evolutionary aspects in this house. Emphasising the two phases of this house is very important, and different material will be used to reconstruct each phase and show how these two phases are linked and work together.

Using the same traditional materials to reconstruct the old phase (before 1250 BC) will give an opportunity to expose the structural and building system (stone-walls with timber framework through, piers and roofs) with all other architectural elements, such as staircases, doors and windows. This will have a great educational significance for different fields, architecture and construction history in particular. The second phase (after 1250 BC) will be reconstructed with timber structure which will be supported by steel posts. These posts will be made of steel framework and complete the volume of the original piers insisting on the original structural purpose of these intersection points. Similar principle has been successfully applied for reconstructing some geometries at Crypta Balbi Museum in Rome, Italy (see section 5.2.1) and the Roman Temple of Apollo at Portonaccio (see section 5.5.4). The new steel addition should be weather treated before installing it on the site, and its positioning should be carefully selected following a detailed analysis of the original piers and surrounding walls. Very careful consolidation work should be applied to the original piers before installing the new steel addition. This house will be the museum of multi-functionality in Ugaritic domestic architecture (figure 7.97).

Restoring the professional functions (workshop, mill, oil press, storages, shops and silo) will be a strong representation of a professional life in the city and how houses were vital units during the Bronze Age period. In the northern part, the ground floor was used for residential and educational purposes. Restoring the educational area on the ground floor with the library upstairs will highlight the intellectual importance of this house in the city. This strongly shows that writing and learning were not monopolised by a specific class in Ugarit; rather, they were available to everyone.
interested. Also, this part will be a replica of the Bronze Age private residential environment inside the Ugaritic houses.

Restoring the two courtyards inside the house is a clear manifestation of different types and functions of this architectural element in one house. This restoration will be of crucial significance and serve to highlight the role of the courtyards, not only in ventilation and lighting but also as a focal element around which various functions were properly organised. It also reflects the influence of Mesopotamian or eastern Syrian colonnade courtyard in Ugarit as the latest development of this architectural element. Using timber columns on the original stone bases (reconstructing the stone base where needed) reflects the original technique for using posts in the portico entrances or courtyards in the city’s houses. The presence of the two courtyards in the same house will display the evolution line of this architectural element and the purpose of each type.

Figure 7.97: Reconstruction proposal for House B, block X, South City: Virtual model.

From outside, the building is looking over the Public Plaza, the biggest urban element in the area. Therefore, reproducing full volumetric expression of house B (three storeys for the northern part which looks over the plaza) explains Ugaritic people’s appreciation of their city and urban elements. Also, it reflects great evolution in their thoughts about their structures after the earthquake: they sought to look over this unique urban element (the Public Plaza) by constructing strong, regular and beautiful structures (figure 7.98). The reconstructed House B shows the
volumetric vision and aspects of those people, and on the other hand, house A beside it shows how these evolutionary thoughts were also represented in the house’s layout and its structural quality (thick and well-built walls). Establishing some routes inside the house to guide visitors through is very important in terms of emphasising the specific hierarchy in residential and functional sections. These routes will further highlight the importance of the courtyard as a focal organising point in the house.

![Figure 7.98: Reconstruction proposal for House B, block X, South City: Virtual model.](image)

7.5 Summary

Ugaritic houses are considered a very good representation of cosmopolitan Bronze Age domestic architecture in the Middle East. The development of architectural and urban principles in the domestic areas of Ugarit is a distinct reflection of people’s social life and cultural attitudes. Therefore, this chapter proposed not only the preservation of the domestic fabric but also projecting the Ugaritic past onto the ruins with its social, ritual and cultural ingredients. Moreover, the long-span development of these structures is well connected to the political advancements as well as people’s rituals and cultural aspects (e.g. seeking proper privacy for domestic spaces and incorporating funeral structures into the houses as a predominant feature). Therefore, the Ugaritic tomb is believed to be an exceptional representation of funeral architecture in the Levant and Mesopotamia. Having a tomb within the house, or setting up a separate part of the house to accommodate the family tombs and allow family members to practice funeral rituals is evidence of a key characteristic: the strong relationships which Ugaritic people sought with their ancestors.

Discovered houses in Ugarit highlight high architectural and urban experience of ancient people during the Late Bronze Age. The featured evolution in space
perception, materiality and building techniques has enriched the conservation proposal with a fresh perspective. Consequently, comprehensive conservation procedures, which unveil the hidden cultural and social aspects of these houses, have been proposed. Moreover, the conservation of funeral architecture in Ugarit pushes the level of presented evolution further up by shedding light on the last achievements of those people in planning and building such elaborate structures under the ground floor using an advanced stone technology. The conservation of domestic architecture in Ugarit also has an educational significance in placing Ugaritic houses and tombs within their regional context and reasonably exposing different evolutionary phases and presenting them in spatial forms, making them relevant to contemporary Syrian and architectural values.

Further excavations on the site might bring new information which would amend the current interpretation of this study. Therefore, all conservation and architectural choices have been regarded as critical enough to consider any future change to the intervention. Thus, and considering that the history of Ugarit goes back to 6000 BC, a substantial question needs to be raised about whether future archaeological missions to the site will bring to light older houses or, at least, tombs, from the Early Bronze Age, for example. If so, will that further confirm the long history of Ugarit and establish an older phase to be presented alongside the current ones in a new narrative? Will the new discoveries confirm that the original roots of the concept of chamber tombs had existed in Ugarit? Indeed, it will be a very important future research avenue to investigate simultaneously with future excavation works in Ugarit.

These questions, which remain to be answered, require further excavation works at the oldest area on the site, the Acropolis. This area currently comprises a mix of Middle and Late Bronze Age structures. However, especially below the temples, some earlier ritual facilities were discovered, which confirm that further excavation would unearth a new phase of Ugaritic history. Therefore, the existing fabric of the main temples, at the Acropolis, and the local sanctuaries distributed in the city, which will highlight more social, cultural and architectural aspects of Ugaritic people’s lives, will be the main focus of the following chapter.
Chapter 8  The Conservation of Religious Architecture in Ugarit

8.1 Introduction

Religious buildings are strong representations of social and cultural aspects of any civilisation. The development of these buildings over time reflects advancements not only in political, economic and cultural systems, but also in architectural concepts, principles, and technology. The monumental scale of these buildings has a strong implication for the understanding of the level of the studied civilisation and cultural and ritual attitudes of its people. The temple is the sacred place where ancient people used to worship their deities. It was common that, in every city, there were specific dominant gods to whom people had assigned their main temples. However, ancient cities comprised a variety of other smaller scale religious buildings (sanctuaries), which were dedicated to religious as well as social purposes on a smaller urban scale (neighbourhood or district). Therefore, it is very important for this research to clarify the differences between the so-called temple and sanctuary based on the scale, function and the building’s importance for ancient communities.

The history of religious buildings in Syria dates back to 10th millennium BC; however, these buildings started to have specific characteristics during the Neolithic period 8000-5000 BC. Successive forms of religious buildings can be recognised between the Neolithic and Late Bronze Age periods; the development of these forms unveils not only the enhancement in architectural and structural concepts, but also political and economic evolution occurring to successive civilisations which occupied that specific area. Temple’s successive forms also highlight the similarities and differences between neighbouring civilisations during that time. The understanding of this development process is very important for placing the final forms of Bronze Age religious buildings in Ugarit, the main focus of this chapter, in their historic context. Also, the temples of Ugarit are considered exquisite and unique examples of Middle and Late Bronze Age religious architecture in Syria and this will be investigated in this chapter.
Ugarit, as all Syrian cities at that time, was subject to the influence of surrounding powers. The unique thing about Ugarit is that its links had exceeded the land borders and reached international communications with overseas civilisations in Crete and Cyprus. That immensely enriched civic life and differentiated the city and its sphere sites from other Syrian cities. Accordingly, the discovery of Ugarit in 1929 had greatly contributed to the interpretation of religious life in the Middle East (Canaanite, in particular). Understanding the Canaanite religion was originally based on discovered writings in surrounding cultures, which was not enough to grasp a clear appreciation of this religion and its customs. Ugaritic discoveries (texts, in particular) immensely contributed to the understanding of this culture and its religion as they brought to light crucial knowledge of the Canaanite religion in the whole area; for example, a tablet was discovered, which comprises sixty names of popular gods and goddesses in the kingdom of Ugarit and all Canaanite sites. Under the direction of Claude Schaeffer, the archaeological mission to Ugarit, which started in 1929, had revealed two superstructures, temples, on the Acropolis, and three smaller sanctuaries in different excavated areas of the site. The destructive earthquake in 1250 BC generated considerable transformations, both in architectural and urban aspects of the city’s religious buildings. Tracing these developments is key to a broad reflection on the evolution of people’s social and cultural attitudes towards religion and its buildings between the Middle and Late Bronze Age. The stratification of the site also exposes this evolutionary line, even earlier than 19th century BC, due to the discovery of cultic facilities in the Acropolis area that date back to Early Bronze Age or the beginning of Middle Bronze Age period.

This chapter will carry out a detailed archaeological and architectural reading of the religious buildings in the city around their outstanding architectural, urban, social and cultural aspects and developments over time. It will also highlight how cultural and ritual aspects influenced Ugaritic people’s architectural and urban principles at that time. Moreover, this chapter is going to establish appropriate conservation concepts that focus on the most valuable aspects of religious architecture in Ugarit.

Contextualisation will be the first step which studies the historic background and development of religious buildings in Syria, with more focus on its links to the final
forms of religious buildings in Ugarit. Since the Acropolis area was not fully accessible due to its very fragile condition and dense vegetation, I could carry out a limited survey in May 2013. Therefore, the study of Ugaritic main temples will be based more on the archaeological and excavation reports, texts studies and the latest architectural analyses done by some scholars of the French mission, such as Olivier Callot and Marguerite Yon. Combining these studies made possible the appreciation of the unique architectural, urban and cultural aspects of religious architecture in Ugarit, considering the different forms that existed in the city. The analysis of the unique superstructures on the Acropolis has shown their impact on the city’s urban form as well as the life aspects of its people. It also highlighted the great evolution in the architectural, urban and technical aspects of the two temples and their transformation after the earthquake in 1250 BC. As for the discovered sanctuaries in the other areas of the site, very detailed architectural analysis and observation were carried out by the author and combined with the French mission’s. This analysis made possible a better understanding of these structures’ functions, composition, development and relationship to the surrounding architectural and urban context.

The use of critical conservation approaches (see section 4.3.3: critical conservation approaches) is fundamental to free the architectural expression and allow the reconstruction of the main architectural principles of religious buildings and their evolution. These approaches are supported by the concepts of Burra Charter and the notion of authenticity (see section 4.3.3: international conventions) in order to guarantee high regard for the original physical fabric. Simultaneously, these approaches will sufficiently work together on releasing the embedded intangible aspects of religious ruins in the city. Consequently, intervention works will involve some design approaches that expose the valuable aspects of these building in volumetric expressions, after carrying out proper anastylosis works on the fragments. Proposed interventions will also aim to fulfil some management purposes. For stronger appreciation of religious buildings in Ugarit, it is essential to understand the transformation process through which various forms of religious buildings in Syria had come to be known and appreciated. This will further highlight the unique form of Ugaritic temples in comparison with the majority of contemporary religious buildings at that time.
8.2 Historic development

The history of discovered temples in Syria goes back to the Neolithic period when these structures were simple and could be differentiated from surrounding fabric by their footprint. It is believed that both religious and social functions were accommodated in the so-called sanctuaries at that time (Cauvin, 1972; Jamous, 2006, p.15-22). The importance of these building for the ancient people became evident as new architectural features, which facilitated the function and simultaneously characterised the building’s form from the surrounding fabric, were added later on during the Neolithic period. Also, the urbanisation process, which took place during 5th millennium BC, promoted the form of religious buildings which constituted the catalyst points around which urban agglomeration had been developed. Therefore, temples’ design and materiality were immensely improved reflecting on the dominant position of these buildings in various aspects of ancient people’s life. The development of political systems during the 4th millennium BC had contributed to creating various forms of the temple in better regularity; the temple’s design and materiality varied based on the political power, location and importance of the assigned deity. Therefore, distinct differences in architectural approaches and principles can be recognised between temples from Syrian and Mesopotamian cultures, although people formed their temples based on the same basic architectural elements (figure 8.1).

The Rectangular Temple, which is considered to be the basic form in the architecture of Syrian temples, comes from the Early Bronze Age period (Margueron, 1985). Some scholars, who worked on archaeological sites in Syria and Mesopotamia, had intensively studied the development of this form in Syria; they named it Antes Temple “The Temple with Antes” based on its front portico entrance which was developed afterwards into two buttresses around the entrance in the early Middle Bronze Age Period (Margueron and Boutte, 1995; Matthiae, 1997, p.391; Werner, 1994). The long time-span development of this form brings various typologies of this temple in accordance with the geographic location, cultural system and the level of influence by neighbouring civilisations (Margueron, 1985, p.15-31). Considering the shape and period and based on Margueron’s classification, Syrian temples can be divided into four main categories: Rectangular Temples (Antes Temple), Developed
Rectangular Temples (mainly 1600-1200 BC), Mass Temples and Tower Temples. The main temples of Ugarit fall under the Tower Temples category. A detailed analysis of the development of Syrian temples can be found in Appendix 2.

Distinction is conferred upon Syrian temples for their clear, lively and light structures which had sometimes expanded vertically; adding a tower onto part of the temple is an exclusive characteristic of a Syrian temple. Syrian temples are distinguished by their use of stone foundations, unlike the case in surrounding areas. The main architectural features (entrance, foyer, the Most Holy Place and the altar) are the same in all Syrian temples and follow specific privacy hierarchy. These temples had been differentiated by secondary features, such as the annexes, the altar’s location and some additional spaces concerning the function and location of the temple. It is worth mentioning that excavation works in different archaeological sites in Syria confirmed that the Antes Temple, the typical Syrian form, existed in Syria since the 4th millennium BC; it had been developed overtime showing various and interesting typologies of this from until the Late Bronze Age period. That would
raise an important question about whether Mesopotamian Rectangular Temples had formulated their start point based on Syrian forms. Finally, the Syrian temples did not follow the four cardinal directions, as did the Mesopotamian ones, and that consequently gave the ancient people of Syria more freedom to express their attitudes and views towards their temples’ architecture. Thus, Ancient Syrian people were able to promote the typical form in different directions based on the location, available building materials and dominant cultural aspects. This had resulted in an interesting variety in the architectural principles of Syrian temples; e.g. Mari, Ebla, Emar, Alalakh, and Ugarit (figure 8.2).

![Figure 8.2: Various forms of Syrian temples during the Bronze Age period.](image)

In addition to the big temples, people continued to use the small temples (or sanctuaries) for local and everyday religious and, perhaps, social activities. These buildings are quite small compared to the main temples, as can be seen in temple (N) and (B2) in Ebla (figure 8.3a) as well as the Royal Sanctuary, Sanctuary of Rhytons (figure 8.3b) and the New Sanctuary (figure 8.3c) in Ugarit (Callot, 2013a; Yon, 2006). The structure of this type is very simple and, in most cases, connected to a domestic unit which served as accommodation for people who were looking after the building’s activities or who carried out the social events of specific cults. In many cases, these sanctuaries were found distributed in different areas of the city; however, there are also some examples, such as in Ebla and Ugarit (Margueron, 1991, p.1176; Tarragon, 1995. p.203-206; Yon, 2006), where these small sanctuaries had served the royal community.
During the Late Bronze Age period, 13th century BC and afterwards, the ancient people of Syria had developed this type of religious buildings when the construction of gigantic temples became a rarity. It is believed that this explains Syrians’ attitudes of formulating more civilised and organised communities at both urban and social levels. It is essential to point out that the principles of these small sanctuaries had inspired a new form of Syrian palaces, the so-called “BitHilani” or the “House of the Priest”, after the Late Bronze Age period. This form is considered a key feature that characterises the Syrian architecture of that period. That consequently attributes further significance to those local sanctuaries that represent the origin of “BitHilani” during the Middle and Late Bronze Age periods.

### 8.3 Religious buildings in Ugarit

Ugarit’s inhabitants followed the Canaanite religion and worshiped many deities whose throne was ascended by El, the father of all Canaanite gods (Edzard and Haussig, 1983). The discoveries in the city have so far confirmed many gods; they are El and Athirat (father and mother of all gods, who were worshiped everywhere in the kingdom), Baal (god of thunderstorms, fertility and agriculture), Dagan or Dagon in some publications (god of fertility and multiplying, and god of cereals), Anat (war-goddess), Kothar (god of professions), Mot (god of death), and Yam (god of seas and rivers). In the city ruins, two of these gods, Baal and Dagan, are strongly represented by two big temples. Their ruins clearly manifest that those two temples were dominant superstructures of the Acropolis during the city’s life. The temples’ footprint (figure 8.4) shows that these two temples follow the principles of Middle
Bronze Age temple’s architecture (figure 8.2 & Appendix 2), taking into account that Ugarit’s architecture had been always distinguished from surrounding Syrian cities by its developed principles and techniques. Since the city is not fully excavated, more temples that represent other dominant gods in the city may still come to light through future excavation.

Figure 8.4: The Acropolis area, Ugarit.

The city also comprises small local sanctuaries which are located within different areas of the city and well connected to their surrounding fabric. These sanctuaries (small and local temples) had simpler form and were dedicated to the smaller-scale everyday religious and, perhaps, other social activities. Three local sanctuaries were unearthed in Ugarit; they are known in the publications of the French mission as the Temple of Rhytons in the City Centre (figure 8.5a), the Building with the Throne in the Old Royal Zone (figure 8.5b) and the Royal “Hurrian” Temple in the New Royal Zone (figure 8.5c). For the sake of achieving clear differentiation between main temples and local sanctuaries, this study will replace the mission’s names with new ones. Henceforward, these local sanctuaries will be respectively referred to as Sanctuary of Rhytons, the New Sanctuary and the Royal Sanctuary. It is clear that
the first two have the same design principles, taking into account the long period that separated their construction; the evolution between these two sanctuaries is distinct as will be seen later on.

Figure 8.5: Local sanctuaries in Ugarit. (a) Sanctuary of Rhytons, City Centre. (b) The New Sanctuary, Old Royal Zone. (c) Royal Sanctuary, New Royal Zone.

The position of the two big temples (Baal and Dagan) at the highest point of the site reflects their symbolic character as landmarks which can be seen from far away. It is believed that they were significant beacons for the sailors, who were arriving at the port of Mahadou (Minet el-Beida), less than 1 km to the west of Ugarit (Callot and Monchambert, 2011). On the other hand, discovered sanctuaries have local character; they accommodated everyday religious and, probably, social activities for civic or royal communities. Consequently, considering their attributes, religious buildings in Ugarit can be classified into symbolic temples and local (civic and royal) sanctuaries.

8.3.1 The symbolic temples on the Acropolis

The Acropolis area occupies the northeast and highest part of the site, approximately 4 ha in area (figure 8.6). It accommodates the ruins of two big temples; each temple is separated with an enclosure which also comprises the temple’s annexes, courtyards and external altar. The area is not fortified as in surrounding cultures like Hattusa, and the name of Acropolis is just a morphological definition (figure 8.6, 7). The whole area is in a very fragile condition owing to more than 80 years of exposure without any real preservation work or substantial documentation, which is the excavation approach often adopted by Claude Schaeffer 1929-1971.

Olivier Callot carried out systematic surveys and analyses on the two main buildings, the temples, between 1988 and 1990 and then again in 2005. He concluded with
some schematic plans, sections, elevations and 3D perspectives that show his architectural interpretation, which he built on surveys of the buildings’ foundations, stratifications and material culture. Also, he used some of the discovered texts, especially those poems and myths found in the House of great priest (e.g. those describing the Palace of Baal as well as the epic of Keret). Olivier Callot believes that this area, with its two dominant buildings, is a very important element in understanding this ancient civilisation and the city’s urban morphology throughout its life-time (Callot and Monchambert, 2011). Therefore, its conservation is of a crucial necessity for the city, modern Syrian community and all disciplines concerning ancient civilisations. The area’s domestic fabric and funeral architecture have already been discussed in Chapter 7. Therefore, this chapter will mainly focus on the two big temples and their architectural, urban and cultural settings.

Figure 8.6: A computer model of Ugarit's topography showing the location of the Acropolis and its morphological settings (Calvet and Yon, 2008, p.27-36).

Figure 8.7: General section of Ugarit showing the city's topography and the morphological settings of the Acropolis area (Callot and Monchambert, 2011).
**Temple of Baal**

**Introduction**

The temple occupies the top point where all routes end. The ruins of this gigantic structure occupy 1000 square meters and create an island on the Acropolis but fully integrated with the urban context as can be seen in the layout of stairs, ramps and the streets which identify the enclosure limits and the temple’s relationship to its surroundings (figure 8.4). During the original excavation (1929-1932), Schaeffer thought that he was unearthing a Palace, a hypothesis he amended by the end of 1930. Unfortunately, the first serious survey was only carried out in 1975 (Margueron, 1977), a period long enough to cause severe deterioration to the ruins. The temple had waited until 1988 when a comprehensive systematic analysis had been conducted by Olivier Callot, based on his own surveys as well as former archaeological excavation and analyses. A comparison of all analyses shows that substantial original fabric was lost during those 60 years, but this comparison was helpful for the final architectural interpretation of the complex footprint (figure 8.8).

![Figure 8.8: Temple of Baal: Successive analyses (Callot and Monchambert, 2011) (a) 1988-2005. (b) 1979. (c) 1949. (d) 1933.](image)

**Architectural and Urban Settings**

As mentioned before, the temple is very well integrated within the surrounding domestic architecture. Excavation works showed that the temple’s enclosure had a monumental gate which opened to the west, facing the Royal Palace; also, a direct street probably connected the temple with the palace; 70% of this street is excavated so far. This should not be surprising, bearing in mind the palace-temple economy.
which Ugarit had during the Late Bronze Age. The temple and the palace had equally empowered the development of life aspects in the city. The important role of the temple in the city’s economy, maritime, trading and farming had been confirmed by many discovered texts in Ugarit. Thus, the main link, which sets out of the temple, is heading west directly towards the Royal Palace (figure 8.9).

Figure 8.9: Proposed streets network of Ugarit by Olivier Callot (Yon, 2006).

The same street, which is called the Library Street, continues east to connect the temple’s enclosure with the other temple on the Acropolis, the Temple of Dagan. Also, the Temple of Baal had good connections with the surrounding domestic areas. Two direct streets connect the temple and the Library Street with the Lower City. Although the topographical setting of the area is very sloped and it is thought that the Lower City was inhabited by the normal workers, discovered streets confirm very
good communication between the Lower City and the Acropolis (figure 8.10a, 11). This strongly reflects the relationship between the temple and local community from all classes. In his book “Les sanctuaires de l'acropole d'Ougarit: Les temples de Baal et de Dagan”, Callot shows that some remains of the stone steps between the temple and the Lower City still existed during his survey works in 1988 (figure 8.10b). Part of these two streets is currently covered with a pile of soil as a result of the excavation works carried out on the sounding to the west of the temple (figure 8.11).

Figure 8.10: (a) The relationship between the Temple of Baal and Lower City. (b) The remains of the street connecting the Temple of Baal to the Lower City (Callot and Monchambert, 2011).

Figure 8.11: aerial picture of the Acropolis area in Ugarit (National Museum in Latakia).
The relationship with other areas to the south (South Acropolis Slope and South City) and to the west (City Centre) is even stronger via many main and secondary streets, despite all the topographical constraints (figure 8.9). That undoubtedly reflects the importance of this temple to the city’s people and life. Therefore, it can be concluded that enclosing the temple with high walls was not to separate it from the surroundings; the main aim was, rather, to achieve better privacy and conceal the events (sacred maybe) taking place in the complex’s main courtyard A. In his book, Callot presents a comprehensive analysis and architectural description of the temple (Callot and Monchambert, 2011). However, it cannot be assumed that Callot reached absolute organisation and architectural interpretation of the building during its life time. In addition to his own surveys, he used all available materials that support his assumptions, especially those regarding the first and second floor.

The enclosure consists of the main temple’s building, two courtyards (A&B) and two annexes (figure 8.12). The main courtyard A, most probably used for outside ceremonies, is a rectangular shape which is located in front of the temple’s main access. It accommodates an external altar (2.2*2.2 m) which is thought to have been used for big sacrifices. The other courtyard B is located to the east and thought to be used for storing the sacrificed animals. The foundations of the surrounding walls indicate that these walls were high and thick, but not as much as the temple’s. This confirms the thought that these courtyards were not visible from the outside.

The remains of a stone pier (figure 8.12a) and the northwest corner of the southeast annex are the only available evidence that indicates the division between the two courtyards. The annexes occupy the northwest and southeast corners of the complex. The first one is located at the main entrance of the enclosure, the western wall. It is believed that it had a dual function; it constituted an indirect secondary access to the main courtyard A in addition to accommodating the guardians of the temple. The other annex is a rectangular (perhaps, square) space, located at the southeast corner of the enclosure. All plans created before 1988 do not show that this annex existed, but in the last surveys which Callot conducted in 1988 and 2005, the northwest corner of this space was seen and that encouraged Callot to assume that there was another (simpler) annex in this corner of the temple’s complex (Callot and
Monchambert, 2011). The discovered ritual texts in Ugarit reveal that the Ugaritic cults involved preparing a meal for the god after sacrificing the animals (Margueron, 1991, p.1253). Taking these texts into account, Callot proposed that this annex was most probably used for this purpose, considering that it had links to both courtyards where animals had been stored and sacrificed. Also, the assumed function, food preparation, is plausible particularly since the space is located in the far corner of the main building and does not conflict with other ceremonial activities which might have taken place in the main courtyard A.

Figure 8.12: Temple of Baal, Ugarit. (a) Callot’s survey 1988-2005 (Callot and Monchambert, 2011). (b) Schematic plan of the Temple showing its main sections (Callot and Monchambert, 2011).

The elongated courtyard B might have had an access through its eastern wall, since it was dedicated to storing the sacrificed animals (rams, cattle, cows, etc.). The two open spaces, the main courtyard A in particular, constitute significant elements in the temple’s operation. The presence of the outside altar in the main courtyard A indicates bringing the blood sacrifice to the outside open spaces, a key development in Syrian Middle and Late Bronze Age temples. The main building, the temple, occupies the northern part of the complex, approximately 350 square meters. It is formed up by the juxtaposition of two rectangles, where the North Hall (figure
8.12b:9) is double the size of the South Hall (the vestibule) (figure 8.12b:7). Concerning the foundations, it is clear that this building had been planned in advance to be a gigantic structure. The foundations, which date back to 19th century BC, the proposed construction date for the temple, are very thick (1.5 m), which indicates the high and thick walls constructed to the very top. The difference in thickness and depth between the foundations of north and south halls encouraged Callot to propose a different height for each hall: the South Hall was only one storey and the North Hall had one or two additional levels up. From the remains, the South Hall looks like a very simple space, perhaps a big vestibule without any specific architectural features; it had only a door that facilitated access to the North Hall. The temple’s entrance had also been equipped with stone steps that raised the temple ground floor above the courtyard’s level, most probably to further highlight the building’s importance among its surrounding facilities.

Callot proposed that the main entrance of the temple would have two timber columns with a stone base, similar to most discovered temples in Syria; although no evidence was found, this feature is applied everywhere in the city’s houses and the Royal Palace. These columns with the two antes had created a portico, whose two side spaces accommodated god’s stelae. These stelae were discovered outside the building. This monumental access system supports the assumption of using the South Hall as a big vestibule or gathering space. The North Hall is much more complex. It comprises the remains of different structural elements which, with a thicker foundation for external walls, point out different structural characteristics for this space. The ruins of two huge piers with buttresses are located in the eastern side of the hall and with 1.6 m offset from the southern and eastern walls. Callot believes that the niche, created between the northern and southern buttresses, constitutes the temple’s interior altar (figure 8.13a).

The discovered platform, 30 cm high, between the two buttresses further emphasises the presence of altar facilities. Another buttress can be recognised in the western wall, which corresponds to the altar’s southern buttress to the east. The eastern and western buttresses give an impression that the North Hall was divided into two different spaces. Considering the presence of the altar inside further promotes
Callot’s assumption that the first space, the Intermediate Space (figure 8.13a:8), was functioning as a portico to organise the horizontal and vertical movement inside the North Hall, the most holy area. The part to the north, where the altar is located, was most probably the effective Most Holy Place, the altar section (figure 8.13a:9), whose privacy was enhanced by the intermediating screen wall.

Also, the remains of the staircase that guided into upper levels are recognised in most surveys plans (1932-33, 1935, 1988 and 2005); only the first three steps were still intact during the last survey. The location of discovered steps gives a clue that this staircase continued inside the space between the temple walls and the altar’s structure (two piers and screen wall) (figure 8.13b, c). The presence of the staircase in this area, the Intermediate Space, between the vestibule and the Most Holy Place, confirms its main purpose which was to organise the traffic inside and, in the meantime, give more privacy for any event taking place in the Most Holy Place.

Callot believes that it was not a solid wall that made this division between the Intermediate Space and the Most Holy Place. The ruins of three pillar-like structures (piers) are located between the eastern and western buttresses; these piers with the
buttresses formed the two spaces inside the North Hall. Using curtains was possible in specific events to give more privacy to the interior space, the altar section. Considering their size, it is thought that these piers, the buttresses and the altar’s complex had also structural purposes: they may be holding something above. Callot proposed an intermediate balcony level that facilitated the movement to the terrace, on top of South Hall, and the other staircase which, in all likelihood, ran alongside the east-west partition above the Intermediate Space to the south of altar’s section and guided up to the roof of the North Hall (figure 8.15). Consequently, three main levels had probably constituted the most holy area (the North Hall); they are ground floor level which consists of the Intermediate Space and the Most Holy Place (altar’s section), the balcony level and the roof of the North Hall (figure 8.15).

Figure 8.14: Temple of Baal, Ugarit: the temple’s conditions in 1930s (Callot and Monchambert, 2011). (a) External altar. (b) The temple’s ante and corner. (c) The temple’s Most Holy Place: the northeast corner.

Figure 8.15: Temple of Baal: Proposed sections (Callot and Monchambert, 2011).

Taking the foundations footprint into account (figure 8.17), Callot proposed another level which covers the central area of the Intermediate Space and constitutes the summit of the temple, where the king or the priest gets closer to the god. This again highlights planning skills in Ugarit but much earlier, i.e. in 19th century BC, when
this temple was planned from the foundation to be a massive structure. However logical it may be, this interpretation is not supported by any other physical evidence to be considered absolute.

The discovered texts in Ugarit, those came from the House of the High Priest in particular, as well as some architectural models (Beyer, 1982; Caubet, 2009; Kyriatsoulis, 2009; Muller, 2002) found in Emar's temples and other Euphrates areas (figure 8.16) are helpful to support Callot’s interpretation of having a multi-level structure over the North Hall.

Figure 8.16: Examples of architectural models found in Emar’s temples and other Euphrates areas (Callot and Monchambert, 2011; Muller, 2002).

Two very important texts found in the House of High Priest brought very important clues about what the temple looked like during the Bronze Age period. The first is “The Legend of Keret” which describes King Keret’s sacrificing rites. The text shows that the king went to the top of the tower, sacrificed a bird (possibly), and then returned downstairs. Steps or stair flights were used in plural term in the text as Dennis Pardee (2000) confirms in his studies of the ritual texts from Ugarit. “The Palace of Baal” is the second text which includes a more detailed description of the temple’s structure at that time. The text presents the Baal’s inquiry for building his temple and a description of this temple by Kothar14, the god of profession, who conceptually built the temple for Baal. In the text, Kothar describes the temple for Baal; it is mentioned that he added three types of opening to the temple, (hln), (urbt) and (bdqt) which respectively mean a window, a barred window, and a gap (Pardee, 2000). Thus, it is clear that these windows were further improvements and did not

---

14Kothar: the god of profession. He is sometimes called Kothar-wa-Khasis which means Skilful –and-Wise. He was well known in Syria since early 3rd millennium BC, as confirmed by a discovered text in Ebla.
exist in the temple before the earthquake. This highlights an evolution in architectural concepts in Ugarit after 1250 BC.

It is well known that such texts would include much of the reality, albeit with a poetic licence; they highly correspond to the architectural models found in Emar’s temples and other Euphrates sites in Syria. The purpose of these models is not known so far; they most probably had a high religious value to be kept in safe places for a long time. The interpretation of the temple’s volume is becoming closer to certainty with every single excavation in Ugarit and surrounding sites; however, it cannot be confirmed yet if there can be an absolute one.

Construction techniques and planning experience

It has been seen how Ugaritic masons overcame the difficulties in building on the slope through erecting the foundations in a box system (see section 7.2.2). The temple’s foundations follow the same system; however, they do so on a larger scale, which in turn justifies the interpretation of the gigantic structure built on them (figure 8.17). Planning buildings from foundations was a very important aspect in Ugarit’s architecture. Consequently, Callot built his architectural interpretation of the temples based on detailed analyses of the foundations and their varying thickness and depth. He also benefited from the broad experience he got through analysing all houses in the South City (Callot, 1994).

![Figure 8.17: Temple of Baal, Ugarit. Schematic diagram for the foundations system (Callot and Monchambert, 2011).](image-url)
Walls and foundations were built following different techniques and thicknesses; however, they were perfectly linked as revealed in 1988 survey conducted by Callot. The chain between the walls and their foundations as well as the plaster remains in some parts of the building are very important indicators to restore the original ground floor level (figure 8.18, 19).

Figure 8.18: Temple of Baal, Ugarit: Section drawings from Callot’s analysis 1988-2005, which show the foundations and walls construction (Callot and Monchambert, 2011).

Figure 8.19: Temple of Baal, Ugarit: Elevation drawings from Callot’s analysis 1988-2005 which show the foundations and walls construction (Callot and Monchambert, 2011).
The 1988 analysis of the temple’s western walls pointed out that the temple’s external walls had two, interior and exterior, layers. From outside, the wall was dressed with big carved stones whereas the interior layer was built in rubble, although it is believed that the temple was plastered from inside and outside. Using lighter materials, brick for instance, in the upper storeys is possible, especially since the unearthed stones do not look sufficient for building a structure as big as the temple. Using a deductive analysis, Callot assumed that bright colours were used to enhance the temples’ visibility from a great distance. The temple was most probably plastered using the same type of plaster discovered in the Royal Palace (figure 8.20) (Galliano and Calvet, 2004, p.22-27).

Figure 8.20: Walls' plaster discovered in the Royal Palace, Ugarit (Galliano and Calvet, 2004, p.22-27)

To enhance the building’s stability, walls and their corresponding foundations were braced using big stones at the intersection points and corners. We saw (section 7.4.2: City Centre) that in Ugaritic houses, builders used these points to create a pillar-like structures (piers) which promoted the building structural performance to a higher level and allowed it to carry bigger loads and maintain its stability on the slope (figure 8.21) (Callot, 1994, p.115-147). Thus, large through stones were used to
create ties which had been designed to strengthen the wall edges, stabilise the building’s corners and achieve some aesthetical values for the building.

The Temple of Baal was the only complete and functioning large temple after the earthquake in 1250 BC; however, another temple which was attributed to the god Dagan, existed in a gigantic structure between 19th century and mid of 13th century BC. The Temple of Dagan was transformed to another form after the earthquake.

**Temple of Dagan**

**Introduction**

In the same book, Callot (2011) also presents his analysis of the Temple of Dagan. In general, this temple shows striking similarity to the Temple of Baal; this similarity was very helpful when interpreting the temple’s ruins as less evidence is found there. According to Schaeffer, this temple was also built in the late 19th or early 18th century BC (Schaeffer, 1935) and was also fortified but with less regularity and outside spatial resolution. It had been built on very thick foundations 2.2- 2.4m (figure 8.22a), but the foundation of the temple’s northern wall is exceptional for it reaches
4m thickness; Callot believes that this special thickness tells of special arrangements, as will be seen later on in the detailed reading and analysis of the temple.

Many scholars had been involved in the analysis of this building, such as George Saad 1979, Jacques-Claude Courtois 1979, Jean-Claude Margueron 1984-1997 and Olivier Callot 1988-2005. Unfortunately, this building was uncovered in 1930s but then left for almost 50 years without any substantial analysis and protection. Moreover, no photographs were taken during the excavation campaign to show the original condition of this building apart from five photos that date back to 1936, two years after the excavation works took place. The survey plan (figure 8.22a) shows the building condition between 1990 and 2005 after severe damage occurred to the discovered structure (Callot and Monchambert, 2011).

Architectural and Urban Settings

The temple’s enclosure occupies an area of 650 square meters, and encompasses the main building, two courtyards and small annex, but many remains disappeared due to 50 years of slow degradation. The main building follows the same arrangement as in the Temple of Baal; it consists of two juxtaposed rectangles. The Temple of Dagan shows less regularity in terms of space and structure, and this point would be helpful
in interpreting the building’s history and chronology. Callot identified three main structural elements in the building’s walls: wall, the foundation and the base (figure 8.23). The existence of a base cannot be recognised in the Temple of Baal, and that consequently points out the first, and crucial, difference between the two temples.

Figure 8.23: Temple of Dagan, Ugarit (Callot and Monchambert, 2011). Highlighting the building bases on (a) Callot's survey 1988-2005. (b) Foundation plan.

Although there is no evidence of the building’s entrance, and based on Schaeffer’s and his 1990s survey plans, Callot proposed an identical entrance system to the one at the Temple of Baal drawing on additional similarities between the two temples: a porch made of two antes and two timber columns between them. In the South Hall of the temple, the bases do not follow the building foundations and walls; they are irregular, creating a trapezoidal shape (figure 8.23). It is believed that this did not have any negative effects on the building character during the city’s life, considering that these bases were totally covered. This irregularity raised a substantial question as to whether these bases were related to another older structure before the temple’s construction in 19th century BC.

Apart from the very thick northern wall and the absence of the Intermediate Space, the North Hall has almost identical plan to the Temple of Baal’s. This inspired Callot to hypothesise a door between the two spaces, south and north halls, although no
physical evidence existed at the time of analysis. The altar complex with the staircase is very similar to the other temple’s; however, Callot proposed a different arrangement for the first floor, based on the thickness of the northern wall. He believes that the second flight of the staircase was embedded in the upper part of the northern wall (figure 8.24, 25). It seems a logical hypothesis when compared with the other three foundations. Since the foundations and the ground level wall were thick enough to carry the upper structure as will be seen later, there is no other structural reason to continue the building of the northern wall using the same thickness (4 m) on the first floor. It is believed that the thickness of this wall on the ground floor was a structural solution, having been located at the beginning of the slope towards the Lower City. It also provides a strong clue about the superstructure that was built over this part of the temple. For this purpose, Callot proposed an additional structure on top of the northern wall as the temple’s summit, offering protection for the staircase that is embedded in the northern wall and guides to the roof of the North Hall.

Considering this hypothesis from both a structural and aesthetic point of view, the thick foundation of this part supports this interpretation. It can be added that the sounding survey carried out by Callot in 2005 showed that the altars walls have shallow foundations compared to those of the North Hall. This reveals the fact that these walls did not continue to the first floor. Consequently, there is no other possible way to have another staircase which gives access to the top of the temple’s North Hall. Furthermore, proposing another small structure, the temple’s summit, over the northern wall is merely hypothetical and, apart from the thick foundation, no physical evidence can support it further. The striking similarity of this temple to the Temple of Baal but having a thicker foundation inspired Callot to reach this conclusion. The operation of this temple is more or less the same as the other one. After the vestibule hall, one accesses the North Hall, the Most Holy Place, which consists of the altar in the ground floor and another three holy levels, the balcony with the roof of the vestibule, the roof of the North Hall and the temple’s summit on top of the northern wall (figure 8.24, 25).
In addition to the main building, the enclosure also comprises two courtyards. In front of the building, a narrow courtyard existed; however, it is difficult to propose that it accommodated any outside activities. It is believed that the building originally had no fortifications, but the urban development of the area defined the temple’s borders afterwards. To the southeast, another spacious courtyard can be recognised. The location of this main courtyard highlights the second conceptual difference between the two temples. Some stone troughs were discovered in this courtyard in a disordered arrangement. They are bordered with foundations of light structure, altar perhaps (figure 8.26). The archaeological level of these troughs confirms that they were not corresponding to the temple’s phase.

Although the main entrance of this enclosure did not exist anymore, Callot proposed it was similar to the Temple of Baal with its two large stone jambs and wide opening.
The ruins of the small annex in the southwest corner show that this temple had secondary access through the annex too. To sum up, this temple presents aspects that are quite similar to the Temple of Baal, despite it being simpler and less regular. Its excavation also rendered fewer details and objects as if it were empty at the time of destruction. Nonetheless, this temple presents very interesting stratifications which, in physical evidence, confirms the long history of habitation at the site which can be said to date back to before 19th century BC.

Construction techniques and planning experience

Physical evidence confirms that the builders considered the building’s geometry from the beginning of the construction process. The differences in depth and width of foundations can be regarded in view of the change in received loads, which is accordingly reflected in the different sizes of the temple’s north and south halls. It interestingly shows the high level of professionality and planning experience that Ugaritic builders had in the 19th century BC. The builders successfully considered the geographical settings of the area and perfectly adapted the temple’s foundations to make the slope accommodate the massive structure, especially the northern wall, which is believed to be the highest part of the building and located at the start of the slope towards the Lower City. The thickness of this wall, which was built in high quality cut stones, was a proper solution for this critical point (figure 8.27).

Also, the foundation of the southern wall of the North Hall was built in cut and regular stones to be capable to receive loads from the structural framework of the two, south and north, halls. This furthermore adapted the building on the slope and
promoted some aesthetic aspects of the temple as parts of these foundations were exposed from the outside due to the slope (figure 8.28).

Figure 8.27: Section drawing in the Temple of Dagan showing the northern wall structure (Callot and Monchambert, 2011).

Figure 8.28: Section drawing in the Temple of Dagan showing the structure of the joint wall between the two main halls (Callot and Monchambert, 2011).

A new structure was added to the western wall of the North Hall, the so-called “glaze” which was built as an inclined wall doubling the western wall of the Most Holy Place (figure 8.29). This element does not belong to the original structure from 19th century BC; investigating the foundations of this glaze confirmed that it is totally separated from the original foundations of the temple. Since the temple of Dagan maintained its sacred function after the earthquake but was transformed to an open-air platform, this new glaze would have been added for aesthetic values in order to give a particular form to the new sacred podium, the platform-temple. It is not confirmed yet whether this glaze had any structural purposes to support the remains of the western wall of the temple’s North Hall after the earthquake.

Figure 8.29: The glaze added to the western wall of the Temple of Dagan (Callot and Monchambert, 2011).
**History and Chronology Discussion:**

The archaeological probes, conducted by Claude Schaeffer in the Acropolis area (Curtis, 1985; Marchegay, 2008; Schaeffer, 1935; Yon, 2006) and the Royal Palace (Schaeffer, 1962a), had confirmed that the history of the site dates back to 8000-6500 BC, the Neolithic period (see Chapter 2 & section 4.2.2: stratification). Many of these layers are not well preserved and the only readable structures can be assigned to the Middle and Late Bronze Age periods. The soundings carried out inside the two temples (Callot and Monchambert, 2011) revealed some associated materials and foundations that date back to the very beginning of the Middle Bronze Age. This area consequently exhibits very interesting stratigraphy and the soundings in the area encouraged archaeologists to believe that this was the start point of the city 20th century BC.

Based on the analysis of the two temples in the Acropolis, three main stages can be identified in their history. A comparison reveals the development in architectural concepts and perception of space in Ugaritic Temples’ between 19th and beginning of 12th century BC (figure 8.30). Many texts found in the city confirm that the Temple of Baal was rebuilt after the earthquake in 1250 BC; its relationship to the palace in architectural and urban terms is shown in some ritual texts (Pardee, 2000, p.219) that emphasise the existence of the sacred path that the king followed between his house “the Royal Palace” and the temple to practice cult sacrifices.

Rebuilding the other temple, the temple of Dagan, was postponed for many reasons, for instance the financial constrains proposed after the earthquake made the Royal Palace and the Temple of Baal top priorities. Additionally, Dagan ceased to be a popular god. The objects discovered in each building further confirm that the Temple of Dagan was not in use as a complete building in the last phase of the city’s history. The presence of two stelae and the stepped glaze supports the assumption of using this temple as an open platform temple after the earthquake, hoping perhaps for better financial conditions before reconstructing it again. Since it has been rebuilt, the discovered ruins of the Temple of Baal represent the Late Bronze Age phase. Apart from the foundations, it was hard to identify the Middle Bronze phase in this building, as all remains are from the Late Bronze Age.
Using the same Middle Bronze Age foundations indicates that the general layout of the building did not change that much; however, many new interventions were definitely added to the second phase. For example, the external altar and its foundations date back to the Late Bronze Age, most probably to the period that followed the earthquake. Adopting a new cult, external sacrificing, is an improvement that Ugaritic people added to their temples. The enclosure which looks more organised and regular than that of the Temple of Dagan, had been greatly improved in response to the new external altar. A new big courtyard was added in front of the temple with the possible aim of accommodating outdoor ceremonies. This courtyard, with the southeast annex (perhaps, for cooking services), is a very special architectural evolution compared to the one in the Temple of Dagan.

The visual architectural reconstruction, done by Callot, shows the heaviness of these temples’ structures. Although he managed to collect all possible written and physical evidence to confirm his interpretation, Callot could not verify the exact architectural character of the building and other relevant architectural details; however, he was right about the conceptual massive volume of these temples.
Archaeological surveys and soundings, conducted by Schaeffer in the Temple of Dagan, brought to light another (Early Bronze Age or Middle Bronze Age II) layer of compacted white soil which dates back to before the construction date of the temple. The presence of the stone troughs (figure 8.26), which are not related to the same phase of the temple, in the southeast courtyard further confirms the existence of another cultic facilities or buildings before the construction of the temple in 19th century BC. J-C Courtois had assigned those troughs for a libation and ablution function. However, Marguerite Yon, on the other hand, proposed that these blocks would have functioned as bases for stelae which served outside rituals in the place during Early Bronze Age and the beginning of Middle Bronze Age periods. Yon established a comparison with similar troughs existing in Temple of Resheph (the Temple Obelisks) in Byblos, Lebanon (figure 8.31) to support her interpretation.

Figure 8.31: Temple of Resheph (the Temple Obelisks), Byblos, Lebanon (Callot and Monchambert, 2011).

Parts of the foundations of the quadrangular wall enclosure (figure 8.26), which surrounds these troughs, are still preserved giving the impression that the troughs agglomeration served as an altar or a place for outdoor cult. Consequently, the idea of the external altar already existed in Ugarit long before the construction of the two temples, but it became more central and started to be used for sacrificing rituals in the later phases. The temple’s bases (see section 8.3.1: Temple of Dagan) constitute another evidence for the existence of another structure before the temple was built. Keeping the foundations of the earlier buildings’ in order for them to be used in later structures is a strong assumption, which takes into consideration that this approach was commonly used during the Bronze Age period; the Temple of Kition in Cyprus is another example. This further confirms the long history of habitation in the City of
Ugarit. The layer above these bases contains mainly the foundations of the temple of Dagan and, apart from the glaze, all ruins in this layer date back to the Middle Bronze Age period, the 19th or beginning of 18th century BC.

It is clear that the glaze is an added part to the original structure; its shallow foundations confirm that it did not have any structural purpose. It, most probably, was a decorative element that related to the Late Bronze Age phase of the temple. Regarding the very fragile condition of this temple, nothing is preserved above the foundation level. Transferring the temple into an open sacred platform after the earthquake justifies the deteriorated condition and the missing part of the temple’s original walls and artefacts. It is assumed that, after the earthquake, a layer of compact soil and rubble were added on the temple’s ruins to achieve this transformation and create the temple’s podium. This layer was taken off by Schaeffer’s intensive excavation in 1934.

The popular deities in Ugarit, Dagan and Baal, who was mentioned as the son of Dagan sometimes, are strongly represented in the city’s fabric. However, excavation works have not yet revealed any temples for other popular deities such as El, Anat, Mot, and Kothar (only 30% of the city is excavated thus far, though). The history and stratification of these temples demonstrate the changes in the popularity of these two gods between the Middle and Late Bronze Age. The temples also express interesting architectural, urban and cultural aspects in Ugarit. Having these two superstructures on the top of the Tell, the highest point of the city, characterised the urban morphology and constituted navigating points for citizens and surrounding suburbs.

**The rituals and architecture in the temples**

The city’s temples are those structures most associated with the people and city’s rituals. Therefore, this section will present my interpretation of how rituals might have influenced the design approaches of the two main temples of the city, similar to what has been discussed in the Royal Area (see section 6.2.3).

One of the Canaanites beliefs was that their gods existed in a very sacred and wild environment. For example, it was believed that Baal, the god of thunderstorms, fertility and agriculture, inhabited the Mount Saphon, a mountain to the north that
dominates Ugarit’s landscape. Therefore, the king’s sacrificing cults in the temples required approaching high and sacred parts of the building where human intervention is kept to a minimum: only the king and the priest were allowed to approach such places. This was confirmed in the ritual text found in the House of the High Priest “The Legend of Keret” which describes one of the sacrificing cults that the king used to carry out in the main temples. The text indicates that the king or the priest sought to approach the highest and the most sacred place of the temple; the aim was, I believe, to be in a place where they can be immaculate and close to the god.

Reviewing the structure of the two main temples, it is clear that this belief strongly influenced the temples’ architectural principles and the way Ugaritic people arranged the two superstructures at the Acropolis. Ugaritic people, in a manner different from that of other surrounding cultures, intended to construct their temples in order to fulfil their beliefs; consequently, the Acropolis temples had a new form, manifest in the tower temples, that allowed easy and sufficient practice of the cult. Also, fulfilling the practice requirement became a priority for Ugaritic people and as a result the temples had been freed from following the cardinal directions, which was strictly followed by the surrounding cultures. The analysis of Ugaritic tombs (see section 7.3.3) also confirms the fact that Ugaritic people prioritised better performance of their structures and invented new architectural rules which fulfil their religious, cultural and functional attitudes rather than merely following inherited principles and rules that were popular in the area. This, I believe, makes it difficult to only use an approach that compares between Ugarit and other surrounding cultures in order to investigate certain Ugaritic aspects, especially the city’s architecture. Any comparative study should be supported with other pieces of evidence from the discovered material culture and text in the city.

The ritual aspects (e.g. seeking the very sacred spaces for practicing the rituals) also affected the arrangement of the sacred spaces in the temples’ ground floor. Although the whole temple was considered to be a sacred building, its spaces were constructed in gradual sacredness from the open courtyard outside to the deepest point of the temples, the internal altar section (Figure 8.30). This concept of gradual privacy became a dominant principle in Ugaritic architecture (see section 6.2.2 and 7.3.2).
The ritual texts found in the palace, the temples and the House of the High Priest show that Ugaritic people did not only sacrifice a bird, as “The Legend of Keret” tells; they also had big sacrifices, such as rams, sheep and cows, which cannot be sacrificed on top of the temple’s tower. Ugaritic cults also involved ceremonies and food preparation for the god. Therefore, specific architectural arrangements were put in place in order to respond to the functional requirements of these cults. This is clearly manifested in the Temple of Baal which was reconstructed after the 1250 BC earthquake. An external altar was introduced to Ugaritic temples architecture and a spacious courtyard was arranged around the new altar to accommodate the public ceremonies. Cooking facilities, most probably the southeast annex of the Temple of Baal (see section 8.3.1), was introduced to the temple structure too.

What is known about Bronze Age cultures is that their life and principles, including their architecture, were inspired by their rituals and beliefs. However, in Ugarit, this aspect has not been studied in depth through the analysis of the city archaeology and literature. Also, since 30% of the site has been discovered thus far and only few ritual texts have been found and translated, more materials and texts are still to be uncovered by future excavation, which would promote the interest in investigating the rituals of Ugaritic people and their effects on their social, spatial, architectural and urban principles.

**Cultural values of the symbolic temples**

In summary, the values of these two symbolic temples are as follows:

1. Massive volume that represents their significance for the city’s urban life and its people;
2. Very interesting stratigraphy in the Temple of Dagan along three stages of the site’s history;
3. Their careful designs show the architectural planning experience and skills that Ugaritic people had in considering all building’s aspects from the very first stage of construction. Technical capabilities are strongly represented in the two temples;
4. The temples’ urban settings reflect a strong relationship between their respective enclosures and the surrounding domestic fabric of the city. This
strongly highlights the importance of these two temples for the city structure and its people from different social classes;

5. Architectural analysis shows an interesting horizontal and vertical hierarchy of sacred spaces, starting with the courtyards and ending with the temple’s summit.

### 8.3.2 The local sanctuaries in Ugarit

In addition to the two big temples, the City of Ugarit comprises other local sanctuaries that facilitated everyday religious and social activities. This type of religious buildings has the notion of Late Bronze Age religious architecture in Syria, whereas the other big temples (Baal and Dagan) show Middle Bronze Age concepts. Having local sanctuaries in the city became a common trend during the Late Bronze Age, which reflects the community’s demand for smaller scale religious and cultural centres that could be distributed in all areas to facilitate everyday rites and social events. It is understandable especially as the main temples were enclosed with walls and not available at any time or for all activities. Consequently, such local religious centres became of a great significance.

---

**Figure 8.32: Schematic plan showing the location and some details of block VIII, South City, Ugarit.**
In Ugarit, three local sanctuaries have been uncovered so far, although it is strongly believed that there will be more via future excavation and analysis (Yon, 1984). The excavated part of block VIII in the South City shows that this building was of special use (Callot, 1994). It is most probably not a house; it is fitted with a portico entrance that guides to a hall, which highlights its special function (figure 8.32). This building, consequently, could have served a social purpose, perhaps as a local sanctuary, considering that no local sanctuary has yet been identified in this area. This building directly looks over the Public Plaza, which subsequently promotes its public nature.

The three discovered local sanctuaries are varied in terms of regularity and construction quality. They are the Sanctuary of Rhytons at the City Centre (figure 8.5a), the New Sanctuary at the Old Royal Zone (figure 8.5b) and the Royal Sanctuary at the New Royal Zone (figure 8.5c).

**The Sanctuary of Rhytons**

The Sanctuary of Rhytons at the City Centre is considered the oldest so far; it was under intensive excavation and research works between 1978 and 1984 under the direction of Marguerite Yon (Yon *et al.*, 1987; Mallet, 1987). The archaeological analyses identified two main layers in the building (Mallet, 1987), which date back to the Late Bronze Age period (figure 8.33) (Yon, 1994). Joël Mallet and Marguerite Yon had this conclusion after conducting two archaeological soundings: one in the main hall (space 36) and the other in the residential annex (space 52 and 77) (figure 8.33a). The stratigraphic analysis of the building revealed that the building was developed between 14\textsuperscript{th} and early 12\textsuperscript{th} century BC.
The building’s complex of the last phase consists of three main units, strongly attached to each other. They are the main sanctuary hall with its annex, the eastern residential unit and southwest unit which is not fully excavated yet to identify its use (figure 8.34a). Callot and Yon believe that the oil press to the north (figure 8.34b) is an industrial facility that belongs to this complex for financial support (Callot, 1987; Yon, 1984; Yon, 1994).

The whole complex is corresponding to the east-west Street 35 which runs through the excavated part of the City Centre dividing it into two blocks. This building is considered exceptional, firstly for its access from the street, which is totally different from all surrounding houses. It has a portico (space 46) which was most probably
equipped with two timber columns, as commonly used in Ugarit, probably roofed. Secondly, in addition to the portico, the temple has an indirect access which consists of two doors, using a U-shape turn in space 45 (figure 8.35a). This access system is not found in any other houses. Finally, the central hall’s (space 36) location, size and relationship to surrounding fabric strongly points out a special use of this building.

The use of the building had always been for cultic and social purposes; the study of its stratification and discovered elements in the main hall confirmed that. Very interesting arrangement of stepped altar and two sets of stone (37 and 88 benches maybe) were found in the central hall (space 36) (figure 8.35a, b). It is also believed that the stone benches were possibly used to hold a timber platform above, which accommodated specific offerings and statues. However, no physical evidence can support this assumption; Callot noted that stone set 88 is located 1 meter from the western wall (figure 8.35a) and that was most probably meant to hold a timber platform and its supporting columns (Mallet, 1987; Yon, 1994).

Figure 8.35: Sanctuary of Rhytons, City Centre. (a) Plan. (b) The ruins condition in 1981 (Mallet, 1987).

A set of small rooms (47, 65, 49, and 66) are attached to the main hall; they were most probably serving as annex and offerings’ storage, as Jacques-Claude Courtois assumed after he compared it with the Temple of the Ingot god at Enkomi, Cyprus (figure 8.36) (Courtois, 1973; Yon, 2009; Kyriatsoulis, 2009). Many reports about
the Sanctuary of Rhytons had shown that only space (47) is opened to the main hall. On the other hand, Marguerite Yon proposed that the other three spaces (65, 49, and 66) were opened to street 35 and served as a public sanitary. She justified that by the presence of water ducts and drainage in these spaces. Yet, there is no identified access into these spaces from either the street to the north or space 52 to the south. On the other hand, the analysis carried out by Joël Mallet 1987 confirmed that space 65 is accessed from space 47, and identified the door’s threshold and jambs between these two spaces. Subsequently, the most possible interpretation is that these rooms had functioned with space 47 as the main annex for the sanctuary; they may as well have accommodated other functions which needed water facilities (e.g. cooking).

![Figure 8.36: (a) Sanctuary of Rhytons, Ugarit. (b) Temple of the Ingot god at Enkomi, Cyprus (Yon, 2009).](image)

The presence of the stepped altar (figure 8.35b) that centralises the eastern wall confirms the religious function of this hall. The analysis of this altar showed that it consists of 4 steps; only three of them were seen in the last phase of the building, as the ground level had been raised up by the reconstruction works after 1250 BC (the earthquake). The last step has a better quality and regularity compared to the other three steps. On this stone, the deity’s stele or statue was most probably placed.

The eastern residential unit is well attached to the main hall and also has its own access from Street 120 to the east. This unit was probably used to support the sanctuary’s functions, that is when big social or cultic events took place. The courtyard and the two rooms to the east (space 79, 80 & 81) (figure 8.35a)
constituted the alternative reception area for people to access while another cultic event was taking place in the main hall of the sanctuary. In the meantime, the western part of this unit (space 52, 77 & 78) and the first floor (if existed) provided residence for the keepers. The northern industrial unit was used by those people for financial purposes. The direct relationship with the sanctuary’s entrance, its structure as a separated unit as well as being built with the second phase of the building after 1250 BC confirm that this industrial unit was another architectural and economic development in the complex. Hence, this local sanctuary was not an autonomous unit within its fabric. It established strong relationships with the surrounding architectural fabric as well as with people’s social and economic life. These aspects were further developed in the newly-built local sanctuary in the city, the New Sanctuary at the Old Royal Zone, where people had more freedom to present their new principles.

**The New Sanctuary**

This New Sanctuary was excavated in 1937-1950 with the Royal Palace (Schaeffer, 1951), and in 1970 with the North Palace (Callot, 2013a; Matoïan and Al-Maqdissi, 2013; Pirenne *et al.*, 1970). The analysis of this building has contributed significantly to the understanding of architectural, urban, cultural and historical aspects of the city, firstly through the analysis by Olivier Callot, where he could better date the earthquake of the 13th century BC (Callot, 1986a; Mallet, 1987).

![Architectural plan of the New Sanctuary, Old Royal Zone.](image)

*Figure 8.37: Architectural plan of the New Sanctuary, Old Royal Zone.*

This building also shows an interesting stratification with the North Palace which presents much about the development of the city and people’s attitudes (see section
6.2.2). The New Sanctuary can be divided into three main sections, the residential unit, the main hall, and the new annex to the east (figure 8.37). The presence of the main hall encouraged the French scholars to think about its special use as a place of worship. Olivier Callot in 1990s and Marguerite Yon in 1997 assigned a religious function to this building (Yon, 1997; 2006); the two scholars supported their interpretation with further architectural and archaeological evidence (Callot, 2013a).

In this building and through an intensive analysis, the remains show horizontal and vertical evolutionary aspects which highlight the building’s historical phases. The foundations of the western part date back to 16th or 15th century BC (Saadé, 1979); however, the upper part is represented by the walls of new residential unit (spaces 1-7), which was built after the earthquake in 1250 BC on top of the old phase’s foundations following similar arrangement (figure 8.38).

A new structure was added to the east, which included the main hall and the annex with a staircase (space 8&9). The difference in foundation level between eastern and western parts is clearly seen at the main entrance B from the Palace Street (figure 8.39), whose jambs are clearly based on different foundations from an earlier period.

The third part is the new annex, the staircase and the eastern access C (spaces 10-13) (figure 8.37). Archaeological excavation released some evidence, for instance the ramp at the eastern access C, the unfinished staircase, the absence of the roof remains, and the slight effect of the fire compared to the residential unit, owing to the absence of the timber rafters and reeds for roof construction. These findings encouraged Callot to think that this part was under construction when the final destruction of the city took place in 1185 BC.

Similar to the Sanctuary of Rhytons, the main hall (space 8&9) constitutes the heart of this building, and has strong relationships with other subsidiaries, but with much better regularity and constructional quality. The organisation of this hall led to assigning cultic function to this building. The traces of the altar’s foundations and the annex room behind, which includes a staircase, clearly point out a special character. Also, the presence of the wall which divided rooms 8/9 and functioned as a screen wall behind the altar enhanced the appreciation of the building’s worshiping
function. These results correspond to broader studies by Jean-Claude Margueron on Syrian temples and sanctuaries (Margueron, 1985; 1991).

Figure 8.38: New Sanctuary, Old Royal Zone: The ruins conditions in May 2013.

Figure 8.39: New Sanctuary, Old Royal Zone: The ruins of the entrance B and the main hall, May 2013.
Furthermore, as the prestigious and expensive basalt seat and trough (Schaeffer, 1972) were found in the residential unit, they indicate the high importance of this building for Ugaritic people’s cultic and social life. They are very well made and still exist on the site (figure 8.40).

Figure 8.40: The presence of the basalt seat and trough in the residential unit, May 2013.

The main hall is constructed using big regular stones to the outside-facing layer, most probably brought from the destroyed North Palace, whereas the interior layer was built with regular rubble (figure 8.41).

Figure 8.41: The composition of external walls of the main hall, May 2013.

The eastern part’s staircase and annex (spaces 10-13) are considered additional improvements to the building in its last years. They were built over the ruins of the southwest corner of the North Palace. The eastern wall of the main hall was built on the foundations of the western wall of the North Palace too (figure 8.42). Many scholars have discussed this unique building (Callot, 2013b; Ray, 2009a) which was
never rebuilt after the earthquake 1250 BC; rather, its stones and parts of its land were used in neighbouring buildings, such as the New Sanctuary (see section 6.2.2). The eastern part of the sanctuary was under construction but never finished due to the final destruction of the city in 1185 BC. This subsequently presents a very interesting stratification in this building which overlaps with the foundations of the North Palace. Consequently, Ugaritic people kept developing their city until the last days before the destruction in 1185 BC.

Figure 8.42: Architectural plan of the overlapping between the New Sanctuary and the North Palace. Olivier Callot proposed that the inhabitants remained in the city after the destruction (or some external tribes who arrived to the site after 1185 BC) rearranged the ruins to create their own sanctuary which was an essential (Callot, 2013a); however, he had little supporting physical evidence. Callot based his interpretation on limited analysis that he carried out in the Residential Quarter, where he proposed that some buildings had been rearranged and used after the final destruction of the city (Callot, 2008).
The Royal Sanctuary

It is the third local sanctuary in the city and located in the New Royal Zone. French scholars mentioned it in their reports as the Hurrian Temples drawing on the two golden statues discovered in the temple which were possibly related to Hurrian deities. In some reports, it is referred to as “the temple with the Mitannian axe”, an iron axe with gold and copper handle that was discovered in the building. The form of this sanctuary follows the main concepts of the temples on the Acropolis, but on a much smaller scale. The sanctuary consists of two main rooms, vestibule and the back hall, in which a staircase guides to the upper level (figure 8.43). The archaeological mission did not analyse this building in similar detail to other sanctuaries and temples, so discussion here is based on the author’s observation and analysis which took place in May 2013.

Figure 8.43: Royal Sanctuary, New Royal Zone: Architectural plan and ruins conditions in May 2013

This building was dedicated to ritual ceremonies which took place in the Royal Area. Its small size prevented any banquet, which supposedly followed the rituals as an integrated part of the cult, from taking place. Therefore, through the development of the Royal Area during the 13th century BC, a new big feasting and ceremony hall, the Pillared Building, was built next to the sanctuary. Consequently, the rituals took place in the Royal Sanctuary, whereas the Pillared Building accommodated relevant ceremonies and banquets. The sanctuary’s footprint does not follow the symmetric concept of the big temples of the Acropolis. Its main entrance occupies the southeast
corner of the vestibule. This is different from the Acropolis temples whose entrance marks the front façade and is flanked with two antes creating a portico access.

**Discussion**

It is very important now to extract the main characteristics of the architecture, function and cultural dimensions of local sanctuaries in Ugarit. Comparing the Sanctuary of Rhytons and the New Sanctuary shows that the main hall is the dominant space that states the religious function of the complex. Also, the organisation of this hall and the traces of a podium, which in most cases centralises its assigned wall, state the public worshiping and social function of the building, especially as there is no similar arrangement in the analysed houses in all residential areas of the city. Both sanctuaries are well integrated and communicating with the surrounding fabric. The Sanctuary of Rhytons was already in existence before 1250 BC; however, only the residential unit of the New Sanctuary existed. Callot believes that the main hall was planned to be built next to the North Palace, but the construction works had not started before the earthquake in 1250 BC (Callot, 2013a). Subsequently, the destruction of the North Palace by the earthquake was a better opportunity to re-plan and construct a proper sanctuary which represents the new Late Bronze Age architectural principles. Therefore, the detailed study of the two sanctuaries exposes a set of evolutionary aspects (figure 8.44). It is believed that the Sanctuary of Rhytons (figure 8.44a) represents the before-earthquake form, while the New Sanctuary (figure 8.44b) is a very good example of evolution after the destructive earthquake in 1250 BC.

It has been seen before that the Temple of Baal was completely rebuilt after the earthquake with better organisation and architectural aspects, despite its use of the same Middle Bronze Age foundations. The resulting new arrangements were applied in local sanctuaries too. The main hall of the New Sanctuary is similar to the Most Holy Place of the Temple of Baal. A screen wall with a hidden staircase behind had been installed; they created an annex space which was accessed via two doors symmetrically located on either side of the altar. Also, the New Sanctuary and the Sanctuary of Rhytons show similar arrangements but with great improvement in the relationship between the main hall and its subsidiaries for the former (figure 8.44).
Accessing the main sacred hall in the New Sanctuary followed a different system. A small vestibule is inserted between the hall and its residential unit. This vestibule gives a direct access to either part. Consequently, the residential unit was not directly accessed from the main hall, similarly to the one at the Sanctuary of Rhytons. Also, another access had been facilitated to the main hall of New Sanctuary; it is located in the eastern part of the sanctuary, which supposedly is the latest development of the building. It is believed that this access was established to communicate with the external courtyard which was supposed to occupy the southern part of the North Palace and accommodate outside ceremonies (figure 8.42, 44).

The analysis of the New Sanctuary shows that Ugaritic people tried to achieve better privacy for the events taking place in the main hall. The new development which was added to the east of the main hall (access with corridor, staircase and annex space) displays further evolution to the hall’s arrangement as well as to the whole complex. The staircase (space 10) had been planned to create another level (balcony level) within the space of the main hall, mimicking thereby the main hall of the Temple of Baal. Also, the proposed courtyard to the east further confirms Ugaritic people’s intention to have open, but private, space for outside cults. To sum up, it is worth mentioning that the New Sanctuary presents great developments in Ugaritic religious architecture. It gives enough clues about people being willing to inspire the design of their local sanctuaries by principles from the main temples on the Acropolis with much improved regularity, strategy and constructional quality.
The Royal Sanctuary, on the other hand, presents a new arrangement. Since it belonged to the Royal Palace, it did not have an attached residential unit. Instead, a ceremonial monument, the Pillared Building, was constructed next to this temple and that clearly shows its importance especially during the period when the Temple of Baal was still unreconstructed.

The reconstruction of the temple of Baal took a long time after the earthquake. The correspondence letters between the king of Ugarit and the Egyptians confirms that this temple had not been immediately reconstructed and finished after the earthquake. Ugaritic people had to wait until the Egyptian king accepted to offer materials for the reconstruction works and interior finishing. Also, “the Palace of Baal” mythology clearly shows that Baal had been without a temple (house) for a long time, and that made him complain to his sister Anat about not having a house. Anat then threatened El asking for permission to allow Baal to have a new house (temple) which had been conceptually built by Kothar, the god of profession.

Therefore, the Royal Sanctuary and its ceremonial hall were definitely involved in big and cultic events. These two buildings, which are considered the latest
developments in the New Royal Zone (see section 6.2.2), had improved the social and religious functions at the Royal Palace\textsuperscript{16} and, simultaneously, conferred better architectural and urban reading of the Royal Area\textsuperscript{17} (figure 8.45). The architectural quality of these buildings represents the advanced architectural concepts and building technology used in Ugarit during its last phase in the 13\textsuperscript{th} and early 12\textsuperscript{th} century BC. The complex of the Royal Sanctuary is characterised differently from other sanctuaries in the city. The religious spaces were totally separated from other supporting facilities, and that gave more privacy to the events that took place inside. On the other hand, the Pillared Building and the New Royal Plaza can respectively match the vestibule and the courtyard in the big temples. Consequently, the principles of the main temples and local sanctuaries are represented in the Royal Area too, albeit in a new disassembled form.

**The cultural values of the local sanctuaries**

The main values of these local sanctuaries can be summarised as follows:

1. The presence of the main sacred hall is a very strong indicator to the presence of these sanctuaries within the city fabric;
2. The evolution in architectural concepts and the sanctuary’s organisation strategy (relationship between the main hall and its annexes);
3. The developments between the two sanctuaries (Sanctuary of Rhytons and the New Sanctuary) present the Ugaritic builders’ experience in developing new architectural principles and how they creatively and successfully employed aspects from the big temples in smaller sanctuaries;
4. The New Sanctuary, especially in its eastern part, gives substantial experience about the settings of construction site during the Late Bronze Age;
5. The Royal Sanctuary also represents a combination of principles from the Acropolis temples and local sanctuaries but in a different form, and that further emphasises Ugaritic people’s skills in combining architectural aspects and expressing them in various forms and spatial resolutions.

\textsuperscript{16} While the Temple of Baal was not functioning, The Royal Sanctuary and Pillared Building were very important to accommodate the big cultic, ritual or social events, in which the king was involved.

\textsuperscript{17} These two buildings enhanced the reading of the New Royal Zone at an urban level. They constituted the northern side of this area, and consequently formed a proper urban element, the New Royal Plaza, within the royal enclosure.
8.4 Conservation proposal for Ugaritic religious architecture

Religious buildings in Ugarit are associated with specific values in terms of their presence, form, architectural principles and building techniques, which are strongly linked to Ugaritic society’s thoughts and beliefs. These architectural features resulted from involving novel concepts or developing old aspects into new forms. The conservation principles and chosen interventions should consider the very important authentic fabric, but at the same time incorporate it into the conservation strategy and conceptual interventions, taking into account the valuable information it reveals.

8.4.1 Acropolis area: The main temples

The two temples on the Acropolis manifest various valuable technical, architectural, urban and cultural aspects. The analysis of these temples used the striking similarities between them to appreciate their settings. Thus, the conservation proposal for the Acropolis temples will benefit from this strategy in enhancing the visitors’ experience and understanding. Since the two temples deliver a number of similar aspects, it would be overwhelming to present them in both buildings. Therefore, the conservation proposal will highlight specific aspects in one of them with reference to their existence in the other, and vice versa.

The Temple of Dagan presents very interesting stratigraphy that brings the site back to the beginning of Middle Bronze Age (or Early Bronze Age) period for the first time. The troughs found with the layer of white compacted soil are most probably related to a cultic facility that existed previously, in 19th century BC. The bases of this temple could also be considered to belong to the same period; however, what is confirmed so far is that they are actually related to a structure that preceded the temple. Building up the available stones and taking back the temple’s footprint are the best procedures to start with. The differentiation between phases in the building is an essential aspect to follow in order to highlight its important stratigraphy; this approach has successfully been employed in the Crypta Balbi museum (see section 5.2.1). For this purpose, a musealising route will be installed to guide the visitors through; this route will follow the historic development of the architectural complex starting with Early Bronze Age (perhaps, the beginning of the Middle Bronze Age). Therefore, the route will start with gate of the Middle Bronze Age enclosure which
highlights the first direct connection with its assigned street. Then, the route will head east towards the southeast courtyard where the first layer of this building existed. The route will wind around the quadrilateral shape foundations which flanked the troughs agglomerations (figure 8.46).

![Figure 8.46: Detailed plan for the conservation proposal of the Temple of Dagan.](image)

This area probably functioned as an outside altar which had stelae fixed on the troughs; the Temple Obelisks in Byblos, Lebanon, can be a good example. These foundations are not found complete in place; therefore, their missing parts will be completed to produce the expected footprint of this outdoor facility, using reversible and recognised materials (figure 8.47). Completing the foundations with different material will enable better differentiation from the original parts and, at the same time, indicate the hypothetical nature of this reconstruction. The troughs will be tidied up in the same discovered arrangement; other dispersed troughs will be returned into their original agglomeration within the quadrilateral shape area. Since there is another interpretation of these troughs, their conservation proposal will emphasise them as stelae bases, and replicas of these stelae will be installed in the area, with reference to the known example, the Temple Obelisks in Byblos, Lebanon.
(figure 8.47b). Using reversible materials for the interventions is a key concept, emphasising the uncertainties and taking into account new information would be revealed. For that, Replicas and the new added foundations will be made of rammed earth which is easy to remove, does not affect the fabric as it is a natural material, and allows appropriate differentiation, given that the whole city had been built in stone. At the same time, this material has a good resistance to weather conditions.

Figure 8.47: Virtual reconstruction of the conservation proposal for the southeast courtyard in the Temple of Dagan.

Thereafter, the route will lead to the main building of the temple where another two stratifications exist, the before and after-earthquake phases. The before-earthquake phase is represented by the 19th century BC remains, while the second phase is gone now because of the excavation works. It is believed that the temple during this phase was an open platform with no structures above it. The building’s ruins were covered with compact soils to create the new open podium whereas the altar, where the deity statue or stele is placed, was in all likelihood kept in the same place; the Dagan’s stele was discovered in the building, which indicates that the building was still in use during the last days of the city’s life.

For that, the proposal will focus on presenting two important aspects: the overlapping between the two phases as well as the gigantic volume of the first phase of the temple. The reconstruction of original footprint of the 19th century BC temple will be carried out with partial anastylosis, re-using the original stones available on the specific walls to avoid any falsification. The stones will be rebuilt using the traditional lime and soil mortar. This procedure will reconstruct the first phase of the building. Then, the original level of the second phase platform will be reconstructed with an irregular steel mesh that enables the musealisation of the ruins underneath.
The steel mesh will be detailed in order to complete the walls and to meet the inclination of the glaze (figure 8.48), but raised using intermediate supports that are located in empty spaces inside the temple to eliminate any interaction with or further loads onto the original fabric. Furthermore, these supports should not in any way confuse the reading of the original ruins beneath the mesh. This needs a very detailed investigation in order to avoid interference with the temple’s original bases.

Figure 8.48: Virtual reconstruction of the conservation proposal for the temple's ruins.

The altar place will be highlighted on the mesh by installing a replica of the stele of Dagan in the same vertical position of the original one (figure 8.49a). Since this temple will not be reconstructed, some architectural features, for instance the location and staircases that guided to other levels of the Most Holy Place above, will
be highlighted on the steel mesh using regular frames which present the footprint of the staircases (figure 8.49a, b). This will give the visitors a glimpse of the arrangement of the first phase of the building; however, the complete arrangement will be reconstructed in the other temple, the Temple of Baal. Applying this concept has been chosen due to the very little evidence that this temple shows. This interpretation was mostly based on the striking similarities between this temple and the Temple of Baal. For that, the arrangement in the Temple of Dagan will be rather conceptually highlighted to insist on the vagueness in the available archaeological evidence.

Figure 8.49: The installed mesh on the temple's ruins, highlighting specific arrangements of the first phase.

The installed route will continue over the ruins at the same level of the steel mesh to facilitate better musealisation of the ruins of the first phase, and create for the visitors an architectural experience of the last phase of this temple. The route will use the mesh structure for support; it is designed to follow the original hypothetical arrangement inside the ground floor of Middle Bronze Age temple (main entrance, vestibule, and the Most Holy Place) (figure 8.48, 49, 50). For that purpose, three timber platforms will be formed as part of this route to highlight the vestibule area as well as the altar platform inside the Most Holy Place. The route and its platforms will be made of oak which is closely related to the site and its history.

A timber staircase will be installed to let people go up to the level of the installed steel mesh, starting with the ruins of the South Hall, the vestibule. Unfortunately, there is no evidence that would confirm how people approached the last phase platform. Therefore, the staircase will be installed as part of the musealisation route with respect to the building fabric and original access of the temple (figure 8.50).
Figure 8.50: Virtual reconstruction of the proposed route above the ruins of the temple.

The route on the mesh will be flanked with steel and glass balustrade for visitors’ protection. The way downstairs will be through another staircase which will guide the visitors to the temple’s annex whose footprint will be restored using the original stones (figure 8.50). Through this annex, the proposed route will highlight the other exit of the temple’s enclosure giving the final experience to the visitors and guiding them to the indirect link between the temple’s complex and its assigned street.

As to the volume of this temple, which is similar to that of the Temple of Baal, it has a high architectural and constructional significance that must be highlighted. As seen in the analysis (see section 8.3.1), this building had provided less evidence and the primary contribution of its conservation proposal is to show its stratigraphy. Therefore, to avoid overwhelming the presented stratifications, the reflection of this building’s volume will be light and conceptual, using a subtle framed steel structure to show the overall massive volume without overwhelming details (figure 8.51, 52). This approach successfully reflected the volume of some architectural elements in the Roman ruins of Can Tacó and Iesso (see section 5.5.6).

This concept helps to maintain the visitors’ concentration on the building stratigraphy and enhance their perception of the final state of this temple which does not involve its gigantic volume. Comparing this proposal to that for the neighbouring temple, the Temple of Baal which put more emphasis on the volume, will further promote the visitors’ understanding of the additions’ vocabulary. The supports of the framed steel structure will be installed outside the temple borders to avoid causing damage to the original foundations (figure 8.52).
As for the Temple of Baal, the conservation proposal will be different, taking into account that it was difficult to recognise any of the pre-earthquake phases. The ruins of the enclosure give better evidence regarding the final state of this building after

Figure 8.51: Virtual reconstruction of the conservation proposal for the temple’s volume.

Figure 8.52: Virtual reconstruction of the complete conservation proposal for the Temple of Dagan.

Chapter 8 The Conservation of Religious Architecture in Ugarit
the earthquake of 1250 BC than the Temple of Dagan. Also, the importance of this temple for the city was stronger, especially in the last phase. This consequently should be highlighted on an architectural and urban scale. The conservation proposal will provide the visitors with a better experience concerning the architecture of Bronze Age Ugaritic temples. The first procedure is to preserve and consolidate the remains of the temple and its enclosure using the available stones and historic records and analyses. Excavation and analysis works at the building produced a considerable amount of information and photos that would be helpful in restoring the scattered stones into their original positions. The Temple of Baal is, anyway, a better preserved structure than the Temple of Dagan. Restored walls will be waterproofed with a layer of lime mortar (see section 6.3.2: General aspects).

Concerning the relationships with the surrounding fabric, the enclosure’s walls will be reconstructed to a height of 2.5 m to restore the enclosure’s urban settings and highlight its impermeability to the outside. The reconstruction will use different material, Oak timber for instance, and be self-supported; timber studs will be based away from the original foundations on pre-cast concrete pads (figure 8.53, 54, 55).

Figure 8.53: The Temple of Baal, virtual reconstruction of the proposal for the temple’s enclosure.
Figure 8.54: Architectural plan of the conservation proposal for the Temple of Baal.

Figure 8.55: Possible detail drawings for the enclosure’s posts and bases.
The enclosure’s western monumental gate, with its corresponding Library Street, sheds light on the relationship between the Temple of Baal and the Royal Palace. This aspect will be explained in more details in the urban conservation proposal of the city in Chapter 9; however, in this chapter it will be sufficient to work on the enclosure’s architectural elements and corresponding streets. The western gate will be reconstructed to represent its monumental character. Rammed earth blocks will be added on top of the available stone jambs of the gate in order to reconstruct the gate’s proportions and represent its heaviness. These blocks, with the reconstructed walls of the enclosures, will keep the temple’s courtyards invisible from the outside, reflecting its original privacy. Like the proposal of the funeral department entrance in Ugaritic houses (see section 7.4.1: Funeral architecture), a timber door will be installed to mark the sacred and private spaces behind. The door design will be more abstract than the one for the tomb’s area, which would help to avoid any misleading interpretation regarding the specific design of the door. Timber panels will be used as door studs and a self-supported steel framework will be added to flank the jambs of this gate and create the skeleton (figure 8.56). There is no evidence concerning the original height of the gate or the enclosure’s walls. Therefore, the gate and the walls’ proposals will emphasise the undefined and open-ended edge of the reconstructions. The lintel of the monumental gate will not be installed in order to dissolve any wrong interpretation by the visitors regarding the gate’s original height.

Figure 8.56: Virtual reconstruction of the conservation proposal for the main gate of the temple’s enclosure.

The two north-south streets that align the western and eastern walls of the enclosure will be restored to highlight the connections between the Acropolis and the Lower City. The comprehensive urban proposal will be discussed in more details in Chapter
9. In summary, the western street that is heading north toward the Lower City will be cleared and any available steps will be restored. Since approaching the Lower City is done through a very steep route and many stone steps are missing because of the erosion, a timber stairway with handrails will be installed in vacant parts of the street in order to reconstruct the original connections (figure 8.54, 57).

Figure 8.57: The reconstruction proposal for the western street that connects the temple to the Lower City.

To the east of the temple and owing to the excavation of the Middle Bronze Age necropolis, Schaeffer went down well beyond the original level and, therefore, the street is not recognised anymore. For that reason, the original level of the street will be restored using a suspended timber-decking route which will be attached to and supported by the timber columns that are used to reconstruct the eastern wall of the enclosure. Using Oak as a hard and traditional wood will be sufficient for this intervention. This procedure will restore the original level of the street, shed light on the history of excavation of the area, and highlight the presence of the Middle Bronze Age necropolis, although it has been covered quite a while ago (figure 8.54, 58).

Figure 8.58: The reconstruction proposal for the eastern street that connects the temple to the Lower City.
The main Library Street will be highlighted as a very important urban element in the Acropolis area. It will be tidied up recovering the connection between the two temples as well as between the temples and Royal Palace and the rest of the city. The way people used to approach the Temple of Baal through the stone steps or the ramp will be restored (figure 8.54, 59) in order to reconstruct the urban settings of the area and the relationship between the temples and the surrounding domestic houses. This proposal will be included and further expanded in the next chapter which discusses the urban conservation proposal of the entire city.

Figure 8.59: The reconstruction proposal for the Library Street that connects the temple to the Royal Place and the rest of the city to the west.

Inside the enclosure, the courtyards will be tidied up and the external altar will be reconstructed using its original stones (figure 8.14a). The existence of the southeast annex is not confirmed yet; however, the foundation of its northwest corner appears in the plans of 1988 and 2005 surveys. Consequently, these foundations will be uncovered again, while the missing parts will be reconstructed using rammed earth wall with the same height of available foundations. The annex’s western wall and the stone pier to the north, which formed the conjoint wall between the two courtyards, will be completed to a (0.5 m) higher than other foundations in order to highlight the separation between the two courtyards (figure 8.54, 60). Using the reversible rammed earth will enhance the differentiation of the original stones and highlight the hypothetical nature of this reconstruction, as it has been done in the temple of Dagan.
The eastern access of the enclosure to the side courtyard B is still hypothetical and it does not make sense to restore it; it was most probably a secondary access, if at all.

![Image](image.jpg)

**Figure 8.60: The reconstruction proposal for the temple's courtyards and external altar.**

The main building and its western annex will be the best place to reflect some of the temple's architectural, cultural and religious characteristics. The main building will be transformed into a cultural and religious museum, in which some original findings (stelae, objects, texts) or replicas will be placed. The added structure will serve an educational purpose regarding architectural, cultural and religious aspects associated with Ugaritic temples. The magnificent volume of Ugaritic temple, as a tower temple form, will be better reflected by completing the building in a conceptual proposal. There are no stratifications in this temple; therefore, such a big intervention will not overwhelm the original fabric. Rather, it will facilitate the understanding of the building form as well as many additional cultural and religious aspects of Ugaritic people’s lives. The architectural details will be abstracted as much as possible; they are still hypothetical and it is very important to avoid any misleading interpretation. Like all previous critical proposals, the construction over the ruins will have its own structural framework which will avoid adding any new loads on the original fabric. Completing the volume in a conceptual design has been a successful approach in many projects, like Kolumba museum, Koldinghus castle, etc (see section 5.4).

The main structural cores will be at the portico entrance and the Intermediate Space between the vestibule and the Most Holy Place. These structural cores will be in the form of a glazed-steel framework constituting the focal points for organising the movement within the building; the entrance guides the movement between exterior and interior spaces whereas the Intermediate Space facilitates the traffic between the
vestibule and the different levels of the North Hall, through monitoring both horizontal and vertical accesses from the ground floor (figure 8.54, 61). More emphasis will be placed on this Intermediate Space in an attempt to highlight its original role as a central structural element that held the highest part of the building, the temple’s summit.

Choosing transparent structures for the reconstruction of these two focal points is inspired by the original design of this building; it is believed that the building was a solid impermeable structure and the only way for light to come in was through the

![Figure 8.61: Architectural plan of the temple showing the location of the glazed-steel structures and their role in organising the movement between the temple’s spaces.](image-url)
portico entrance and the three types of widows\textsuperscript{18} that the building had in the structure of its Intermediate Space. Furthermore, the tall glazed-steel structure, which will be inserted in place of the Intermediate Space, will be an indirect light well that guarantees a dim light and reconstructs the original interior environment of the temple. The central part of Intermediate Space also accommodated the route that the priest or the king followed to the top point in order to pray. Keeping that in mind, a light path will be created inside the added structure to underline the intimacy and special character of this space (figure 8.62).

Figure 8.62: The reconstruction proposal for the main building of the Temple of Baal.

The volume of the two halls will be conceptually reconstructed using a steel framework for the main structure. The cladding will be made of larch timber and the rammed earth panels manufactured off site. The design concept behind the new addition will be inspired by the gradual increase of the spaces’ sacredness from the entrance to the altar section. As to the structural framework, steel frames (inverse U-shape) will be added outside the building and alongside the north-south walls of each hall. Intermediate steel columns will be added within each frame span to enhance its structural performance and decrease its section. East-west frames will be installed over the ruins connecting the abovementioned U-shaped frames and ensuring the overall stability of the structure. Additionally, the new structures on the north and south halls will be connected to achieve better rigidity and stability. Consequently, the added structural framework envelops the entire ruins without inserting any

\textsuperscript{18} These windows were mentioned in the discovered text that includes the myth of “The Palace of Baal”. It is believed that they existed in the last phase of the building during the Late Bronze Age period.
column inside the building, aiming to keep the original fabric as undisturbed as possible (figure 8.63, 64).

Figure 8.63: Plan drawing of the reconstruction proposal for the main building of the Temple of Baal.
Figure 8.64: Section drawings of the reconstruction proposal for the main building of the Temple of Baal.

The steel structure will be installed on concrete bases and a detailed sizing must be carried out to position them and avoid any damage to the original foundations. Timber profiles (inverse U-shape, too) 15-20 cm wide will be placed on the steel framework (east-west direction) and envelop the ruins, creating a proper interior...
environment for the proposed museum. The height of these timber profiles will be gradually increased in order to express the graduation in the sacredness of the temple’s spaces between the entrance and the Most Holy Place (figure 8.65).

![Figure 8.65: The reconstruction proposal for the main building of the Temple of Baal.](image)

The timber profiles will have the same level above the Most Holy Place and eventually form a flat podium at the assumed level of the original roof. This level will facilitate a platform for visitors to explore the urban, landscape and regional settings of the site (figure 8.66).

![Figure 8.66: The reconstruction proposal for the Temple of Baal.](image)
The musealisation approach inside the building will focus on providing visitors with some original experience. In the North Hall, the staircases which are believed to have provided vertical access to the upper levels will be installed to restore processional routes during worship. The first staircase will be released from Intermediate Space in the ground floor, while its original route will be used in the vacancy between the altar’s structure and the eastern wall. This stair will arrive to the intermediate balcony which is looking over the Most Holy Place. The balcony will be made of timber and supported by the added steel framework over the North Hall and the glazed-steel structure at the central Intermediate Space (figure 8.67).

Figure 8.67: Plan drawing of the reconstruction proposal for the first floor in the main building of the Temple of Baal.

Although the Intermediate Space is located in the most holy area (the North Hall), it is believed that it was separated from the altar’s section (the Most Holy Place) in order to give more privacy to the events that took place there. Based on the list of
materials requested from Egypt to rebuild the temple as mentioned in the original tablet (RS.88.2158) (Lackenbacher, 1995), Callot proposed that the Intermediate Space was separated by curtains. Thus, dark glazing will be used to clad the steel structure at the Intermediate Space, which would lessen the visibility as much as possible. This type of glass will reduce the light coming into the interior space as well and keep the altar section obscured. This will further assert the privacy of the altar section and reconstruct its original interior environment. In the ground floor, a door will be opened in the glazed-steel structure to facilitate access from the Intermediate Space into the Most Holy Place whereas the glazing will continue in the first floor to achieve better separation between the balcony level and the altar section on the ground floor. Consequently, this structure will create a proper space on the first floor (the balcony level), which will function as a museum for original artefact or replicas (figure 8.67).

Visitors will be allowed to reach the top point, the North Hall’s roof, using another staircase at the balcony level. This will complete the visitors’ self-experience of following the original cultic route inside the temple (The route was originally followed only by the priest or the king). Callot proposed different place and shape for this second staircase; however, he did not have any strong evidence to confirm his interpretation. Therefore, the second staircase, which guides visitors to the top terrace, will be facilitated in an L-shape parallel to the balcony borders (figure 8.67). This will further highlight the separation between the altar’s section and the balcony level and generate exhibition space on the balcony. The top terrace will expose visitors to the entire site and even to other related sites, especially the nearby Bronze Age harbour at Minet el-Beida.

The added staircases will be obscured from both sides, based on the belief that they were sacred private routes. This approach will guarantee the original experience and ritual significance in the new structure. Therefore, the altar in the ground floor will be completed using timber structure in order to hide the first staircase; restoring the altar platform will further enhance the visitors’ interpretation of the Most Holy Place. As for the second stair on the balcony level, the glazed-steel structure at the Intermediate Space will conceal the staircase from the Most Holy Place side. The
same type of separation will be added to hide the other free sides of this staircase in order to guarantee original experience for visitors (figure 8.67).

The northern and southern walls of the North Hall will be designed to reflect some original relationships with the surrounding spaces. The transparent part of the southern wall at the balcony level will highlight its original direct link to the roof of the vestibule (South Hall). Also, it will restore the original source of light into the building during the Bronze Age period. Using the staircase and dark glazing structure to separate the balcony from the Most Holy Place in the ground floor will highlight the original architecture’s privacy for the sacred events in the Most Holy Place. The northern wall and the remains of southern wall of the North Hall, and the remains of the southern wall of the South Hall will be reconstructed using solid materials, rammed-earth panels, to highlight its strong presence, even from a great distance, and guarantee the dark interior environment for these spaces. The rammed-earth panels will be held by a suitable framework, which will be supported by the steel frames inserted over the ruins for reconstructing the volume of the temple and its museum.

Figure 8.68: The reconstruction proposal for the Temple of Baal with its northwest annex.

As for the western annex, its ruins will be preserved and consolidated to ensure a correct and clear footprint. Its relationship to the temple will be highlighted through inserting timber boards that cover the ruins’ footprint at the same level of the expected original roof of this part of the building. These boards will protect the available ruins from further degradation and, at the same time, highlight the presence of this annex in volumetric sense, showing its original relationship to the main building. Cantilever steel beams, supported by the steel framework of the main
building, will be used to hold the additions. This will eliminate any need for posts within the ruins to support the added timber boards and, consequently, guarantee better preservation for the original stones and foundations (figure 8.68).

The conservation proposal of these two temples (Baal and Dagan) is quite important for understanding original architectural, structural and cultural aspects in Ugarit. Although it is believed that they were a twin temples, the conservation proposal of these massive structures are different in order to express different aspects associated with their ruins. The two interventions are working complementarily to promote comprehensive understanding of Ugaritic temples during the Bronze Age. Therefore, descriptive panels will be installed on the sites of the two temples to justify the difference between the two proposals while highlighting the striking similarities between the two temples. Having discussed them as main temples contributes to the city’s final image; however, the conservation of the local sanctuaries has an effective role in exposing additional social and evolutionary aspects on a smaller architectural and urban scale in the city.

8.4.2 Local sanctuaries
Since these sanctuaries are located in different areas of the city, this chapter will consider only the conservation procedures on the building scale. A comprehensive discussion of the urban level will be presented in the following chapter which discusses the reading and conservation proposal of the entire city. The position of these sanctuaries within the domestic fabric implies the differentiation of their conservation procedures from the domestic areas’ which helps avoid any compromising of their character. The remaining walls will be preserved and consolidated using original stones and traditional lime mortar. Reconstructing any missing footprint in stone will allow visitors to clearly read the complete original design. Like the Temple of Dagan (see section 8.4.1), the volume of the main hall of these sanctuaries will be highlighted and reconstructed using a framed steel structure. This approach will confirm the presence of these cultic functions everywhere in the city and simultaneously differentiate their scale from that of the Acropolis temples’ (figure 8.69, 70). The wall-heads of the main hall will be capped with timber to visually brace and better highlight the hall’s architecture. These two procedures for
the main hall will facilitate the understanding of its relationship to the surrounding units (e.g. the entrance, the annexe and residential apartments).

Figure 8.69: Conservation proposal for the New Sanctuary: plan and virtual reconstruction.

These units will be highlighted and differentiated from each other. First of all, the entrance is a central part as it organises the relationship with the street, and sometimes between the building apartments. Focusing on this part holds particular significance and relevance to promoting people’s recognition of its evolution, especially between the Sanctuary of Rhytones and the New Sanctuary. Therefore, timber skirting 70 cm high will be installed across the interior spaces of the entrance and highlight all openings. This procedure will enable better appreciation of access in each building and, consequently, visitors will easily understand the changes between the three sanctuaries. The other related units (the annex and residential or industrial apartment) will be highlighted using a steel-beam railing which will run over the borders of each unit. In order to clearly differentiate between these units, a single
beam railing will frame the annex while a dual-beam railing defines the borders of the residential apartment. As a result, visitors will appreciate the complex’s units, functions and spatial relationships.

Figure 8.70: Conservation proposal for Sanctuary of Rhytons: plan and virtual reconstruction.

As for the New Sanctuary, there is a different value; the building’s stratigraphy needs to be presented, especially the building intersection with the southwest part of the North Palace. The main two phases of the New Sanctuary are recognised as before and after the earthquake 1250 BC. Thus, all foundations that are related to the phase
before the earthquake will be differentiated from the upper ruins which are post-earthquake. The eastern part, where the building overlaps the ruins of the North Palace, calls for a very detailed proposal. First of all, the ruins of the North Palace, which may be associated (or not) with the walls of the New Sanctuary, will be uncovered and preserved. A new layer of lime mortar will be added on top of these foundations to protect and differentiate them from the walls which were built after the earthquake. These walls also present very interesting characteristics of an unfinished construction site during the Late Bronze Age. Therefore, the ramp and the wide opening which points out the unfinished status will be highlighted (figure 8.71).

Moreover, the people’s intention to expand this sanctuary eastward and overlap the southern part of the North Palace with a courtyard will be presented. The most suitable approach to highlight that is similar to what was proposed in the temple of Dagan, a steel mesh (see section 8.4.1). The steel mesh will represent the second layer, the courtyard; meanwhile, the ruins of the North Palace will still be visible underneath. To stress the incompleteness of this idea, the mesh will be spread on few meters to the east of the entrance C and with ramified ends. A timber-decking route will be installed on the steel mesh, which will enable visitors to experience the courtyard relationship to the structure from inside the sanctuary (figure 8.72, 73).

Figure 8.71: The conservation proposal for the New Sanctuary showing the building’s stratification and highlighting its overlapping with the southwest part of the North Palace.
The Royal Sanctuary is an integral part of the New Royal Zone. Therefore, its final conservation proposal is combined with the Royal Area’s overall conservation approach (see section 6.3.2: proposed interventions). The composition of this sanctuary is different from other local sanctuaries in the city. Its residential unit is
actually the Royal Palace which was provided with a detached ceremonial hall, the Pillared Building. The presence of the sanctuary’s cultic hall will be highlighted in a way similar to what was done to other local sanctuaries in the city whereas the relationship to its conceptual\textsuperscript{19} units (the Royal Palace, the Pillared Building and the New Royal Plaza) is comprehensively considered in the Royal Area’s conservation proposal in Chapter 6.

\textbf{8.5 Summary}

Religious buildings in Ugarit are strong representations of cultural and architectural developments. The main temples at the Acropolis area distinctly present the high level of architectural, planning and technical experience of Ugaritic people during the Middle Bronze Age. The development of these two gigantic structures also reflects different attitudes which people had during the Late Bronze Age. The catastrophic event, the earthquake, was the trigger that allowed people to express new thoughts in spatial resolution. At the same time, the existence of smaller scale religious structures in the city provides an important clue about the planning skills that Ugaritic people had, not only for central and massive religious structures but also considering the neighbourhood scale and its need for a cultic and social centre. These developments are quite significant for the overall reading of the city in the next chapter. They disclose substantial knowledge of the urban structure and the morphology of the city.

The conservation proposal of these structures highlights their evolution and associated social and cultural aspects. The use of conceptual design enabled the presentation of the buildings’ stratigraphy and developments in coherent

\footnotesize{\textsuperscript{19} The composition of this sanctuary is different as it formed an integral part of the New Royal Zone. However, it is important that it has been studied based on the local sanctuaries composition, as it has been done for other sanctuaries. This consequently stresses the identifying of the attached units to this sanctuary and their functions. These unites were the Royal Palace (residential unit), the ceremonial hall, the Pillared Building, (service unit) and the New Royal Plaza as an open space. They were not directly attached to the main cultic hall and, therefore, this case is different, and those units are conceptually considered as attached units for the Royal Sanctuary.}
musealisation approaches, which will be of a high educational value for academic and public visitors. The conservation proposals of the two gigantic temples have contributed differently, but also complementarily, to people’s knowledge, although it is believed that they were twin temples during the Middle Bronze Age and the beginning of Late Bronze Age periods. Each proposal has contributed to a specific type of knowledge regarding the history, condition, clarity and stratifications of the ruins. On the other hand, the proposal of local sanctuaries has focused on highlighting the existence of these cultic structures within the domestic fabric as well as unveiling successive evolutions that occurred to the architectural and urban settings of these buildings.

Since the discovered religious structures do not represent all dominant gods in Ugarit during the Bronze Age period, it is fundamental to point out that future excavations will definitely expose other (large or small) religious structures. For now, it is essential to carry out comprehensive analyses of the discovered part of the city which would identify other local sanctuaries, if any. The main focus should be those structures that have not been determined yet, especially in the South City where many structures have not yet been completely excavated or identified (for example, the excavated part of block VIII) (figure 8.32). This initial procedure will contribute significantly to the reading of each area and also to establishing a better understanding of different forms in which local sanctuaries might be represented in Ugarit. The results of the initial analysis will constitute a good trigger for guiding the planning strategy for future excavations in the city. This aspect will be further explored through the urban reading and conservation proposal of the City of Ugarit, which will be the subject of the following chapter. The Acropolis main temples, in particular, play a primary role in the overall reading and appreciation of the city’s urban principles and structure.
PART III: CONNECTING THE FRAGMENTS: URBAN DISCUSSION
Chapter 9  Urban Reading, Analysis and Conservation of the City of Ugarit

9.1 Introduction

Grasping the urban structure and landscape of any city is not an easy task. Many scholars have attempted clear and sensible approaches that explain the concept of the city and clarify its dimensions. This debate becomes more problematic in studying the urbanism of ancient cities whose ruined conditions nowadays challenge the presentation of the valuable aspects of their urban and landscape structure. The inhabitants and their stories are, of course, missing and this affects the city’s collective memory and its interpretation, a quite significant element that informs the overall urban discussion, hopefully complemented by modern approaches to the definition of the city. Material culture and written resources, if any, are also essential components of the discussion. Moreover, the urban topography, morphology and spatial relationships frame the discussion and the urban interpretations. Indirectly, they convey further important information about the city and the main principles of its ancient inhabitants.

Having established a detailed analysis and conservation strategy for each area on the site throughout Part II of the thesis, this chapter will discuss the urban and landscape aspects in Ugarit and present them within a coherent framework. The urban study will, first of all, build a proper theoretical framework through which the ancient city will be read and its urban and landscape aspects interpreted. This framework aims to provide a comprehensive understanding of the origin, structure and evolution of ancient cities. Also, it will shed light on meanings as perceived by the cities’ inhabitants as well as through modern approaches. The concept of the “Image of the City”, a significant one for the study of urban environment, will be used too. Following that, the City of Ugarit will be analysed in this framework. The final interpretation of the city’s urban aspects will inform its urban conservation proposal, taking into account the individual proposals of each area of the city and their relationships. The connection between the proposals of the city’s fragmented areas in a sensible and consistent overall narrative is considered a substantial contribution that this work makes.
9.2 Urbanism of Ancient Cities

Studying ancient cities is of a high significance in modern time. In addition to transmitting the innovations in ancient people’s political and social systems to modern and future generations, it reveals important information about the developments which modern cities and communities have undergone. Many scholars, such as Max Weber, Paul Wheatley, and Richard Gabriel Fox, agree with Gordon Childe that the concept of the city originated in urban evolution and continuous transformations in the socioeconomic structure. In his Urban Revolution theory, Childe insists on the importance of urban revolutionary aspects in the economic and social relationships between ancient people. That, he believes, led to a more complex socioeconomic structure and, in turn, promoted both their urban environment and its organised structure, the city. He adds that the complexity of urban structure reflects the degree of evolution that characterised ancient people’s life (Childe, 1950). Fox also attributes the appearance of the city to political and economic developments. He asserts that the concept of city had started when ancient people organised themselves within a state (Fox, 1977).

Thus, Childe creates a direct link between the city structure and the level of political or administrative system. Consequently, many ancient cities came to light as the end result of a long-time transformation process, and their variation in form is ultimately regarded to be the result of the complexity of their society. Some cities were intentionally and rapidly created in order to express a sophisticated political and economic system and mark the power of the leaders or religious rulers. Many scholars, for example, reviewed similar cases in Mesopotamia (Emberling, 2003), Peru (Attarian, 2003) and Greece (Fletcher, 2007).

To facilitate defining city, some scholars (Childe, 1950; Mumford and Copeland, 1961), have identified specific elements that grant city status to the urban agglomeration: social classification, writing system, public and monumental structure, large and dense population and advanced crafting and industry, actually similar to the definition of the concept of civilisation and state (Childe, 1950; Flannery, 1972a) (see section 3.3.3: Full civilisation traits). Furthermore, Colin Renfrew and Spiro Kostof suggested additional features like the presence of diverse
types of public building, social hierarchy, monumental and sacred centrality, city
scape (morphology), and organisational and urban features (streets, squares, plazas,
city walls) which promote an urban agglomeration to a higher level, the city (Kostof,
1991; 1995). Renfrew, in particular, emphasised that the large size of any urban
agglomeration does not necessarily form a city. He proposes Çatalhöyük in Turkey
as an example: although the site is big and has an administrative centre, the absence
of the monumental centre is obvious and, thus, Çatalhöyük is merely an overgrown village.

A city is created and structured by its people who intend to express political,
economic and social views in spatial resolutions. Therefore, it is very important to
understand how the city is structured. Most ancient cities comprised heterogeneous
social groups varying from high political authority down to non-elite residents. The
compositions of these cities were mostly characterised by bottom-up and top-down
structures (Batty, 2007; 2008; 2010). The bottom-up approach is the most
recognised by scholars, such as Monica Smith, who believes that the city is socially
constructed based on households, neighbourhoods and urban interactions. She
emphasises that the interactions between urban elements guarantees long survival of
the city (Smith, 2013). In cities, Smith argues, people are subject to different types
of evolution as a result of exchanging information among different social groups.
Also, it is always possible, at the city scale, to create a new social, architectural and
urban identity based on the evolutionary level that people achieve.

9.3 The Meaning and Image of Ancient Cities

An ancient city conveys dual meanings to its ancient inhabitants and modern society.
Some ancient people saw their cities as a sacred urban environment where their
sacred king erected his own house, the palace. Thus, the city was a real
representation of their social composition and beliefs. On the other hand, modern
society and scholars see different meanings embedded in these cities; for example,
Amos Rapoport summarises three main levels at which the meanings of the city are
categorised. These are the high-level (symbolic), the middle-level (identity), and the
Low level (urban-social interaction) meanings (Rapoport, 1988; Smith, 2007).
The high-level meaning considers encoded significance in the buildings and city layout. It expresses the potential image of the city based on its structure and the relationship between its urban elements. Kevin Lynch supports this statement through his Theory of Magical Correspondence: some fundamental social values can be constructed by using urban principles. Consequently, these values are presented in spatial forms, such as order, stability, dominance and continuity between function and form (Lynch, 1984; Smith, 2007). These values, Lynch advocates, contribute to the final image of the city. The middle-level meaning focuses more on ancient people’s identity and power, as it is manifested in the architectural and urban features of the city. However, it is very important to avoid the persistent connecting or equating between monumentality and power. Joyce Marcus contends that some outstanding valuable monument could have been built without the existence of a strong political power. She uses Stonehenge as an example to support this opinion. Influences (meanings) of monumentality should be transmitted to the modern time visitors of the ancient city; after all, they are part of the collective memory of ancient people. Finally, the low-level meaning manifests the relationship between the urban environment and its inhabitants. It focuses on people’s judgement and their reaction to the surrounding architectural and urban settings (Smith, 2007). Overall, in most cases, the three levels of meaning are not separated from one another.

The symbolic meaning, as Joseph Rykwert emphasises, is one of the most important characteristics. He proposes that three main elements constitute the concept of the city: site, enclosure and material. The relationship between these three components expresses the urban dynamic of the city and its associations. Since ancient people perceived their urban environment and landscape as sacred elements, they established strong relationships with their surroundings, while separating the whole city from its surroundings in order to avoid reducing the interior environment (Rykwert, 2013). Rykwert’s thoughts are expressed by other scholars in another way. In his book “The Architecture of the City”, Aldo Rossi believes that the city as an urban artefact has associations with its surroundings. These associations must be located in the object’s envelope (surface) which corresponds to the enclosure in Rykwert’s theory. Therefore, the city wall is a crucial element that secures the city,
represents its character and power and gives a clue about the level of cultural system employed.

Like John Lydus, Rykwert believes that the city has three attributions which are Secret, Priestly and Public. He regrets that this notion is lost in current urban design principles, and that planners are today mainly focussing on the public dimension. Therefore, both scholars consider it very important that the study of urban aspects of ancient cities considers the social, sacred and ritual aspects of the city in order to avoid the abstraction of the city’s characteristics into its physical materiality (the city’s conceptual poverty, according to Rykwert). These aspects are substantial in building a comprehensive and sensible image of the city. Furthermore, it is essential to recall the ancient people’s perception of their city and transmit it to present and future generations (Rykwert, 2013; Wheatley, 1978a). Thus, the urban environment (town or city) can be presented in its totality, where its symbolic meaning is preserved and transmitted and, consequently, the mentality and the urban experience of ancient inhabitants is reconstructed. In this sense, the enclosure is also a sacred element that encompasses the ancient people’s rituals and beliefs and unfolds the city’s external image.

The site also poses dual dimensions. Rykwert believes that everything means itself and something else, which is clearly represented in his thoughts on the design of the city. He supposes that the choice of site is associated with people’s rites and beliefs, so it was never arbitrarily chosen (Rykwert, 2013). Also, the city’s morphology and associations with the surroundings are very important variables that would contribute to a proper choice of its location. Thus, abstracting the whole site into one component is a useful principle for understanding its characteristics and relationships. Any abandonment of the site causes deterioration to this object (the city) and its significant associations. Consequently, for the sake of a clear representation of the city, the city’s site should be studied with its structure and interior urban environment using the same theoretical framework. In another vein, the city is a changeable urban artefact overtime; its structure and image are the faithful representations of historical phases through which the city has gone during its lifetime. This principle is strongly manifested in Aldo Rossi’s thoughts,
particularly in his book “The Architecture of The City”, where he regards the city as an urban artefact which transforms overtime (Rossi, 1982).

Rykwert emphasises the importance of investigating the urban rather than cosmological symbolism in the city’s layout (Rykwert, 2013; Wheatley, 1978b). Subsequently, the city’s rituality, namely the ancient people’s experience of their city, will be intelligibly exposed. People’s rites, consequently, become important for understanding the urban environment. In that vein, Aldo Rossi insists on the importance of the city as a whole and in terms of its individual parts (Rossi, 1982). Considering it as an object is a good opportunity to understand the city’s relations with its surroundings; this is one of the city’s images, the external image. However, the interrelations between the city’s parts are very important to be drawn and understood in order to constitute the interior image of the city (ancient people’s perception of their urban environment).

Similarly, in his phenomenological approach to understanding the architectural space, Christian Norberg-Schulz identified four levels of existential space: geographical and landscape, urban, the house and the thing. He emphasised that comprehensive understanding of the space, whatever its scale, requires exploring it at different levels as well as the connections between these levels taking into account that the house is the central space from which all social, cultural and epistemological aspects start (Norberg-Schulz, 1968). This approach is useful in forming and understanding the structured totality of an urban agglomeration and/or the city; Norberg-Schulz’s approach meets Rossi’s thoughts regarding the study of the city on different scales (as one object and as agglomeration of different parts). Schulz’s phenomenological approaches was always backed by his structuralist background; he always worked on reconciling structuralism with phenomenology, and his contribution regarding the existential space or the spirit of place (the concept of genius loci) is essential in the understanding of the city structure (Norberg-Schulz, 1968; 1980). Based on reviewing examples from Mircea Eliade and Kevin Lynch’s work, Schulz argued that architectural spaces are existential spaces that are structured into schemata and centres, directions, paths and domains. This approach clearly intersects with Kevin Lynch’s regarding the structure of the city. Schulz
concluded that architectural space can be understood as a concretization of environmental schemata or image.

Consequently, the city image is generated based on specific urban elements. The focal points and districts of the city, as Kevin Lynch states too, are the primary catalysts that stimulate the city’s urban life and, simultaneously, reflect people’s thoughts of their built environment (Lynch, 1960). The final internal image of the city is interpreted via binding these urban elements and using specific “cultural” and urban routes (paths, as named in Lynch’s theory). These routes knit the urban life story of the city based on people’s social and cultural aspects. Subsequently, in order to obtain sensible reading and understanding of the city, these two (external and internal) images should be combined.

Unfortunately, Rossi’s perception of the city as a merely historical product has been misinterpreted by some architects and planners. Some of them focused on the city’s aesthetic aspects as a collective work of art, whereas its formation was seen as a process where many aspects are involved besides the artistic ones (natural, social, political and economic). The psychological dimension of the city is also another aspect which provides essential knowledge of the people’s collective memory and their experience within their urban environment. In ancient cultures, for instance, the king was considered as god’s representative in his city and, therefore, he gained ritualistic significance among the urban community in addition to the political power. Therefore, and as Stanley Tambiah suggests, involving political aspects is worth considering in conceptualising the urban environment and reconstructing its proper image (Tambiah, 2013; Wheatley, 1978b).

According to Lynch, the city’s image holds its identity, structure and meaning. He believes that the image of the city should be expressed as it is perceived by its inhabitants. Thus, the surrounding urban environment and its structure or pattern are the main source of knowledge about the city and its people’s beliefs and intentions. Although Lynch had identified five main elements in the city (paths, edges, nodes, districts and landmarks), the final image of the city is actually affected by only three memorable elements. The city is essentially built around “focal points” and divided into clear parts “districts” (mostly regarding function or social class). These parts are
connected by routes “paths”, whose existence is very important in building the collective memory and the urban experience in the city. These three elements and their structures represent the city’s materiality which varies depending on the function or social group. The disparity in district materiality indicates a different importance and contribution of each area in building the overall image of the city.

Also, the city’s materiality displays the internal dynamics between urban and social hierarchies. Since the main focus of this research is a ruined city whose people disappeared a long time ago, inferring the relationship between the city and its people will go through a detailed analysis of its architectural and urban fabric as well as written resources. The discovered material culture plays an important role in defining the urban elements (landmarks, districts and memorable routes) and its organisation pattern or structure.

Many cities, especially prehistoric ones, were built and developed around specific buildings or complexes. Aldo Rossi perceives these structures as urban dynamics monuments around which the morphological and structural transformation process of the city took place. These strategic points should be distinguished by their structure, pattern or function. They have a primary role in evaluating the development of the city overtime. The stratigraphy of these monuments in most cases reflects the city’s historical periods and stratifications, as they are the only withstanding elements in the transformation process. These focal points characterise the transformation process and identify its stages during the city’s history. For example, in studying ancient cities, it is crucial to focus on the political system and its structures, such as the royal palace. The development of political system in any culture reflects the changes affecting people’s life pattern and aspects. Also, related structures (palaces, royal residences, royal temples, etc.) stir the urban dynamics of the city.

9.4 The City of Ugarit

Olivier Aurenche and Olivier Callot provide a basic architectural definition of the city in their book “Dictionnaire illustré multilingue de l'architecture du Proche-Orient ancien”. The two scholars adopt specific criteria to differentiate between the city and the village of the ancient world in terms of social, urban and architectural
hierarchies (Aurenche and Callot, 1977). Archaeological evidence of these hierarchies, the city walls and the pattern of street network must be primarily investigated to analyse the city’s structure, associations and urban concepts.

The City of Ugarit was built on a Tell, whose top point is 20 meter above the surrounding plain fields. This location facilitated easy visual communication between the city and its dominating harbours, Minet El Beida and Ras Ibn Hani. The regional relationships between the city and the two bays of the harbours sufficiently express its well-planned location and how the topography of the area was used to choose a proper site for their dominant urban agglomeration (the capital city) to supervise all surrounding lands (figure 9.1) (Calvet and Yon, 2008, p.37-47).

![Figure 9.1: The City of Ugarit: its location and relationship to the two harbours (Calvet and Yon, 2008).](image)

It is well known that the City of Ugarit had started during the Neolithic period as a small village (Schaeffer, 1961a; Schaeffer, 1961b), but its strategic location and people’s persistent efforts to develop their city contributed to its complex structure and excellent reputation during the Late Bronze Age period.

Considering the original height of the buildings in the city, especially in the Acropolis area, the city is a well-recognised urban element within the regional landscape. The morphological characteristics and the direct link with the main harbour of Minet El Beida had conferred an important role on the city as a landmark for people from the seaside as well as from the surrounding landscape (figure 9.2, 3).
It is obvious that the city got a physical and cultural significance, not only for its inhabitants, but also for the inhabitants of the surrounding sites of the kingdom. The topographic survey, carried out by the French-Syrian mission in 2001, clearly shows the city’s overall morphology and its topographical settings (figure 9.4) (Calvet and Yon, 2008, p.27-36). It is believed that Ugarit constituted an urban icon within its region which, consequently, promoted its importance to its citizens who persistently developed the city until its last phase in the beginning of 12th century BC. Ugarit gained a very good reputation in the Levant, Mesopotamia and Asia Minor, and even on an international scale. The discovered writings on the City of Ugarit in Egypt, Ebla, Mari and Hattusa strongly advocate this fact (Bordreuil, 2000a; Lackenbacher, 2000; Yon, 2006)
This city had accommodated all political, economic and cultural activities of those people and was an important example of multicultural cities during the Late Bronze Age period. Thus, the City of Ugarit represents a smaller scale prototype of the whole kingdom and, consequently, it is a good example of the so-called city-state. Political (Royal Palace) religious (big temples) and social (public buildings) representations within the city wall confirm the high complexity of the city during its last phase. This, consequently, conveys the very significant role which Ugarit had within the international sphere (figure 9.5). The discovered architecture, objects and texts in the city confirm this fact; the written sources show that the relationships between the kingdom and surrounding powers during the Late Bronze Age were established mainly through the capital City of Ugarit and its dominated harbours. Hence, the City of Ugarit is an object which holds intrinsic physical and cultural values as a unique urban agglomeration on a regional and international scale. Henceforward, this section will focus on reading and analysing the urban characteristics of the city in order to identify its outstanding urban values.
9.4.1 Urban Reading and Analysis

The site of the city is flanked with two riverbeds (Nahr Chbayyeb and Nahr ed-Delbeh), which formed its natural border. However, it is believed that the city was also equipped with fortifications, although only the western part has been discovered so far (Yon, 2006). The building materials and techniques of the discovered fortification explicitly show that the city had been strongly secured using monumental structures in addition to the natural ones, the rivers (figure 9.6). Based on Naroll’s formula which uses a ratio of persons per total floor area to calculate the population of ancient cities (Naroll, 1962) and taking into account cross-cultural parallels, the city’s population is estimated to be 7,635 (Garr, 1987). Considering this high density, it is very important to highlight the daily urban traffic of those people within the city and also between the city and the surrounding region.
Starting with the city access, the only access discovered so far is the western gate which directly leads to the New Royal Plaza around which the new royal structures (Royal Palace, Royal Sanctuary and Pillared building) are located. For political, religious and practical reasons, it is obvious that this gate did not function as an access for public people and carriages (Callot, 1986a). Its monumental geometry and termination in front of the Royal Palace leads one to think that this access served special traffic to the city: royal family, officials and external visitors. This issue, first of all, elaborates the understanding of the political system and the movement within the political zone of the city. Secondly, it promotes searching for an alternative access for the daily life movement between the city and surrounding fields. Potential access(es) should have been sufficient for the flow of carts that were used to bring crops and merchandise (Calvet and Yon, 2008, p.37-47). Furthermore, the constitution and design of western gate do not facilitate the continuous movement of carts from and into the city; approaching the western gate was done through a very sloped route (figure 9.7).
Marguerite Yon and Oliver Callot, who have been central in studying the architecture and urbanism of the site, kept investigating the evidence for another potential access to the city (Callot and Yon, 1995). Excavation works at the river bank, carried out by Y. Calvet and B. Geyer to the south of the city, brought to light a significant clue about a commuting access (Calvet, 1990; Calvet and Geyer, 1992). A well-built block of ashlars was discovered at the Nahr ed-Delbeh River bank (Figure 9.8a). The architectural and structural properties of this block confirm its capability to hold a bridge connecting the city with the surrounding landscape to the south. Together with Marguerite Yon, they believe this bridge would have been transformed to a dam in specific times of the year in order to support the water management system of the city (Calvet, 1990; Calvet and Geyer, 1992; Calvet and Yon, 2008, p.37-47; Calvet and Geyer, 2013). Figure 9.8b shows an artistic reconstruction of this bridge by Olivier Callot (Calvet and Geyer, 1992).

Figure 9.8: (a) A pier of bridge/dam on Nahr ed-Delbeh River to the south of the city (Al-Maqdissi et al., 2010; Yon, 2006). (b) An artistic reconstruction of the bridge by Olivier Callot (Calvet and Geyer, 1992).
In the city, there are two significant discoveries that support the interpretation of the bridge and an access to the city from the southern part. The first discovery is at the Main Street area, which had been unearthed in 1986 (Yon, 2006). Excavation works resumed in this area in 2008 - 2010 by the Syrian-French archaeological mission to the site (Al-Maqdissi et al., 2007; Al-Maqdissi et al., 2010), which expanded the unearthed part permitting by doing so a better reading of the area and its relationships with the surroundings (figure 9.9).

Figure 9.9: The Main Street area, Ugarit (Al-Maqdissi et al., 2007).

Further excavation at the “south bridge” stone base enabled scholars to support their interpretation with more evidence. The Main Street area is a north-south axis, almost 4 m wide. The noteworthy structures around the streets are built in big and regular ashlars (figure 9.9). The south extension of this street meets the stone base on the river bank, whereas the extension to the north terminates at the western edge of the big Public Plaza at the South City (figure 9.10). This inevitably confirms that this exceptionally wide street was a main vein that provided direct access from outside the city into a central urban element (the Public Plaza) which, considering the uncovered areas, is mostly located at the heart of the city’s domestic fabric. This Public Plaza, in turn, provides a forked street network to every part of the city. Consequently, it can be said that Ugarit had a direct access from the southern part using a timber bridge that crossed the Nahr ed-Delbeh River. It is not clear yet if the city had a proper gate on that side; however, more excavations between the Main Street area and the stone base can yield significant information which clarifies the
characteristics of this access. Unfortunately, parts of the lands between the stone base and the Main Street area are still private properties and full of citrus trees.

Figure 9.10: The relationship between the stone base, Main Street and the Public plaza on the city’s map.

Since the city has access from the southern and western sides, it is most likely that it also has another two accesses from the northern and eastern parts, like most Bronze Age cities in Mesopotamia and Cyprus, for example. In the northern part of the city, and by revising the city map, a straight southeast-northwest street can be recognised, which may have continued to cross the other river, Nahr Chbayyeb, to the north of the city (figure 9.11). Unfortunately, the north part of the Tell is in a very bad condition and a significant part of it has been eroded. For that reason, nothing definite can be said about an access from this side, and more excavations are needed at the Nahr Chbayyeb River banks to search for the bases of a bridge, if there had ever been one. As for the fourth possible access, the whole eastern part of the Tell is still being unearthed, and future excavation should bring new information about a possible access there. The excavated part of the Acropolis and its southern slope shows many streets which head east and correspond to the city’s topography. One of them is the Library Street which aligns the two main temples in the city (figure 9.11). Nothing can be confirmed about any access from the east; however, the location of the main temples in the northeast part of the city evokes thinking about an eastern...
access, taking into account the substantial significance which these two temples had brought to Ugaritic life during the Bronze Age period (See section 8.3.1).

Figure 9.11: General map of the City of Ugarit's plan showing possible accesses to the city.

The organic urban development of Ugarit and the incomplete excavation make it difficult to infer the overall urban structure of the city. Most unearthed streets are running parallel to the city contour in response to the site topography. Olivier Callot created a conceptual street network of the city (figure 9.12) based on the discovered
parts. He highlighted some discovered streets with hypothetical extensions based on the site morphology in order to create possible connections between the discovered neighbouring areas.

During a private conversation with O. Callot in October 2013, he pointed out that he is still not sure about this plan as there is still a huge area of the city that needs to be discovered. However, the discovered part of the city encourages the thoughts that the overall urban structure constitutes ring-streets which are parallel to the site’s topography. These rings are connected by as short streets as possible, perpendicular to the site topography, in order to adapt to the site’s slope. Most of the proposed rings result from logical connections between discovered areas, as is the case in the City Centre, South City and the South Acropolis Slope (figure 9.13).
Thus, it is essential to understand the urban development forms in Ugarit and how the different areas of the city were physically and socially connected. This is discussed in detail in the following section.

**9.4.2 Urban Development and Social Interactions**

The proposed plan of the entire city (figure 9.12) was used by other scholars who worked on analysing the city’s urban forms and social dimensions. For instance, Panagiotis Kontolaimos had investigated the role of main urban elements (the palace, acropolis, and open spaces) and the circulation pattern within the city. Using axial, visibility and agent-based analyses, Kontolaimos reached several results concerning the urban characteristics of the City of Ugarit (Kontolaimos, 2013).
Results of the analyses are very useful for the urban principles; however, they are not complete as Kontolaimos could not use other sources, especially the discovered writings in the city that had established absolute facts about the city during the Late Bronze Age period. For example, Kontolaimos proposes that the Acropolis area, represented by the two main temples, served a local religious function only. He emphasises the symbolic meanings of the temples, and proposes that they were placed at the top point of the Tell for visibility purposes. Unfortunately, Kontolaimos had missed important facts when he assumed that the function of the Acropolis area was restricted and it had a weak relationship with the surrounding built environment. The analysis of the Acropolis temples in the previous chapter (see section 8.3.1) clearly pointed out that the two temples were built on west-east Library Street whose possible extension to the west meets a street at the Residential Quarter, which in turn heads to the Royal Palace (figure 9.14). This possible connection indicates a direct relationship between the Acropolis and the Royal Area. Some ritual texts confirm this relationship by describing the route that the king used between the Palace and the temple in specific events (Pardée, 2000, p.219). Moreover, although the two temples were fortified, the Acropolis area shows very good connections with other surrounding areas of the city (Lower City, South City and South Acropolis Slope) (see section 8.3.1). The analysis by Kontolaimos was useful in consolidating some interpretations about the symbolic meanings which the temples had for the city and its inhabitants, and their importance for the overall townscape.

As concerns the Royal palace as another dominant urban element, Kontolaimos concludes that its location reflects that the palace controlled the city’s (civilisation) international trade through the main two harbours (figure 9.15). He attributes the development of the palace’s construction over two centuries (see section 6.2.2) to the gradual development of economic control between 15th and beginning of 12th century BC. Kontolaimos’s interpretation can be considered as part of the overall interpretation for this location. The western part of the city facilitated the control of the city’s trade; however, it was also facing source of danger at that time, the sea.
Thus, Kontolaimos built his interpretation on a single aspect ignoring other cultural purposes of this location. The location of the Royal Palace at the western side of the city differentiated Ugarit’s urban structure from other contemporary surrounding cities. Building the Royal Palace and administrative facilities out of the city centre and far away from the main temples was not only to control the city’s trade, but also
to decrease the influence which the temples had on civil life in Ugarit. Also, it shows that the royal dynasty had responsibility to protect the city and was exposed to the main source of danger at that time, the sea (figure 9.15). These two aspects strongly support the findings of previous chapters regarding the very good relationship that existed between Ugaritic people and their royal family. In addition, the city, especially during the Late Bronze Age period, shows a unique approach to civil life where temples did not have absolute power over aspects of people’s lives. That is clearly manifested in the organisation of the urban environment.

The main contribution of Kontolaimos’s study is the understanding of the role of open spaces in urban life, namely social interaction. Kontolaimos simulated the social interaction of open spaces and the social movement within the city by applying Space Syntax’s analytical tools, such as Agent-based (figure 9.16a) and All-Line (figure 9.16b) analyses. The simulation clearly shows that small urban elements (streets, enlargements and small squares) were very important in organising traffic on a local scale and, therefore, they had low social interaction. On the other hand, the city had other dominant open spaces (New Royal Plaza at the New Royal Zone, Public Plaza in the South City, Public Plaza between the Royal Area and Residential Quarter, and the open spaces in front of the main temples). The simulation shows that these open spaces had a high level of social interaction, and that clearly reflects their significant role in organising the social traffic on the city scale.

In comparison with Enkomi in Cyprus, for example, which is perceived as a planned town with a regular street network, Ugarit has better interactive open spaces with a greater significance for the city’s social life (Kontolaimos, 2013). Therefore, organic development of the urban environment in Ugarit has a human scale in giving pedestrians more options to move within the city and encouraging neighbourhood life (Kontolaimos, 2013; Stöger, 2008). Furthermore, the simulation maps reflect the strong relationship between all domestic and public areas to the east of the royal district. Considering the possible two access to the north and south of the city, these simulations can also be considered as a faithful reflection of household economy in Ugarit where different economic resources were physically represented by different accesses to the city. This aspect will be discussed later in more detail.
Figure 9.16: Simulation of social interaction among open spaces in the City of Ugarit (Kontolaimos, 2013)
(a) Agent-based analysis. (b) All-Line analysis.
The site has a long history of continuous urban development, starting with being a small settlement during the Neolithic period 8th millennium BC and ending with its last phase in the beginning of 12th century BC. This long history was confirmed by the sounding SH (see Chapter 2 & section 3.3.3) at the western slope of the Acropolis (Schaeffer, 1935). It is believed that the city started acquiring its urban characteristics in the beginning of 3rd millennium BC; however, it was challenged by several destructions the last of which occurred around 2200 BC (Middle Bronze Age) in correspondence with the collapse of Old Kingdom in Egypt and Akkadian empire in Mesopotamia (Akkermans and Schwartz, 2003; Klengel, 1992; Yon, 2006). The city had afterwards had a spectacular urban development by the new comers to the area, most probably the Amorites who arrived from inland Syria.

The urban development started at the Acropolis area by building the big temples. Apart from the findings in the sounding SH, the oldest discoveries of the city thus far (some tombs and foundations found mainly in the Acropolis and Lower City) date to the beginning of the Middle Bronze Age. Also, the Acropolis accommodates some cultic facilities that date back to before erecting the main temples in the 19th century BC (see section 8.3.1). On the other hand, the soundings carried out in the Royal Area, particularly in the garden of the Royal Palace (courtyard II and the garden), clarify that the Royal Area was built on the remains of simple houses (Schaeffer, 1962a). That confirms that the Acropolis area was the start point and the heart of the city during the Middle Bronze Age period. It constituted the first dominant urban focal point around which the city developed before the Royal Palace. Also, the soundings in the palace show that the city was already covering the whole area of the Tell during the Middle Bronze Age and had walls to secure the inhabitants. Additionally, these soundings point out that building the North Palace had started simultaneously with the construction of the Royal Palace during 15th century BC (Schaeffer, 1962a; Yon, 2006). This also confirms a former interpretation of this building to have had a special function in the city’s history (see section 6.2.2).

Thus, the interpretation of Ugarit’s urban development between 2000 and 1200 BC can be summarised in three main stages. After the city’s destruction by the end of 3rd millennium BC, people tried to revive their city and started with building the main
temples, most probably over older cultic facilities in the Acropolis area (see section 8.3.1). These two temples worked as catalysts that accelerated the urban development around them (figure 9.17a). During 17th or 16th century BC, the city had covered the whole area of the Tell and been equipped with proper fortification. The city kept the same development form until Ugaritic people commenced building the royal facilities in the western part during the 16th or 15th century BC. The Royal Palace and other administrative and residential buildings constituted another dominant urban focal point that balanced the urban dynamic with much power for the new structure, the palace (figure 9.17b). This reflects the changes that occurred to the city economy which became a palace-temple economy after it had been under the temple’s control.

Figure 9.17: Urban development forms in Ugarit. (a) 19th-16th century (b) 16th 13th century BC.

The result of this development was strongly expressed in the physical fabric of the city; this can be recognised in the changes in the morphology of the Royal Area and Acropolis over time (figure 9.18) and subsequently the overall urban structure of the city; it is clear that the royal power was significantly growing at the expense of the Acropolis. The new developed area, the Residential Quarter, directly situated to the east of the Royal Palace, shows further evidence of this development. The architectural materiality, technology and organisation of the buildings of this area manifest great development. This development gradually decreases towards the east.
reaching the Acropolis area and Lower City, where people kept their original houses but adopted the new architectural approaches and techniques as much as they could afford. Thus, the existence of the Royal Palace was quite significant not only for the development of the city’s political, administrative and economic systems, but also for the development of its urban structure and architectural quality.

The earthquake, which hit the city during the 13th century BC (most probably in 1250 BC), was another key event in Ugarit’s history that enhanced its urban structure and architectural quality. It was an appropriate opportunity for people to express their new social and cultural attitudes in spatial resolution using their built environment. The improvements after the earthquake touched different scales in the city, varying from single spaces to the entire image of the city. Ugaritic people used this catastrophic disaster to highlight their political, economic and cultural advances and preferences. Therefore, reading the relevant urban evidence facilitates the understanding of the development process and the rationale for specific developments. Thus, the main recognised forms of urban development are:

- Transformation in the buildings’ geometry;
- Abandonment of specific buildings and use of their land and ruins for new structures with new functions;

Figure 9.18: General sections of the city that show the development of the city’s morphology between 20th and 13th century BC. The source of the original section is (Callot and Monchambert, 2011) and then edited by the author.
3- Completion of surviving buildings using new principles to facilitate the function and produce new structures;
4- Rebuilding by following the original form.

Highlighting these developments in a conservation proposal can provide the visitors with comprehensive knowledge of the urban developments in the Late Bronze Age. For example, the change in the design of the city’s main gate and the completion of the New Royal Zone after the earthquake immensely affected the overall external and urban image of the city showing off advancements in political and economic systems. This resulted in a well-organised New Royal Zone around a large Royal Plaza, which facilitated the connection between different buildings (figure 9.19). Also, the new gate was built in a gigantic and heavy structure and that, subsequently, reflected the new power of the occupants of this area, the royal family (figure 9.20).

![Figure 9.19: The New Royal Zone in Ugarit.](image)
Similar development is recognised at the Acropolis where the temple of Dagan was transformed from a gigantic temple to an open-air platform type. The overall morphology of the city had consequently changed and the volume of the Acropolis was reduced to be represented by only one of the two superstructures (temples) (figure 9.18). These two developments also reflect some changes that occurred to the cultural system of the city. Subsequently, the religious power had gradually turned into royal or civil forms. However, the temple was still having power in the city at that time owing to the wide reputation of the god Baal; rebuilding the temple of Baal after the earthquake is a testimony to that (see section 8.3.1: Temple of Baal). This justifies the type of economy (palace-temple economy) which the City of Ugarit had during its last phase.

The noticeable architectural and urban developments between the Old and New Royal Zones constitute strong evidence about the people’s achievements and attitudes towards their built environment. This issue had been comprehensively discussed in Chapter 6. The Old Royal Zone also accommodates a new form of urban development in the city. The North Palace was not only abandoned after the earthquake of 1250, but also its land and ruins were used for the construction of other new buildings which were related to the new cultural attitudes of Ugaritic people. This issue had been investigated in detail (see section 6.2.2) and the transformation confirms that this building, as a Hittite’s property perhaps, is associated with a bad memory to the city’s inhabitants and the royal family. Therefore, they did not rebuild
Traditional but rather overlapped its ruins with new structures (figure 9.21). This development reflects the new political status of Ugaritic people after the city became free of the Hittites’ control during its last phase. The development of the whole area could not be completed eventually owing to the final destruction of the city in 1185 BC.

Figure 9.21: The developments of the Old Royal Zone over the ruins of the North Palace.

House B of block X in the South City presents a very good example of two types of transformation carried out on Ugarit’s structures after the earthquake. The first development involves a mixed reconstruction of the demolished structures, incorporation of original intact parts and new additions that follow new architectural concepts, built with better materiality and techniques. The southern part of the house was reconstructed after adding a colonnade courtyard around which the building’s functions were organised (figure 9.22) (see also section 7.3.1). The other development is about an extension to the structure to facilitate another function with strong relationship to the original part. The northern part of House B of block X is an autonomous unit that was added to the structure and functioned mainly as a residential and educational apartment for the house owner. Adding this unit facilitated better privacy for the owner’s family without any negative interaction with the multifunctional apartment to the south. However, a very good connection that respected this privacy was maintained between the northern and southern parts of the
house (Figure 9.22). Many other examples followed this type of development in Ugarit; this, for instance, applies to (House C, Block VI South City), (House A, Block X, South City) (see section 7.3.1), the addition of Pillared Building to the north of New Royal Plaza, as well as the development of the Royal Palace by consequent additions with new functions over 200 years (see section 6.2.2).

Figure 9.22: The development of House B, block X, South City.

The last development in the city is manifest in the reconstruction of structures using original form and footprint, enhancing thereby building materiality as much as possible. Many examples around the city follow this type, such as the Royal palace, most of the Old Royal Zone’s structures, the Temple of Baal, all houses in the Residential Quarter and many other houses in the city.

These four development forms should be highlighted across the city through specific interventions that guide visitors to grasp them thoroughly. The proposed approach should align to the conservation procedures which were presented in previous chapters for each area individually. The main aim is to create sensible and comprehensive connections between the fragmented areas of the site, their
components (houses, tombs, etc.) and assigned conservation procedures. Therefore, it is crucial to understand how the inhabitants were distributed in the city and highlight the differences between discovered areas, which ultimately represent how that affected the city’s urban dynamic.

### 9.4.3 The City’s Zone and Street Network

Inhabitants’ distribution in the city is another important urban dimension to be investigated. In many contemporary cities in Ugarit’s time, such as Hattusa, Ebla and Mari, the city’s urban form strongly reflects the hierarchy of social classes. For instance, the excavated part of Hattusa (figure 9.23) reflects the social division of the city’s inhabitants. The strongly physical manifestation of the division between royal (figure 9.23b), administrative, religious (figure 9.23a) and public parts makes visitors easily read the city’s social classes. Division according to social hierarchy and wealth gradually decreases from the centre (the royal or administrative forts) to the city’s southern edge (the public and worker houses). The discovered fabric consolidates this interpretation and visitors can easily recognise the level of architectural quality of each part in the city.

![Figure 9.23: The City of Hattusa, Bogazköy, Turkey © UNESCO](image)
The City of Ebla provides a similar prototype. The palaces, temples and monumental buildings are located in the centre of the Tell, the surrounding areas were devoted to public people, and the last ring was occupied by workers (figure 9.24). The architecture and materiality of the discovered buildings reflect the difference in wealth between the centre and edges of the city. The same division is recognised in Enkomi, Cyprus; however, the topography is quite different (figure 9.25).

Figure 9.24: The City of Ebla, Syria (Source: http://www.ebla.it)

Figure 9.25: Enkomi, Cyprus (Source: The British Museum).
The City of Ugarit is considered exceptional regarding the inhabitants’ distribution within the city. The analysis of all discovered areas in previous chapters, the domestic areas in particular, shows that the division of the districts does not reflect the people’s social hierarchy (see section 7.3.1) which had existed in Ugarit. Instead, the city’s districts were identified in light of the dominant functions regardless of how wealthy the inhabitants were (figure 9.26). The physical fabric explicitly manifests this fact. For example, the Residential Quarter, which scholars used to name as Aristocratic Area owing to the high quality of buildings’ materiality, comprises many small and simple houses whose area is sometimes around 60 square meters and which consist of four simple spaces (Adjacent House and House of Rasapabu). On the other hand, some big and rich houses (House B, Block X, 250 square meters) which reflect the owner’s importance and wealth are located in South City. This house accommodates several professional workshops and storages. Archaeological analysis pointed out that the northern part at least was built in three storeys, while the southern part was built in two storeys (see section 7.3.1). This strongly reflects that the house owner was a member of a higher-position social group and did, nevertheless, build his house in the same area where many simple and poor houses existed.

The better materiality of the buildings at the Residential Quarter can be attributed to the urban development process and its location directly to the east of the new urban artefact, the Royal Palace. This area was consequently the first area to be influenced by the new architectural and urban developments in the city after building the Royal Palace. Prior to the construction of the Royal Palace, the Royal Area and Residential Quarter were occupied by dispersed simple and poor houses as the sounding at the eastern part of the Royal Palace has confirmed (see section 9.4.2). That made possible the carrying out of huge improvements in this part of the city, unlike the case around the temples where most inhabitants had lived in dense fabric. Subsequently, huge improvements were applied onto the architecture and technology of the houses in the Residential Quarter, which resulted in well-constructed and organised structures. The changes do not necessarily reflect the wealth of the inhabitants, but rather the new architectural trends and urban development processes.
Based on the written sources, it was confirmed that the palace controlled the city’s trade with other cities and cultures. The analysis of the Residential Quarter shows that it comprised some public buildings (tavern, baking oven) and shops (single shops and bazaars). Therefore, it can be assumed that the inhabitants of this area supported the royal family’s trade and worked on internal and external trade. On the other hand, the South City area accommodates different professional workshops (bronze workshops, oil presses, mills, etc.) and shops and storages attached to the houses. Consequently, professional work and the city’s production was centralised in this area and perhaps also in neighbouring areas, such as the City Centre and the South Acropolis Slope. The Acropolis and the Lower City are different as very few workshops were found there. The inhabitants of the Acropolis area most probably worked on serving the function of the two big temples, maybe on farming too whereas the findings of the Lower City indicate that the inhabitants were normal workers who came from the kingdom’s towns and villages or sometimes from far away to work in the capital City of Ugarit.

Figure 9.26: The possible zones of Ugarit according to inhabitants and functions distribution.
To sum up, people from different social classes were living together in the same domestic area and the urban organisation of the City of Ugarit is a functional-based type. Consequently, the city’s districts can be identified as royal and public trading, professional, religious and worker areas (figure 9.26).

Revising the relationship between the Royal Area and the rest of the city confirms this fact. Although the Royal Palace was separated by a checkpoint, it was physically very well connected with the city (see section 6.2). The palace occupies the western part of the Public Plaza without any strong fortifications to separate it from other parts to the east. Accessing the New Royal Zone from the city-side, therefore, was significantly simpler than it was in many contemporary cities of the surrounding cultures. This principle further differentiates Ugarit as a friendly city that had a high quality of social interaction among its inhabitants and also between the inhabitants and their rulers. This principle is very important to be highlighted in a wider conservation proposal on a city scale. The concentration of the city’s production in the eastern areas of the city (South City, City Centre, South Acropolis Slope, etc.) promotes the interpretation of other possible accesses to the city from northern, southern and eastern sides. These possible accesses are essential for enhancing the production of the city through facilitating strong relationships with the resources, the farms. Therefore, and once the southern access had been confirmed, it is highly possible that the city had another two accesses from northern and eastern sides. This interpretation sounds highly logical taking into account many discovered cities, contemporary to Ugarit, such as Ebla at Mesopotamia and Enkomi at Cyprus whose structures were based on the four-access system.

### 9.4.4 The City’s cultural Values at an Urban Level

Based on the analysis above, the cultural values of Ugarit’s urban form and structure are as follows:

1. The location and morphology grant the city unique characteristics within the surrounding landscape and make clear its controlling role;
2. The external representations of the city (walls and gates) are of monumental and cultural significance;
3. The urban form of the city presents the Ugaritic people’s planning experience to organise their structures on difficult topography;
4. The connection between the main temples and the Royal Palace manifests cultural and economic characteristics of the city;
5. The urban development forms in the city show various and valuable transitions which touch political, economic, social and cultural aspects of the city’s life;
6. The functional-based distribution of people within the city is a valuable aspect that differentiates Ugarit from other contemporary cities and highlights the sustainable social environment of Ugaritic people during the Late Bronze Age;
7. The innovation of the Alphabet and alphabetic writing system, a unique event in Ugaritic history, revolutionised the city’s performance and facilitated our understanding of Bronze Age life. This aspect is physically manifested by the distribution of libraries within the city (see figure 5.8);
8. The strong connections with the related harbours are reflected on the city’s urban organisation and morphology.

9.4.5 Urban Conservation Proposal

Following the discussion of the city’s urban values, and also of certain buildings within the site’s context rather than individually, the conservation proposal will be established on varying scales. It will consider the city in its totality as one object and its relationships with the surrounding landscape. Also, the relationships and the internal dynamics between the fragmented areas of the city will be represented.

The city constitutes a distinguished landmark in the area, so it is crucial to guide the visitors to appreciate the city’s external image. Therefore, the monumental gate from the last phase will be reconstructed using light materials (see section 6.3.2). Also, the available stones of the rampart wall will be returned to its location, and after which the wall will be completed using the same new material of the gate. This is to represent the actual monumentality of the city’s gate and underline its Late Bronze Age external image (figure 9.27). Completing the last phase gate while maintaining the ruins of the access from the previous phase will, moreover, grant the visitors
substantial recognition of the historic transformation of the gate and, consequently, of the political and economic evolution of the city. The site is still surrounded with private lands from the other sides and, therefore, the visitors will not be able to approach it except from the western side. The southern and eastern sides are bordered with private citrus fields, whereas the 8-meter wide street and private houses adjoin the northern side of the city (figure 9.28). The northern side has been suffering from erosion for a long time, and a substantial part of the ruins has been lost. Therefore, for site protection and safety reasons, the reconstruction of the potential access to the city from this side is not possible.

Figure 9.27: The reconstruction of the city's western gate.

Figure 9.28: The City of Ugarit: the site's context.

Thus, the other potential original accesses will be highlighted from inside the city within the urban structure. The reconstructed gate will be the first option where visitors can go up (see section 6.2.4, 6.3.2), explore the city’s territorial relationships, and make visual contact with its dominated harbours (figure 9.29).
The concept of cultural routes, which has been proposed in the Royal Area (see section 4.3.3 & 6.3.2), is sufficient to be used again, but on a larger city scale. The new routes will be connected to those already proposed in the Royal Area to represent the strong original connections between the area and the rest of the city, achieve sensible narrative for the whole city, and avoid any confusion or transmitting misleading interpretation to the visitors. The main aim of the proposed routes is to establish complementary narratives which contribute to the architectural, urban and cultural readings of the city. Proposing new routes will take into account the excavated streets and their hypothetical extensions to connect between the distinct uncovered areas. This will also be an opportunity to reconnect the original urban structure of Ugarit, allowing visitors to easily read and absorb it. One of the routes will be also dedicated to connecting between the various types of urban developments, mentioned earlier. These routes will be of a high educational value.

The first proposed route is to highlight the direct relationship between the Royal Place and the main temples. 50-60% of this route has already been excavated; however, the rest is still hypothetical based on the possible extension of excavated parts which adapt to the city’s topography (figure 9.30). Visitors will be able to easily differentiate between existing and hypothetical parts of the route using the

Figure 9.29: The reconstruction of the city’s western gate: exploring the site’s territorial relationships.
ruins and the route’s materiality as a reference. Nevertheless, it is important to differentiate them through a special design that can be used for hypothetical parts of all proposed routes, considering that they will be installed over non-excavated lands.

Figure 9.30: The city's general map: the proposed route that links between the palace and the temples.

This route will continue inside the New Royal Zone using the two potential accesses and proposed routes there (see section 6.3.2) (figure 9.30). Reconstructing this direct link between the Royal Palace and the Temple of Baal will stress the urban and cultural dimension of the city’s life. First of all, it will highlight the easy access to the Royal Palace from the city’s side as well as the strong relation between the temple and the Royal Palace. Secondly, it will allow visitors to experience the difference in architecture between the western and eastern parts of the city: the
gradual decrease in the architectural quality from the palace to the temple speaks of the city’s urban evolution. The comparison between the houses of the Residential Quarter and the houses from the Acropolis, through which this route passes (figure 9.30), will make this differentiation even easier. This will subsequently reflect the power that the palace had which was greater than that of the temple in the last phase of the city. In addition, visitors will be able to recognise cultural aspects of ancient people, like how they organised themselves accordingly around the two dominant structures in their life (the temple and the palace). The route will also clearly reflect the difference between the urban pattern around the temple (figure 9.31a) and the Royal Palace (figure 9.31b). Consequently, the route will convey a strong educational value, like how the nature of an urban focal point plays a significant role in developing the urban pattern of the surrounding fabric.

Figure 9.31: Presenting the difference in urban patterns accordingly with the dominant urban structure. (a) Acropolis area. (b) Residential Quarter.

This route is part of a complete ring-shaped route C which will be proposed as a reconstruction of the main streets that connected the different areas of the city (figure 9.32, 33). This route will enhance the visitors’ experience of urban development in the city. It will present the movement pattern in each discovered area as well as among different areas of the site. Moving through different areas of the city, this route will enhance the visitors’ recognition of the physical condition, materiality and function of each area. Connecting this ring with the Royal Area proposal (see section 6.3.2) will make possible the link between the four urban development patterns of the city, identified earlier in the analysis (figure 9.33a, b, c, d). Starting with the 16th-15th century BC access of the city, moving through all excavated areas, and then using the
second phase 13th century BC monumental gate to exit the city constitute a small prototype of the whole urban experience, presenting the overall development and patterns. The route goes along buildings that follow the four main forms of urban development (figure 9.32): the monumental gate (a), North Palace (b), Temples (c), the two Public Plazas and House B, block X of the South City (d), in addition to several houses and public buildings. Therefore, it will be an intrinsic opportunity for valuable lessons about the urban design and development in the City of Ugarit during the Bronze Age period (figure 9.33).

Figure 9.32: Proposed route C on the city map.
Another 3 ring-shaped routes (A, B and D) will be added to highlight the urban structure of the city. These routes will additionally make stronger connections between fragmented areas, and accommodate further urban and cultural narratives, that enhance the visitors’ urban experience (figure 9.34). As to route A, it constitutes the smallest possible ring on the site considering the excavated part. This route shows the relationship between three main areas which represent the old parts of the site: City Centre, Acropolis and South Acropolis Slope. The route in general presents houses from the same period and is in a similar physical condition. These areas reflect the urban pattern of the end of Middle Bronze Age or very beginning of the Late Bronze Age period, when the temples had a stronger, perhaps absolute, power in the city. Many improvements were carried out there; however, the overall character did not change as was the case in the South City and Residential Quarter. The excavated parts of the three aforementioned areas show that they maintained the urban form of the Middle Bronze Age, which was distinguished by the absence of urban elements such as plazas or squares. The urban form of these areas is characterised by residential blocks which are separated by narrow streets and closed
lanes. The urban development process in these areas was not obvious as they are far away from the Royal Place around which the new urban development focused.

Figure 9.34: Proposed routes A, B, C & D on the city's map.

A larger ring-shaped route, route B (figure 9.34), will be installed to connect the domestic areas with the Acropolis and the temples. This route aims to facilitate connection between most discovered areas and highlight their relationship to the temples as one of the dominant urban elements. Also, the route will represent the connection between old domestic areas (east) and the most developed domestic area on the site, the Residential Quarter, to the west. As it will pass different domestic areas, the route will allow visitors to experience different neighbourhoods and pedestrian movement patterns: going through excavated areas such as the South City
(figure 9.35a) City Centre (figure 9.35b) or Residential Quarter (figure 9.35c) will make possible the recognition of various pedestrian movement patterns.

Figure 9.35: Various pedestrian movement patterns in Ugarit. (a) City Centre. (b) Residential Quarter. (c) South City.

The local sanctuary of the City Centre, Sanctuary of Rhytons, is located on this route. Therefore, moving from route B to route C will enable visitors to compare this sanctuary with the other local sanctuary, the New Sanctuary, and identify the evolutionary aspects (figure 9.36). It will also allow visitors to continue to the Royal Sanctuary and recognise its different form and composition. Thus, moving from one ring to a wider one will be accompanied with architectural and urban evolutionary aspects of the city.

Figure 9.36: Presenting the evolutionary aspects between (a) Sanctuary of Rhytons, City Centre. (b) The New Sanctuary, Old Royal Zone.

Route D is the largest possible ring-shaped route on the site (figure 9.34). The importance of this route is that it adjoins the site borders and, consequently, visitors will be able to conceptualise the ruins and the surrounding landscape. This route also includes the two riverbeds, the city’s natural border-lines. A substantial part of the
city’s wall, which is most probably parallel to this route, is still embedded in the non-excavated part of the Tell. With future excavations, the significance of this route will be promoted by identifying the urban structure of the city’s edges and confirming that people from different social classes had occupied these edges, not only workers as in other contemporary cities to Ugarit. So far, the route is going through the Lower City (figure 9.37a) and South City’s houses (figure 9.37b), House of Urtenu, Main Street area (figure 9.38a), House of Yabninu and the New House (figure 9.38b) which is still under excavation. This will underline the interpretation that the urban design in Ugarit did not consider the existing social classes, but fusing people from different economic levels living together. By musealising the physical evidence of the city’s edges, visitors’ recognition of this significance will be enhanced. The route also highlights another connection between the city and the Royal Palace through the southwest access of the palace.

Figure 9.37: (a) Houses in the Lower City (Castel, 2004). (b) Houses in the South City.
In addition, this route (D) embodies some educational values. For instance, the north part, linking the Old Royal Zone and the Lower City, presents to the visitors the great evolution in Ugaritic Funeral Architecture. Establishing a direct link between tomb 50 in the Queen Mother House (figure 9.39), tomb 202 in the North Residence (figure 9.40) and tombs 56&57 of the Lower City West (figure 9.41), allows visitors to easily infer the evolutionary approaches in the tomb’s architecture, form, space and building technology.

Figure 9.39: Tomb 50 in Queen Mother House, Old Royal Zone.
Routes B and C also give the same opportunity to visitors to compare between Middle Bronze Age tombs at the Acropolis and Late Bronze Age ones of the South City and Residential Quarter. For example, Route B links between House of Rapanu’s tombs, tomb of House A, block V at the South City and several tombs of the Acropolis and South Acropolis Slope. Moreover, route A, B and C together constitute a proper spiral path to musealise the tombs of House of High Priest of the Acropolis area (figure 9.42), House B of the City Centre area (figure 9.43) and House of Rapanu of the Residential Quarter (figure 9.44). Visitors, consequently, will recognise all changes that took place in the funeral architecture of the city between Middle and Late Bronze Age periods.
Figure 9.42: Tomb 103 in the House of High Priest, Acropolis area.

Figure 9.43: Tomb 1068 in House B, City Centre.

Figure 9.44: Tomb R2 in House of Rapanu, Residential Quarter.
The other educational value of route D is that the newest discovery on the site, the so-called the New House, is located on this route. Consequently, this will be of high importance and show visitors the difference in excavation approaches between early 20th and 21st century AD in Ugarit. The southwest part of route D will connect the Royal Palace, House of Yabninu, the New House, and House of Urtenu. This part has a great potential to involve such interpretation and display the difference in archaeological excavation works between Schaeffer and the new team. Highlighting the extra 50-70 centimetres Schaeffer excavated down in the original ground of the structures will clarify how the new team had benefited from Schaeffer’s mistakes. Consequently, the New House, which does not show this mistake, presents a good archaeological approach at the present time. Also, Schaffer carried out his excavations without analysing and documenting everything in detail. He uncovered large areas of the site during a short period of time. The New House, on the other hand, has been under excavation and analysis for more than 12 years. The very good documentation and preservation works there will highlight another difference in excavation approaches and how the new team became more cautious.

Two additional routes (E1 & E2) will be added to create connections between the ring-shaped routes, and highlight the other potential accesses to the city (figure 9.45). Route E1 in the southern part of the site will connect the Public Plaza in the South City with the Main Street area and the southern edge of the city. This route will offer visitors the original experience of ancient people in approaching the southern fields from inside the city. At the end of routes E1 and E2, timber platforms will be created. Subsequently, both routes (E1 & E2) will allow visitors to explore the surrounding landscape from inside the city.
All routes will be divided into excavated and hypothetical parts. The excavated parts will follow the approach of each area, explained in previous chapters. However, the hypothetical parts will be designed of timber decking with metal baluster. These hypothetical parts, which cross empty unexcavated lands, will be suitable places for descriptive panels that establish connecting narratives between the discovered areas. Consequently, this will guarantee a continuous narrative all over each route and, sometimes, connect between narratives where there is movement from one specific route to another (figure 9.46).
Distributing the visitors on different routes will allow them to experience the urban environment and ancient people’s movement within the city. This distribution will lead visitors to meet in specific streets, squares and plazas. Therefore, they will easily appreciate the level of social interaction which is offered by each urban element. Consequently, visitors will recognise the significance of these open spaces (public plazas, for instance) for the urban and social life of Ugaritic people.

The reconstruction of the city monumental gate, parts of the Royal Palace (see section 6.3.2), and the Temple of Baal (see section 8.4.1) has a significant role in restoring the morphology and regional importance of the site. These reconstructions will inevitably restore the city’s visual connections with its related Late Bronze Age sites in the region. They will also represent the city’s original significance as a landmark for all the surroundings. Moreover, the reconstructed temple will offer another potential where visitors can climb to the top and explore the city’s region and territorial relationships. From the top of the reconstructed temple, visitors can also
have a better reading and appreciation of the city’s urban structure and recognise its potential accesses.

9.5 Summary

Ugarit is the city where people had worked hard to organise their urban environment through subsequent social and cultural developments. However, the final urban form was of an organic structure. The location of the city and its relationships to the surrounding suburbs and landscape enabled its development to the stage of a capital city, or a city-state, of a relatively big civilisation. The use of the concept of cultural routes has sufficiently contributed to the visitors’ experience on the site and promoted their recognition of different social, cultural and urban aspects. The proposed routes are the physical means along which the urban experience and the embedded educational values have been unveiled and organised.

Moreover, the concept of cultural routes has significantly contributed to the connection between fragmented areas of the site and making sense of their exposed narratives. Proposed routes have made possible the representation of the urban dynamic between different areas of the city, and addressed larger urban dimensions, on the city scale, in the conservation proposals. For instance, many narratives of the domestic areas and tombs have been sufficiently connected and justified in a city-scale proposal. The contribution of the city’s urban proposal has significant educational dimensions. The visitors’ self-experience, the development of urban design aspects during the Bronze Age, and the development of archaeological excavation approaches between the first half of 20th century and the present time are the most important educational messages that students from different disciplines and interested visitors might obtain along these routes. These values, along with other educational values of each area in the city which were discussed in the previous chapters, constitute fruitful diverse lessons within the authentic ruins of Ugarit.

Future excavations are quite important for confirming specific interpretations concerning the urban structure of the city. For example, the potential southern and northern accesses need further excavation to clarify their nature and other possible gates which organised the traffic from and into the city. In this case, it is crucial to
search beyond the city walls. The northern area has been significantly eroded, whereas the southern borders are still intact. Therefore, future excavation at the borders and riverbanks might bring to light interesting stories about linking the city with its surrounding fields; these excavation works would also unveil some valuable fact about the structure and the quality of the city walls out of the Royal Area.

Since the city is considered a landmark within the region, any conservation project for the sites around Ugarit, particularly the two dominated harbours, should consider their regional and landscape characteristics and mutual relationships with the capital City of Ugarit.
Chapter 10 Conclusions and Future Expectations

The study set out with the main aim of establishing a comprehensive conservation framework for archaeological sites in Syria with the City of Ugarit being the main focus. Achieving this aim was done by attempting to establish correlations between three main disciplines (archaeology, architecture and conservation) that have contributed to a critical and sensitive conservation framework that enables representing the knowledge of the original fabric. Sensitivity of the framework and the correlations between the three disciplines have made it possible to promote specific interventions that exceed the simple maintenance and anastylosis work on the fabric; they have, further, enhanced the role of design approaches to the site that respect the fabric, expose the knowledge properly in spatial resolution and elaborate the communication and educational values of the ruins. All these aspects have been achieved throughout the thesis by materialising the theoretical discussion and analysis of the city’s archaeological knowledge and architectural and urban fabric through a virtual representation/model.

Each chapter of the thesis has a comprehensive conclusion of its outcomes; however, there is still a need in this chapter for reviewing the original aims and objectives of this study, highlighting by doing so its contributions to archaeological sites in general and Ugarit in particular as a specific case study.

10.1 Has the theoretical and conservation framework met the objectives?

The comprehensive theoretical review in Chapters 3 and 4 allowed me to check for suitable interfaces among the three disciplines that inform the site’s preservation and presentation strategies, in line with its cultural, historic and artistic conditions. Consequently, various approaches and principles have been adopted for the conservation and presentation of archaeological sites’ original fabric in general and Ugarit in particular.

The outcomes of this study reflect the importance of building a coherent theoretical framework for the preservation and presentation of ancient sites. This PhD study
focused on the constituent parts of the site and further emphasised that every single case or part has an equally essential, albeit different, contribution to the composition of the conservation framework, based on the area’s history, values and physical condition. On the other hand, the study has confirmed that it is possible to build a general methodology and framework in accordance with the site’s characteristics. Thus, it is strongly advised that approaches to such sites be informed by a direct engagement with and critical assessment of their archaeological, architectural, historical and cultural aspects. Therefore, this research has explored the intersection points between archaeology, architecture and conservation, creating a coherent methodology which could eventually be exported into the restoration and presentation of more archaeological sites in Syria following necessary amendments that are relevant to the specific character of the site under investigation.

The City of Ugarit was used to corroborate the methodology for the conservation approach. Chapters 2-5 established a theoretical context for archaeological sites through focused analysis of archaeological, architectural and conservation terms. The interdisciplinary nature of this context allowed me as an architect to eventually build a critical and design-led methodology and conservation framework. The analysis made it clear that building an architectural theoretical framework is essential for reframing the largely archaeological knowledge of the studied cultural heritage and ancient people’s identity and attitudes within their original and spatial settings. Conservation approaches, on the other hand, establish the medium through (vehicle by) which this knowledge is transmitted and conceived. Therefore, the relationship between archaeology and architecture has been crucial here for composing an effective method that would decipher the stories of any archaeological sites injecting them with educational aspects. As a result, the concept of archaeological site in general, the City of Ugarit in particular, has been contextualised within the archaeological and architectural conservation sphere in Part I of the thesis. Also, a suitable interdisciplinary conservation and presentation framework was established.

The study of Ugarit was based on reading and understanding a huge amount of archaeological and excavation reports which were produced by the French mission to the city; this made possible to establish a coherent interpretation of the ruins.
Deciphering the knowledge embedded in the ruins was the main aim of employing archaeology as a discipline in this interdisciplinary research in architecture, displaying this knowledge on different scales and by using various concepts such as stratification, musealisation, memory and restoration of fragments. This, consequently, clearly enhanced the understanding of various archaeological terms in the City of Ugarit and made possible the identification of various evolutionary principles of the city’s history, built environment, and ancient people’s attitudes.

The conservation framework is based on a critical judgement of each representative area in the city and advocates giving more freedom to contemporary architectural principles in order to evoke the ruins interpretation in spatial forms using their physical and cultural conditions. Therefore, the study has recognised the immense role of values-based and critical conservation approaches in building the required framework for the conservation of Ugarit. Although the study adopts a values-based conservation approach, it is not only preserving the ruins of the past but also allowing continuous use of the site in different forms and functions. Through this research, proposing specific interventions allows the transformation of the neglected ruins of Ugarit to an open-air museum and an educational place of the Bronze Age. These interventions are mainly based on identifying and prioritising the original and contemporary values of the ruins and follow critical conservation judgment for any addition onto the authentic fabric. For that purpose, critical approaches were adopted everywhere in the city to expose specific aspects of the site's stratigraphy and building skills and culture of the original builders, as also in order to reconstruct some of the ruins that show strong conservation and educational potential. The concept of the proposed interventions is based on critical approaches which focus on the spatial representation of the essence of the ruins, but in design principles that advocate carefully manipulating all new loads away from the original fabric. The materials used were critically chosen in accordance with the expressed values and the fabric condition; therefore, most interventions were made of sustainable, reversible and distinguishable materials, aiming to a clear protection and a separation layer (the original mortar in most of the cases) between the original fabric and the addition. Thus, a conservation framework adopting a critical stance was deemed best to a study of the ruins of Ugarit, bearing in mind the ancient city that has not been fully
excavated yet. In conclusion, the composition of the final conservation framework enhanced the understanding of the mechanism through which the conservation of archaeological site, the City of Ugarit in this research, was carried out; the city’s values were transmitted in a way that represents ancient people’s achievements and makes them relevant to the modern Syrian communities.

10.2 Has the conservation framework had positive implications on the understanding of Ugarit’s values?

Many areas of the City of Ugarit are in a fragile condition; therefore, the study considered a wide range of architectural interventions which varied from simple maintenance to full reconstruction, while maintaining cautionary and full appreciation of the authentic fabric. Choosing the level of intervention was based on the characteristics of each case, its intrinsic values and educational potential. Therefore, and to contextualise the conservation framework, a wide range of conservation case studies were reviewed in Chapter 5; this constituted an inspirational repository for developing creative proposals for each area of the city, whether on an architectural or urban scale.

The City of Ugarit comprises various types of structures (e.g. palace, public buildings, temples and houses). Each area manifests different architectural, urban and cultural settings and, therefore, the study initially focused on each analysed area separately to become later on interlaced throughout in a coherent urban narrative. In-depth analysis was carried out on each area in order to decipher its cultural values. The site’s history and evolutionary aspects have been distinctly highlighted in the ruins of different areas. For example, the stratification of the Royal Area has unveiled the political and economic development of the city between 16th and early 12th century BC. Also, the analysis, carried out on the Acropolis, confirmed that the use of the site is steeped in its history, well before the Middle Bronze Age as the ruins of the temples confirm. However, the Neolithic period was also revealed through soundings in the area. The extensive analysis of the site’s domestic architecture contributed to the evolutionary analysis of the city. The development of the Ugaritic house and its integrated funeral structure revealed a huge advancement in architectural concepts, space characteristics and construction techniques. The
analysis also unveiled some changes occurring to Ugaritic people’s social and cultural attitudes as well as their conscious appreciation of architectural and urban spaces in the city. Actually, the earthquake of 1250 BC that Callot proposed was the stimulation around which the analysis has been built, and which triggered different and profound trends of evolution in the city. This catastrophic event at that time of the city’s life has now become one of the best contributing factors to the understanding of the city and its architectural, urban and cultural developments.

The creation of a theoretical framework for Ugarit begged the considering of the fact that the site has still not been fully excavated but is yet presenting an authentic fabric that was hidden for more than 3000 years. The conservation proposal of each area has highlighted the exceptional role that the specific area played in the political, economic and cultural history of the city. Specific cultural and architectural values were also identified through a detailed critical analysis of each area: political evolution and civilization characteristics in the Royal area, People’s identity, social values (the cult of ancestors and family or clan life-style) and architectural concepts (multifunctional houses, the concept of privacy and the development of open, private and public, spaces) in the domestic areas, and the origins of the city and the religious values of the temples in the Acropolis. Design approaches were discussed and critically applied to map these values onto the original fabric, fundamentally taking into account how to create an architectural experience for the visitors and enhance the educational values of the ruins.

Consequently, the wide range of interventions proposed in Ugarit has enabled better reading and perception of the architectural and urban principles of space in the city. They also facilitated the identification and presentation of the diverse artistic, historical and cultural values rooted in the authentic ruins.

The city’s political power and its development as an outstanding historic aspect has been established and represented in the Royal Area through a musealisation approach to the Old and New Royal Zones. The enhancement in architectural monumentality and space organisation has been highlighted by critical acts and reconstructions of specific architectural elements and the area’s stratigraphy. The consequences of political and economic advancement have been mapped on to the city’s domestic...
In another vein, the conservation of religious buildings in the city has further enhanced the representation of Ugaritic people’s experience by highlighting planning skills that Ugaritic masons used in building the two massive temples on the Acropolis during the 19th century BC. The conservation of the two gigantic temples on the acropolis has complementarily reflected the historic stratigraphy and architectural monumentality of this area. The conservation of these temples and the Royal Palace has strongly contributed to the understanding of the city urban structure and development process over 800 years of the city’s history. Additionally, the local sanctuaries’ proposal has provided more evidence about the architectural evolution and planning skills of the ancient people of Ugarit, as well as their urban experience in considering the neighbourhood scale and the inhabitants’ demands for local social and religious centres.
The urban proposal of the city has mainly contributed to connecting the former proposal in a constant narrative that reflects the city structure and its distinction from other contemporary cities from surrounding civilizations. The location of the Royal Area and the type of social relationships among people and between people and their ruler were among many characteristics that encouraged considering Ugarit a well-developed and peaceful city-state of the ancient world. These characteristics have been mapped onto the city’s original fabric by establishing specific interventions that highlight urban and architectural open spaces in the city and the relationships between them. The conservation proposal has advocated installing specific routes on a city scale which connected the fragmented areas, provided original architectural and urban experience to the visitors and established a complete and constant narrative out of the city’s ruins.

Conservation and design proposals are not only deemed to enhance the preservation and presentation of the site’s physical fabric and intangible aspects; they also activate an outstanding educational value of the site: within the fabric, proposed interventions has promoted an invaluable lesson of Ugaritic people and their political, economic, architectural, and urban achievements during the Bronze Age. From outside the city, people are exposed to appreciating the external monumental image of the city during its life while from the top of the reconstructed gate and temple, they can obtain valuable experience concerning the city’s urban structure as well as its landscape and regional relationships. Full account of proposed interventions are represented in the following map (figure 10.1)
Figure 10.1: Proposed interventions are represented on the overall map of the City of Ugarit.
10.3 Was the use of a virtual modelling approach effective?
A virtual modelling approach simulated the application of the framework on the ruins, both for representation purposes and as an analytical tool to experience the reconstruction, visualisation and understanding of the space. It was very useful to assess the effects of the conservation proposal on the ruins and also test the resolution and materiality. I believe this approach will be highly beneficial in the conservation field, as the proposed interventions can be tested before implementing them on the site, thereby minimising inappropriate architectural interventions as much as possible. Different types of architectural experiences have been tested: the reconstruction of the temple of Baal, the stratigraphy musealisation in the Temple of Dagan, the recreation of the original interior environment of the Ugaritic house, the presentation of the evolution of semi-public spaces and other urban aspects in the city, the intervention to Ugaritic funeral architecture, the reconstruction of Ugaritic house, etc. Interventions, materiality and the proposed experience to the visitors have been carefully tested by creating videos and rendered images of the conservation proposal with the original fabric of each case.

10.4 Additional benefits of the conservation framework
The location of the city gave various rich architectural, urban and cultural clues that its people used to form innovative designs and construction principles. Exposing these principles fertilised the interpretation of the ruins with the effects of exchanging knowledge between different cultures during the Bronze Age period. Ugarit mingled with at least five different cultures, producing the civilization’s particular political, economic and cultural system that manifested in equally unique architectural principles which differentiated Ugarit from other surrounding cities in Syria. This knowledge makes the conservation of Ugarit of a high didactic value. Interventions, therefore, varied from simple restoration to complete reconstruction of buildings or a specific architectural and urban experience. Some routes that were re-configured on the site (e.g. the Royal Area or its connections with the Acropolis and the Lower City) have been equipped with a cultural narrative and designed to show a set of values or stories on different scales. Since the site has not been fully excavated, proposed interventions had to consider the new information which may only come to light by means of further excavation. Also, the conservation proposal may encourage
the direction of future excavations to complete specific stories and then expand to
discover new stories in the city and connect them to the current ones.

10.5 Limitations and future expectations
Due to the fragility of the ruins and dense vegetation, some areas were not accessible
during the in situ architectural analyses and observations carried out in May 2013.
However, the huge amount of archaeological and excavation reports made it possible
to understand these areas, with reference to other accessible areas which comprise
similar fabric and architectural principles.

I strongly believe that heritage conservation strategy should present alternative
proposals. This study presents one point of view, but one which is nonetheless based
on a critical analysis and appraisal of the site’s values. The sensitivity of the
proposed interventions is such that it allows any alternative to be placed in the future
without affecting the original fabric. Additionally, the current proposal protects the
fragile structures from further degradation due to environmental and human factors.
This proposal has been created through the course of a PhD study, and the limited
time has not allowed for establishing a wider range of alternatives. It essentially sets
a frame for further research on the site where other architects could read, preserve
and present it using other approaches, information and theories.

Another two future expectations can be identified based on the outcomes of this PhD
research. The conservation proposal and strategy create a strong basis for the design
project to be implemented on the site. As an example of the concept design as it is
defined in the UK can be found in RIBA Plan of Work 2013 (RIBA, 2013). Yet, the
proposal for a detailed design study, provided it is funded by any international
organisation, will be a major milestone in highlighting conservation attitudes in Syria
and may lead to considering other equally important sites in Syria. This thesis
introduced a comprehensive conservation strategy which abstained from insisting on
specific design approaches or ideas. The main aim of that is to give more freedom to
the architect in the next step to explore conceptual, creative and/or poetic design
approaches based on the analysis and the conservation strategy presented in this
thesis.
On the other hand, the multidisciplinary conservation approach which adopts various concepts, including the virtual modelling approach, is worth testing on other archaeological sites in different geographic, historic and cultural settings. This will further expose the effectiveness of this approach in reading, protecting and presenting cultural heritage in different environments.

There are three potentials that constitute the next step following this research. The first potential could be, as mentioned above, the preparation of the design stage of the presented conservation strategy and the testing of some of the ideas on site but on a very small scale. This will be essential to experiencing the choice materiality and design concept and involving academic, professionals and community to assess the outcomes of the conservation proposal based on their response and feedback. Another potential would be to explore the effectiveness of the methodology employed for studying Ugarit using other case studies in Syria from the same historic period. This potential will verify the methodological contribution to the conservation of archaeological sites in Syria and that consequently would constitute a new route in Syrian heritage studies and conservation standards which is unfortunately missing at the present time. The next research avenue could manifest itself in a study of ruined medieval abbeys in the UK; these structures have good historic documentation and are still relevant to the community. Re-creating an architectural experience of these ruins through a comprehensive conservation strategy will release the authenticity of these frozen structures and maximise their appreciation by the public. Such a project will not only hold potential for the ruins per se, but also for public communities, teaching projects (especially in architecture and archaeology) and conservation bodies in the UK.
Appendices
Appendix 1 The Application of Space Syntax approach (Access analysis) on 22 Houses in Ugarit

Figure 0.1: House with a Portico, Residential Quarter.

Figure 0.2: House of Scholar, Residential Quarter.
Figure 0.3: House of Rasapabu, Residential Quarter.

Figure 0.4: Adjacent House, Residential Quarter.
Figure 0.5: House of Rapanu, Residential Quarter.

Appendix 1
Figure 0.6: House D, Lower City.

Figure 0.7: House A, Lower City.

Figure 0.8: House B, Lower City.
Figure 0.9: Triple House, City Centre.

Figure 0.10: House A, City Centre.

Figure 0.11: House B, City Centre.
Figure 0.12: House C, City Centre.

Figure 0.13: House C, block XIV, South City.

Figure 0.14: House A, block II, South City.
Figure 0.15: House G, block XIII, South City.

Figure 0.16: House A, block VI, South City.
Figure 0.17: House A, block V, South City.

Figure 0.18: Block I, South City.
Figure 0.19: House C, block VI, South City.

Figure 0.20: House C, block X, South City.
Figure 0.21: House A, block X, South City.
Figure 0.22: House B, block X, South City
Appendix 2: Historic Development of Temple Architecture in Syria

Religious buildings that date back to before the Neolithic period in Syria are only recognised by their footprint which is different from the surrounding fabric. The earliest example comes from Al-jerf El-Ahmar (the Red Cliff), 17 km Northeast Aleppo, Syria. The discovered circular building which is 8 m in diameter with loadbearing walls and timber columns is differentiated from all surrounding houses by its footprint and the presence of the altar. This encouraged archaeologists to suggest a social or religious function for this building; however, both functions were not separated at that time (Jamous, 2006, p.15-22). This type became common and more recognised on Neolithic period sites, and most scholars have named it a temple. Actually, it is not precise to name such public buildings as temples, even though they served as religious community centres. The most appropriate name for such buildings, as Jacques Cauvin suggested, would be a ‘sanctuary’ (Cauvin, 1972). In the same book, “Religions néolithiques de Syro-Palestine”, Cauvin pointed out that religious buildings would be revolutionised later in the Neolithic period. The religious buildings became more recognisable with better regular footprint. People then intended to expose the importance of these buildings by adding new architectural features that facilitated the function and, at the same time, characterised the building’s form from the surrounding fabric.

Figure 0.23: Discovered temple at Ariha, North Syria, from 7th millennium BC (Cauvin, 1972).
For example, the excavation works at Ariha, North Syria, had brought to light a 7th millennium BC sanctuary whose footprint looks more regular (figure 1). The access of this sanctuary was equipped with timber columns and the main hall (the most holy space) was separated from the access with a vestibule or portico. These features further emphasised the public and religious use of this building, considering the presence of the altar on the main hall.

The urbanisation development during the 6th and 5th millennium BC has immensely affected the architectural and urban principles of religious buildings in Syria. In addition to its cultural significance, the religious building started to constitute the catalyst point around which the town or the city had developed, for, at that time, the power of the religious centre influenced people’s life more than any other aspect. Consequently, it constituted the religious, political and administrative centre for the community and, therefore, it had been differentiated in form and materiality from the surrounding fabric, reflecting its significant role in the community’s life. The structure of these buildings became more dominant and equipped with better materials. The best example from this period is the discovered religious building at Tell Aswad (the Black Hill), Northeast Syria. This temple dates back to Halaf period, the second half of 5th millennium BC, and its design and materiality show a great improvement in religious architecture at that time (figure 3).

Figure 0.24: Discovered temple at Tell Aswad Northeast Syria, 5th millennium BC (Mohasin, 1986).
The 4th millennium BC had witnessed a striking similarities between Syria and Mesopotamia concerning building, writing and artistic aspects. From this period, excavations works released the first recognised temple’s form, the Three Elements Temple, at Aredo site in Mesopotamia (figure 4), and at Tell Brak and Tell Kanas in Northeast Syria (figure 5).

Figure 0.25: Discovered temple at Aredo site in Mesopotamia, from 4th millennium BC (Mohasin, 1986).

Figure 0.26: Discovered temple at Tell Kanas in Northeast Syria (a) North Temple. (b) South Temple. (c) East Temple (Mohasin, 1986).
Owing to the change in the political systems during the Early Bronze Age Period (the palace started to have more political and administrative power), worship became the dominant function of the temple. In many cases, each temple was assigned to specific deity or deities, based on the belief that the temple is the house of god(s). Consequently, the political power, location and importance of the assigned deity had played an essential role in forming the final design and quality of the temple. Therefore, in many temples from this period, the footprint had been better in regularity and presented in various forms. The discoveries from this period, the 3rd millennium BC, clearly show that Syrian and Mesopotamian cultures had different architectural approaches and principles in building their temples, although they formed their temples using the same basic elements and principles. They almost had the same worshiped gods; however, they expressed their attitudes differently based on the consequences of the urbanisation process in each area. Consequently, people’s attitudes, available building materials and location had primarily affected the temple’s forms and structure (figure 5).

Figure 0.27: The difference between Syrian and Mesopotamian temples. (a) Temple P2, Ebla (Matthiae, 1997). (b) Eye Temple’ in Tell Brak, Mesopotamia (Weiss, 1983).
The basic form in Syrian temple architecture, the Rectangular Temple, had come from this period, the Early Bronze Age (Margueron, 1985). It is considered a milestone in the history of Syrian temple architecture. Anton Moortgat had named it as the Antes Temple “The Temple with Antes”, whereas it is commonly known in Syria as “the temple with a portico”. In his book “Die Entwicklung der Sakralarchitektur in Nord syrien und Südostkleinasien: vom Neolithikumbis in das 1. Jt. v. Chr.” 1994, Peter Werner discusses the development of temple’s architecture in North Syria between the Neolithic period and 1st millennium BC. He proposed that many of Early and Middle Bronze Age temples in North Syria, such as Temple D in Ebla (figure 6a) and the temples at Tell Chuera (Orthmann, 1990) (figure 6b) and Tell Halawa (figure 6c) follow the Antes Temple form (Werner, 1994).

Figure 0.28: Early and Middle Bronze Age Antes Temples in Syria. (a) Temple D in Ebla (Matthiae, 1997). (b) Temples at Tell Chuera (Orthmann, 1990). (c) Temples in Tell Halawa (Werner, 1994).

In his book “Ebla and Syria in the Middle Bronze Age” which was published in 1997, Paolo Matthiae confirmed this very notion. he also insists that this temple’s typology came to light in the beginning of Early Bronze Age, and then turned out to be very popular in Syria during the Early and Middle Bronze Age periods; he suggests that this type could be named as a “Megaron” (Matthiae, 1997, p.391). Matthiae believes that the two buttresses around the entrance existed as a result of a development process which the columns, which were usually used to create a portico in front of the temple’s entrance, had undergone. Very good examples that would
support Matthiae’s argument can be seen in Ebla (Temple P2) (figure 7a) and Emar (The sanctuaries of Baal and Astarte) (figure 7b) in North Syria.

Finally, Jean-Claude Margueron, who worked on many archaeological sites in Syria, including Ugarit, has analysed the four discovered temples in Emar (figure 8); he, too, classified them under the Antes form (Margueron and Boutte, 1995).

In general, temple architecture in Syria had always had clear characteristics, although it had always been subject to influences from surrounding cultures. These influences varied with the temple’s geographical location and its distance from the surrounding cultures. For example, the influence of Mesopotamian architectural aspects can be seen in the temples located at the eastern part of Syria, whereas the temples at
Alalakh, North Syria, which maintained many of their traditional characteristics, had got some aspects from the Hittites culture (figure 9).

![Figure 0.31: Discovered Temples at Alalakh (Fink, 2010). (a) Level III Temple. (b) Level I Temple. (c) Level IA Temple. (d) Level IB Temple.]

In specific areas, Emar and Ugarit in particular, external influence was marginal and people maintained the local characteristics as much as they could; they developed the basic form according to the building’s purpose, material, location as well as people’s attitude. That is clearly manifested in Ugaritic temples which are considered to be very unique structures in Syria (see section 8.3.1). The architecture of the Middle and Late Bronze Age temples became clearer in terms of architectural features and organisation. The discovered texts from different cultures during these periods further promoted the understanding of these temples’ specifications. Based on a comparison between several Syrian temples in Ebla, Mari, Emar, Alalakh and Ugarit, Jean-Claude Margueron classified Syrian temples regarding their shape into (Margueron, 1985, p. 15-31):

1. Mass (Grumous) temples where (Length/Width = 1.33/1) as can be seen in Alalakh and Ugarit;
2. Rectangular temples where (Length/Width = 2.55 /1.49) in Ebla and Emar;
3. Temples that do not fit into the two aforementioned categories as in Temple B1 and B2 in Ebla (figure 10a);
4. Exceptional temple as in Dagan Temple (figure 10b) and the Red Mass temple in Mari (figure 10c).
Finally, considering the shape and the period and in view of Margueron’s classification, Syrian temples can be split into four main categories; they are simple Antes Temples (Antes Temple), the Developed Rectangular Temples (mainly 1600-1200 BC), Mass Temples and Tower Temples.

Figure 0.32: (a) Temple B2, Ebla (Matthiae, 1997). Dagan Temple Mari (Parrot, 1974). The Red Mass Temple (Parrot, 1974).

Figure 0.33: Various forms of Syrian temples during the Bronze Age period. (a) Dagan Temple, Mari (Parrot, 1974). (b) Temple P2, Ebla (Matthiae, 1997). (c) Main temples in Emar (Beyer, 1982). (d) Level IB Temple, Alalakh (Fink, 2010). (e) Baal Temple, Ugarit (Callot and Monchambert, 2011).
Appendix 3 The Legend of Keret (Kirta)

KIRTA

INTRODUCTION

Divinity doth hedge a king.
_Hamlet, Act IV, Sc. v_

The centrality of kingship as a Canaanite institution is well illustrated by the three tablets containing the story of Kirta. The surviving episodes are parts of a larger cycle, in which there was at least one more tablet after those translated here; the final column of the third tablet is fully preserved and ends in the middle of a sentence. Though we have no indication of exactly how much is missing, we can suppose that there were episodes before and after each of the other tablets. Nevertheless, while the narrative as we have it is not the whole story, each episode is largely self-contained and therefore understandable. The Arthurian legends provide a good parallel; in them a theme such as the quest for the Holy Grail loosely ties together various characters and plots.

The hero of the cycle is a king, whose name was pronounced Kerita or perhaps Keret, and the basic theme that unites the episodes is the survival of his dynasty. The first tablet opens with a statement of Kirta's predicament: his once numerous family had perished, and he had no descendants. Kirta's situation recalls that of Job, a comparison strengthened by Kirta's sickness described in the second and third tablets. But whereas Job's problems followed one another quickly, Kirta's were spread out over a long period, and each difficulty forms a separate episode. There are also echoes of Aqhat; like Danel when he was childless, Kirta seems to have performed an incubation rite, during which El, his patron and perhaps his father, appeared to him in a dream.

In this dream Kirta was given detailed instructions to offer
a sacrifice to the gods and then to prepare for war. The war was
to be total—all segments of the population had to serve or
provide a substitute—and its purpose was to sue for the hand
of the daughter of the king of a city about seven days’ march
away. The sketches of the mustering of the army and the siege
of Pabil’s city are reminiscent of Homer’s description of the
shield of Achilles, on which Hephaistos depicted various scenes
from human life, including a city at peace and a city under siege.
Kirta’s dream went on to foretell his negotiations with Pabil
after seven days of siege; in them Kirta demanded Pabil’s
daughter Hurriya in marriage. Hurriya’s beauty is compared to
that of Anat and Astarte, and she is described like the statue of
a goddess with inlaid eyebrows and jewels for eyes.

With the repetition typical of ancient narrative poetry, the
instructions given in the dream are repeated virtually line for
line as Kirta carried them out. There is only one significant
variant: en route to Pabil’s city Udm, Kirta stopped at a shrine
of Asherah, where he promised an offering to the goddess if his
quest proved successful.

Events turned out as the dream had prophesied, for in the
second and least complete of the tablets El blessed Kirta’s mar-
riage in the presence of the Assembly of the gods and promised
him many children, of which even the youngest would have a
large inheritance. Kirta, however, neglected to fulfill his vow to
Asherah and was punished by being stricken with an unnamed
but debilitating disease, evidently just before a feast to which he
had invited the peers of his realm, his “seventy noble bulls,
eighty noble gazelles.” (The aristocracy of the Canaanites, like
their pantheon, often had animal names as titles.)

The third tablet begins with a speech by Ilihu, one of Kirta’s
sons, urging his father to accept the fact of his imminent death.
The king’s sickness had had a catastrophic effect: as though in
sympathy, nature had failed and famine threatened. It seemed
that Kirta had to die, despite the fact that he was in some sense
El’s son (see below). Nevertheless, moved by the prayers of the
people of Hubur, the capital city, or of Kirta’s family, or per-
haps of the sick king himself, El decided to intervene. The
disease was so virulent that none of the other gods dared to try
to cure it, so El pledged to act personally. He sent the goddess
of healing, Shataqat, who with El’s power overcame the disease
and dispelled Death. The sickness itself is not described in de-
tail, but it involved a fever that Shataqat was able to break. Kirta
regained his appetite and resumed his rule.

His troubles, however, had not ended. Yassib, another of his
sons, threatened to oust Kirta from the throne on the grounds
that he had not fully recovered and that his illness had caused
him to neglect the essential duties of kingship. Kirta responded
with a curse on his son, and here the story breaks off.

As this summary of the contents of the three extant tablets
of the Kirta cycle shows, Kirta had to face three problems as
a king: his childlessness, his illness, and his son’s challenge.
Without an heir or a wife to provide one, the dynasty was
doomed to extinction. If a civil war should occur as the result
of an uncertain succession, Kirta would have failed in one of his
essential duties, the preservation of order; one key function of
kingship in the ancient world was the maintenance of stability,
so that the subjects of the realm would not be disturbed in their
prescribed tasks. This required the promulgation of laws to
regulate the relations between citizens, the defeat or deterrence
of enemies from the outside, and the guarantee of a smooth
transfer of power from the king to his successor. His childless-
ness prevented Kirta from fulfilling the third of these respons-
sibilities, and this is the motivation for the first episode, which
recounts the search for a wife.

The problem of Kirta’s illness also affected the social order,
for while he was sick there was no one to defend the powerless
—widows and orphans, the poor, and the oppressed. His son
Yassib attempted, presumably unsuccessfully, to usurp the
throne, on the grounds that Kirta was incapable of ruling. This
episode, unfortunately incomplete, is similar to Absalom’s re-
volt against his father David as narrated in II Samuel 15. Absa-
lom exploited David’s failure to provide justice for his subjects,
and won such widespread popular support that his father was forced to flee across the Jordan until the rebellion had been crushed.

The stories of David and Kirta are linked by another parallel. As we have observed, one of the themes that recurs in the *Kirta* cycle is the problem of succession. A similar emphasis has been found in a literary unit in the Bible comprising II Samuel 9–20 and I Kings 1–2, a document that has been styled "the Succession History of David" since the central thread of the narrative is the question of who would succeed David on the throne of Israel. The last episode in the "Succession History" describes the struggle between two of David's sons, Adonijah and Solomon, over the kingship. David was still alive, though advanced in years and evidently senile, and the court as well as the religious and military leaders was divided into factions supporting one claimant or the other. Again a king's lack of health caused the breakdown of the social order.

Kingship in the ancient world, however, was not just a political and social institution; it was also religious, or sacral. Kings were representatives of their people to the gods; Kirta, for example, clearly functioned as a priest in offering sacrifice to El and to Baal, and he was actually present at the divine Assembly when El and the other gods blessed his marriage. In addition, and perhaps because he was a member of the divine Assembly, the king was responsible for the prosperity of his subjects. There was a direct connection between the health of the king and the agricultural cycle, or, more accurately, the king and the gods were jointly responsible for the harvest. When Baal died, Death reigned and nothing grew; when the king was ill, the crops failed and famine resulted. Thus Kirta's sickness, the subject of the cycle's second episode, was a failure of kingship, but because of his quasidivine status the gods were also implicated in its consequences.

The king was a man, and yet was the head of human society; the gods communicated with him, yet he was not fully a god. This ambiguity may be clarified by an examination of Kirta's
titles. He is called "the Lad of El," "El's servant," and "El's son." The first two epithets are synonymous and express Kirta's close, although subordinate, relationship with El. It is possible that the third title is to be taken literally, and that Kirta, who many have suggested was the legendary founder of the royal house of Ugarit, may have been El's son by a human mother; there are parallels to divine parentage of the founders of cities and dynasties in Greco-Roman mythology. But the Canaanite ideology of kingship has closer reflections in the Bible; the Israelites borrowed the institution of the monarchy and much of its concomitant ritual and idiom from their neighbors. We are therefore justified in subsuming Ugaritic and biblical evidence under one heading, and in using each to interpret the other.

The biblical sources are especially helpful in interpreting Kirta's designation as "El's son." In the coronation hymn that appears in the Bible as Psalm 2, the king speaks:

I will tell of Yahweh's decree;
he said to me: "You are my son;
this day I have begotten you."

The same proclamation is put into the mouths of the divine Assembly in Isaiah 9:6:

For unto us a child has been born,
unto us a son has been given.

Other uses of the father-son image to describe the king's relationship to the gods are found in II Samuel 7:14 and Psalm 89:26; taken together with the Ugaritic evidence they suggest that the coronation ritual included the adoption of the newly crowned king as son of the national god. It is best, therefore, not to understand Kirta's title in a biological sense.

Despite his status as El's adopted son, Kirta was still a mortal; he had to die, and he should not yearn

"to rule like the Bull, his father,
or to have power like the Father of Men."
For the Canaanites, unlike the Egyptians with whom they had commercial contacts and by whom they were influenced, did not believe that the king was a god; to be son of god was to remain human.
KIRTA

I

Ruined was the house of the king
   who once had seven brothers,
      eight sons of one mother.
Kirta our patriarch was destroyed,
   Kirta's dynasty was finished.
His legal wife went away,
   his lawful spouse:
      the woman he married left him.
He had had descendants,
   but one third died in childbirth,
      one fourth of disease,
         one fifth Resheph gathered to himself,
            one sixth were lost at sea,
               one seventh fell in battle.
Kirta saw his offspring,
   he saw his offspring destroyed,
      his royal house completely finished.
His line was utterly ruined,
   and he had no heir in his household.
He entered his room and wept,
   he repeated his words and shed tears;
       his tears poured
          like shekels to the ground,
             like fifth-shekels onto his bed.
As he wept he fell asleep,
   as he shed tears he had a dream;
       sleep overpowered him and he lay down,
          but his dream made him restless.
For in his dream El came down,
   in his vision the Father of Men.
KIRTA

He approached and asked Kirta:
"Why are you weeping, Kirta?
    why does the Gracious One, the Lad of El, shed tears?
Does he want to rule like the Bull, his father,
or to have power like the Father of Men?"

"Why should I want silver and gleaming gold,
a controlling share in a mine,
perpetual slaves, three horses,
a chariot from the stable, servants?
Let me have sons,
    let me produce descendants!"
And the Bull, his father El, replied:
"No more weeping, Kirta,
nor tears, Gracious One, Lad of El.
Wash yourself and put on rouge,
    wash your arm to the elbow,
from your fingers to your shoulder.
Enter the shade of your tent,
take a lamb in your hand,
a sacrificial lamb in your right hand,
a young animal in both your hands,
al the food which accompanies the libation.
Take the proper sacrificial bird,
pour wine from a silver goblet,
honey from a golden bowl,
and go up to the top of the tower,
    climb to the height of the wall;
raise your hands to heaven,
sacrifice to the Bull, your father El;
serve Baal with your sacrifice,
    the son of Dagon with your provisions.
Then let Kirta come down from the roof,
let him prepare food for the city,
    grain for Bit-Hubur;
let him bake enough bread for five months,
enough food for six.
Let the populace be supplied and come out,
    let the special forces be supplied
and the populace come out.
Your army will be powerful indeed,
    three hundred thousand strong,
serfs beyond counting,
    archers beyond reckoning.
The infantry will advance in thousands,
    and in ten thousands, like the early rain;
they will advance two by two,
    three by three, all together.
The bachelor will close his house;
    the widow will hire a substitute;
the sick man will carry his bed;
    the blind man will be assigned a station;
even the new husband will come out:
    he will entrust his wife to another,
his love to a stranger.
Like the locusts which live in the fields,
    like grasshoppers at the edge of the desert,
advance one day, and a second,
    three days, then four,
five days, then six.
Then, at sunset on the seventh day,
you will arrive at Udm the great,
    Udm the well-watered;
and attack the cities,
    raid the towns;
drive the woodcutters from the fields,
    the gatherers of straw from the threshing floors;
drive the water carriers from the well,
    the women filling their jars from the spring.
Wait one day, and a second,
    three days, then four,
five days, then six.
KIRTA

Don't shoot your arrows at the city,
your slingstones at the fortress.
Then, by sunset on the seventh day,
King Pabil will be unable to sleep
because of the sound of his horses neighing,
because of the noise of his asses braying,
because of the lowing of his plow oxen,
because of the howl of his sheepdog.
And he will send messengers to you,
to Kirta his peer:
'Message of King Pabil:
Take silver and gleaming gold,
a controlling share in a mine,
perpetual slaves, three horses,
a chariot from the stable, servants;
Kirta, take these as peace offerings,
and leave my house, king,
go away from my court, Kirta.
Do not lay siege to Udm the great,
Udm the well-watered:
for Udm is El's gift,
and a present from the Father of Men.'
Then you will send messengers back to him:
'Why should I want silver and gleaming gold,
a controlling share in a mine,
perpetual slaves, three horses,
a chariot from the stable, servants?
Give me rather what is not in my house:
give me the Lady Hurriya,
the fairest of your first-born:
her fairness is like Anat's,
her beauty is like Astarte's,
her eyebrows are lapis lazuli,
her eyes are jeweled bowls....
I will rest in the gaze of her eyes.
This in my dream El granted,
in my vision the Father of Men;
she will bear offspring for Kirta,
a boy for El's servant.""

Kirta looked, and it was a dream:
El's servant had had a vision.
He washed himself and put on rouge,
he washed his arm to the elbow,
from his fingers to his shoulder.
He entered the shade of the tent,
he took a lamb in his hand,
a sacrificial lamb in his right hand,
a young animal in both his hands,
all the food which accompanies the libation.
He took the proper sacrificial bird,
he poured wine from a silver goblet,
honey from a golden bowl,
and he went up to the top of the tower,
he climbed to the height of the wall;
he raised his hands to heaven,
he sacrificed to the Bull, his father El;
he served Baal with his sacrifice,
the son of Dagon with his provisions.
Kirta came down from the roof,
he prepared food for the city,
grain for Bit-Hubur;
he baked enough bread for five months,

The populace was supplied and came out,
the special forces were supplied
and the populace came out.
His army was powerful indeed,
three hundred thousand strong.
The infantry advanced in thousands,
and in ten thousands, like the early rain;
they advanced two by two,
three by three, all together.
KIRTA

The bachelor closed his house;
    the widow hired a substitute,
the sick man carried his bed,
    the blind man was assigned a station;
even the new husband came out:
    he entrusted his wife to another,
    his love to a stranger.
Like the locusts which live in the fields,
    like grasshoppers at the edge of the desert,
they advanced one day, and a second;
    then, at sunset on the third day,
they arrived at the shrine of Asherah of Tyre,
    and of the goddess of Sidon.
There Kirta the Noble made a vow:
"As Asherah of Tyre lives,
    and the goddess of Sidon,
if I take Hurriya to my house,
    if I bring the maiden to my court,
then I will give double her price in silver,
    and triple her price in gold."
They advanced one day, and a second,
    three days, then four;
after sunset on the fourth day
they arrived at Udm the great,
    Udm the well-watered.
They attacked the cities,
    they raided the towns;
they drove the woodcutters from the fields,
    and the gatherers of straw from the threshing floors;
they drove the water carriers from the well,
    and the women filling their jars from the spring.
He waited one day, then a second,
    three days, then four,
    five days, then six;
then, by sunset on the seventh day,
    King Pabil was unable to sleep
because of the sound of his horses neighing,
   because of the noise of his asses braying,
because of the lowing of his plow oxen,
   because of the howl of his sheepdog.
Then King Pabil called to his wife ....

"Then head toward Kirta, my peer,
   and say to Kirta the Noble:
'Message of King Pabil:
Take silver and gleaming gold,
   a controlling share in a mine,
perpetual slaves, three horses,
   a chariot from the stable, servants;
Kirta, take these as peace offerings;
do not lay siege to Udm the great,
   Udm the well-watered:
for Udm is El's gift,
   and a present from the Father of Men.
Go away from my house, king,
   leave my court, Kirta.'" ... 
The two messengers left; they did not turn back;
   they headed toward Kirta, his peer;
they raised their voices and shouted:
"Message of King Pabil:
Take silver and gleaming gold,
   a controlling share in a mine,
and perpetual slaves, three horses,
   a chariot from the stable, servants;
Kirta, take these as peace offerings;
do not lay siege to Udm the great,
   Udm the well-watered:
for Udm is El's gift,
   a present from the Father of Men.
Go away from my house, king,
   leave my court, Kirta."
And Kirta the Noble replied:
"Why should I want silver and gleaming gold,  
a controlling share in a mine,  
and perpetual slaves, three horses,  
a chariot from the stable, servants?  
Give me rather what is not in my house:  
give me the Lady Hurriya,  
the fairest of your first-born:  
herself is like Anat's,  
her beauty is like Astarte's,  
herself is like Astarte's,  
herself is like Astarte's,  
herself is like Astarte's,  
herself is like Astarte's,  
their voices are lapis lazuli,  
her eyes are jeweled bowls.  
This in my dream El granted,  
in my vision the Father of Men;  
she will bear offspring for Kirta,  
a boy for El's servant."  
The two messengers left; they did not turn back;  
they headed toward King Pabil;  
they raised their voices and shouted:  
"Message of Kirta the Noble,  
the word of the Gracious One, the Lad of El."

II

"She leads the hungry by the hand,  
she leads the thirsty by the hand ...  
to Kirta, his peer.  
As the cow lows for her calf,  
as recruits long for their mothers,  
so Udm will sigh."

And Kirta the Noble answered ...  

... the Bull,  
... Baal the Conqueror,  
... Prince Moon,
Appendix 3

66

STORIES FROM ANCIENT CANAAN

... Kothar-wa-Hasis,
... the Maiden, Prince Resheph,
and the Assembly of the gods in procession ...
The Assembly of the gods arrived,
and Baal the Conqueror said:
"Come now, El the Kind, the Compassionate:
bless Kirta the Noble,
    show your favor to the Gracious One, the Lad of El."
El took a cup in his hand,
    a goblet in his right hand;
he pronounced a blessing over his servant,
    El blessed Kirta the Noble,
    he showed his favor to the Gracious One, the Lad of El:
"Kirta, you have taken a wife,
    you have taken a wife into your house,
you have brought a maiden into your court.
She will bear you seven sons,
    she will produce eight for you;
she will bear Yassib the Lad,
    who will drink the milk of Asherah,
suck the breasts of the Virgin Anat,
    the two wet nurses of the gods."

."May Kirta be highly praised,
in the midst of the Healers of the earth,
in the assembly of the Gatherers of Ditan.
She will soon bear you daughters:
she will bear the girl ...
she will bear the girl ...
she will bear the girl ...
she will bear the girl ...
she will bear the girl ...
she will bear the girl ...
May Kirta be highly praised,
in the midst of the Healers of the earth,
in the assembly of the Gatherers of Ditan;
to the youngest I will give a first-born's rights."
The gods pronounced their blessing and went,
    the gods went to their tents,
    the Council of El to their divine homes.
And she soon bore him sons,
    and she soon bore him daughters.
Then, after seven years,
the sons of Kirta were as many as had been promised;
    so too were the daughters of Hurriya.
And Asherah remembered his vow,
    the goddess recalled his pledge;
and she raised her voice and shouted:
"Look now, has Kirta changed his vow?
    I will break . . . ."

. . . . . . . . . . . .
He called to his wife:
"Listen, Lady Hurriya:
slaughter your fattest animal;
    open a jar of wine;
call my seventy noble bulls,
    my eighty noble gazelles,
the noble bulls of Hubur the great,
    of Hubur the well-watered. . . ."
Lady Hurriya obeyed;
she slaughtered her fattest animal;
    she opened a jar of wine;
she invited the noble bulls into her presence,
    she invited the noble gazelles into her presence,
the noble bulls of Hubur the great,
    of Hubur the well-watered.
They came to Kirta's house,
    to his home . . . .
She extended her hand to the bowl,
    she put her knife to the meat,
and the Lady Hurriya said:
"I have called you to eat and drink
at the banquet of Kirta your master.”

She extended her hand to the bowl,
    she put her knife to the meat,
and the Lady Hurriya said:
“I have called you to eat and drink . . . .”
They wept for Kirta,
    the noble bulls spoke,
    they wept as though he were dead . . .
“At sunset Kirta will surely arrive,
    at sundown our master will rule. . . .”

And the Lady Hurriya said:
“I have called you to eat and drink
    at the banquet of Kirta your lord.”
They came to Kirta,
    their words were like the words of noble bulls.
In a vision . . . Kirta . . .

III

“As a dog is removed from your house,
    a hound from your court,
so you too, father, must die like a mortal,
    and your court become a place of mourning,
controlled by women, beloved father.
Baal’s mountain, father, will weep for you,
    Zaphon, the holy stronghold,
the holy stronghold will lament,
    the stronghold wide and broad:
‘Is not Kirta El’s son,
    an offspring of the Kind and Holy One?’ ”
He entered his father’s presence;
    he wept and gnashed his teeth;
he spoke through his tears:
KIRTA

"Our father, we were glad while you seemed to live forever, we rejoiced at your immortality;
but as a dog is removed from your house, a hound from your court,
so you too, father, must die like a mortal, and your court become a place of mourning, controlled by women, beloved father.
How can it be said that Kirta is El's son, an offspring of the Kind and Holy One?
Or do the gods die?
Will the Kind One's offspring not live on?"

But Kirta the Noble replied:
"My son, don’t weep,
don’t grieve for me;
my son, don’t drain the well of your eyes, your head's springs of tears.
Call your sister Thitmanit,
a maiden whose ardor is strong:
she will weep and grieve for me . . .
Speak to your sister . . .
I know how loving she is:
she will make her cry heard in the fields, her spirit's outpourings in the sky.
. . . the setting of Lady Sun, and the light of the Ten Thousand shines.

Then say to your sister Thitmanit:
'Our Kirta has prepared a banquet, the king has ordered a feast.
Take your drum in your hand, your lyre in your right hand;
go stand by your lord's singers . . . .'"

Then the Hero Ilihu
took his spear in his hand, his lance in his right hand, and he approached at a run.
As he arrived, it grew dark;
his sister was coming out to draw water.
He put his spear on the hill,
    he went to meet her at the gate.
As soon as she saw her brother,
    her back was as though shattered on the ground;
when she saw her brother, she wept.

"Is the king sick?
    Is Kirta your lord ill?"
And the Hero Ilihu replied:
"The king is not sick;
    Kirta your lord is not ill.
But he has prepared a banquet,
    the king has ordered a feast. . . ."

She approached her brother and shouted:
"Why did you deceive me, my brother?
    How many months has he been sick?
    how long has he been ill?"
And the Hero Ilihu replied:
"He has been sick for three months,
    Kirta has been ill for four.
His end is at hand:
    prepare a grave,
    prepare a grave,
    make ready a tomb." . . .
She prepared a grave . . .
she wept and gnashed her teeth;
    she spoke through her tears:
"Our father, we were glad while you seemed to live forever,
    we rejoiced at your immortality;
but as a dog is removed from your house,
    a hound from your court,
so you too, father, must die like a mortal,
    and your court become a place of mourning,
    controlled by women, beloved father.
Or do the gods die?
KIRTA

Will the Kind One’s offspring not live on?
Baal’s mountain, father, will weep for you,
Zaphon, the holy stronghold,
the holy stronghold will lament,
the stronghold wide and broad:
‘Is not Kirta El’s son,
an offspring of the Kind and Holy One?’ ”

... Baal’s rain for the earth,
and the rain of the Most High for the fields;
for Baal’s rain benefits the earth,
and the rain of the Most High the fields,
benefits the wheat in the furrow,
the spelt in the tilled ground...

The plowmen lifted their heads,
the sowers of grain their backs:
gone was the food from their bins,
gone was the wine from their skins,
gone was the oil from their vats.

“El has heard your speech:
look—you are wise, like El,
like the Bull, the Kind One;
call to Ilisha, the carpenter god,
Ilisha, the carpenter of Baal’s house,
and his wives, the carpenter goddesses...”

He called to Ilisha, the carpenter god,
Ilisha, the carpenter of Baal’s house,
and his wives, the carpenter goddesses.

And El the Kind, the Compassionate, replied:
“Listen, Ilisha, carpenter god,
Ilisha, the carpenter of Baal’s house,
and your wives, the carpenter goddesses:
go up to the height of the building...”

And El the Kind, the Compassionate, replied:
"Who among the gods can expel the sickness, drive out the disease?"
But none of the gods answered him.
He spoke a second, then a third time:
"Who among the gods can expel the sickness, drive out the disease?"
But none of the gods answered him.
He spoke a fourth, then a fifth time:
"Who among the gods can expel the sickness, drive out the disease?"
But none of the gods answered him.
He spoke a sixth, then a seventh time:
"Who among the gods can expel the sickness, drive out the disease?"
But none of the gods answered him.
Then El the Kind, the Compassionate, replied:
"My sons, sit down upon your thrones, upon your princely seats.
I will work magic,
I will bring relief:
I will expel the sickness,
I will drive out the disease."

"Death—be broken!
Shataqat—be strong!"
And Shataqat left;
she came to Kirta's house:
in tears she entered and went in,
in sobs she went inside.
She flew over cities . . .
she flew over villages . . .
. . . the sickness on its head.
She returned, she washed off his sweat;
she restored his appetite for food, his desire for a meal.

Death was broken—
Shataqat was strong!
Then Kirta the Noble gave a command;
he raised his voice and shouted:
"Listen, Lady Hurriya:
slaught a lamb so that I may eat,
some mutton for my meal."
Lady Hurriya obeyed:
she slaughtered a lamb and he ate,
some mutton for his meal.
One day had ended, and on the second
Kirta sat on his throne,
he sat on his royal chair,
on his dais, on the seat of dominion.
Now Yassib too lived in the palace,
and his heart instructed him:
"Go to your father, Yassib,
go to your father and speak,
repeat to Kirta your lord:
'Listen closely and pay attention:
as though raiders had raided, you will be driven out,
and forced to live in the mountains.
Weakness has stayed your hand:
you do not judge the cases of widows,
you do not preside over the hearings of the oppressed;
the sickbed has become your brother,
the stretcher your close friend.
Come down from the kingship—let me be king,
from your power—let me sit on the throne.'"
Yassib the Lad left;
he entered his father's presence;
he raised his voice and shouted:
"Listen, Kirta the Noble,
listen closely and pay attention:
as though raiders had raided, you will be driven out,
and forced to live in the mountains.
Weakness has stayed your hand:
you do not judge the cases of widows,
you do not preside over the hearings of the oppressed;
you do not drive out those who plunder the poor,
you do not feed the orphan before you,
the widow behind your back.
The sickbed has become your brother,
the stretcher your close friend.
Come down from the kingship—let me be king,
from your power—let me sit on the throne.”
But Kirta the Noble replied:
“My son, may Horon smash,
may Horon smash your head,
Astarte, Baal’s other self, your skull.
May you fall at the prime of your life . . . .”

The scribe was Ilimilku the Noble.
BAAL

I

Sea sent two messengers...
"Leave, lads, do not turn back;
now head toward the Assembly in council,
at the center of the mountain of night.
Do not fall at El's feet,
do not prostrate yourselves before the Assembly in council;
still standing speak your speech,
repeat your message;
and address the Bull, my father El,
repeat to the Assembly in council:
'Message of Sea, your master,
your lord, Judge River:
El, give up the one you are hiding,
the one the masses are hiding;
give up Baal and his powers,
the son of Dagon: I will assume his inheritance.'"
The lads left; they did not turn back;
they headed toward the center of the mountain of night,
the Assembly in council.
There the gods had sat down to eat,
the holy ones to a meal;
Baal was standing by El.
As soon as the gods saw them,
saw the messengers of Sea,
the mission of Judge River,
the gods lowered their heads
to the top of their knees,
and onto their princely seats.
Baal rebuked them:
"Gods, why have you lowered your heads
to the top of your knees,
and onto your princely seats?
I see, gods, that you are stricken
with fear of the messengers of Sea,
the mission of Judge River.
Gods, raise your heads
from the top of your knees,
from your princely seats.
For I will reply to the messengers of Sea,
the mission of Judge River."
The gods raised their heads
from the top of their knees,
from their princely seats.
Then the messengers of Sea arrived,
the mission of Judge River.
They did not fall at El's feet,
they did not prostrate themselves before the Assembly
in council;
still standing they spoke their speech,
they repeated their message.
They seemed like one fire, or two;
their tongues were sharpened swords.
They addressed the Bull, his father El:
"Message of Sea, your master,
your lord, Judge River:
El, give up the one you are hiding,
the one the masses are hiding;
give up Baal and his powers,
the son of Dagon: I will assume his inheritance."
And the Bull, his father El, replied:
"Sea, Baal is your servant;
River, Baal is your servant,
the son of Dagon your prisoner.
He will be brought as your tribute,
when the gods bring you payment,
and the holy ones gifts.
Then Baal will be gentle . . . ."

.........................

"The mighty will fall to the ground,
the powerful into the Slime."
These words had just come from her mouth,
this speech from her lips,
she had just spoken,
when he groaned from under Prince Sea's throne.
And Kothar-wa-Hasis replied:
"Let me tell you, Prince Baal,
let me repeat, Rider on the Clouds:
behold, your enemy, Baal,
behold, you will kill your enemy,
behold, you will annihilate your foes.
You will take your eternal kingship,
your dominion forever and ever."
Kothar brought down two clubs,
and he pronounced their names:
"As for you, your name is Driver;
Driver, drive Sea,

  drive Sea from his throne,
  River from the seat of his dominion.

Dance in Baal's hands,
  like a vulture from his fingers.
Strike Prince Sea on the shoulder,
  Judge River between the arms."
The club danced in Baal's hands,
  like a vulture from his fingers.
It struck Prince Sea on the shoulder,
  Judge River between the arms.
Sea was strong; he did not sink;
his joints did not shake;
his frame did not collapse.
Kothar brought down two clubs,
  and he pronounced their names:
“As for you, your name is Chaser;
Chaser, chase Sea,
    chase Sea from his throne,
    River from the seat of his dominion.
Dance in Baal’s hands,
    like a vulture from his fingers.
Strike Prince Sea on the skull,
    Judge River between the eyes.
Sea will stumble,
    he will fall to the ground.”
And the club danced in Baal’s hands,
    like a vulture from his fingers.
It struck Prince Sea on the skull,
    Judge River between the eyes.
Sea stumbled;
    he fell to the ground;
his joints shook;
    his frame collapsed.
Baal captured and drank Sea;
    he finished off Judge River.
Astarte shouted Baal’s name:
“Hail, Baal the Conqueror!
    hail, Rider on the Clouds!
For Prince Sea is our captive,
    Judge River is our captive.”

II

He served Baal the Conqueror,
    he honored the Prince, the Lord of the Earth:
he arose, prepared food, and gave it to him to eat;
    he carved a breast before him,
    with a sharp knife the loin of a fatling;
he got up, made ready the feast, and gave him drinks;
he put a cup in his hand,
a goblet in both his hands,
a large beaker, manifestly great,
a jar to astound a mortal,
a holy cup which women should not see,
a goblet which Asherah must not set her eye on;
he took a thousand jugs of wine,
he mixed ten thousand in the mixing bowl.

He arose, he sang a song;
there were cymbals in the minstrel's hands;
the Hero sang with a sweet voice
of Baal on the peaks of Zaphon.
Baal looked at his daughters,
he set his eye on Pidray, maid of light,
also on Tallay, maid of rain.

The gates of Anat's house were shut,
and the lads met the lady of the mountain.
And then Anat went to battle in the valley,
she fought between the two cities:
she killed the people of the coast,
she annihilated the men of the east.
Heads rolled under her like balls,
hands flew over her like locusts,
the warriors' hands like swarms of grasshoppers.
She fastened the heads to her back,
she tied the hands to her belt.
She plunged knee-deep into the soldiers' blood,
up to her thighs in the warriors' gore;
with a staff she drove off her enemies,
with the string of her bow her opponents.
And then Anat arrived at her house,
the goddess reached her palace;
there, not satisfied with her battling in the valley,
her fighting between the two cities,
she made the chairs into warriors,
BAAL

she made the tables into an army,
the stools into heroes.
She battled violently, and looked,
Anat fought, and saw:
her soul swelled with laughter,
her heart was filled with joy,
Anat’s soul was exuberant,
as she plunged knee-deep into the soldiers’ blood,
up to her thighs in the warriors' gore,
until she was satisfied with her battling in the house,
her fighting between the tables.
The soldiers’ blood was wiped from the house,
oil of peace was poured from a bowl.
The Virgin Anat washed her hands,
the Mistress of the Peoples her fingers;
she washed the soldiers’ blood from her hands,
the warriors’ gore from her fingers.
She made the chairs chairs again,
the tables tables;
she made the stools stools.
She drew water and washed,
the heavens’ dew, the earth’s oil,
the rain of the Rider on the Clouds,
dew which the heavens pour,
rain which is poured from the stars.

........................................
“For the love of Baal the Conqueror,
the love of Pidray, maid of light,
the desire of Tallay, maid of rain,
the love of Arsay, maid of the floods.
So then, lads, enter:
at Anat’s feet bow down and adore,
prostrate yourselves, worship her,
and say to the Virgin Anat,
repeat to the Mistress of the Peoples:
‘Message of Baal the Conqueror,
the word of the Conqueror of Warriors:
Remove war from the earth,
    set love in the ground,
pour peace into the heart of the earth,
    rain down love on the heart of the fields.
Hasten! hurry! rush!
Run to me with your feet,
    race to me with your legs;
for I have a word to tell you,
    a story to recount to you:
the word of the tree and the charm of the stone,
    the whisper of the heavens to the earth,
of the seas to the stars.
I understand the lightning which the heavens do not know,
    the word which men do not know,
and earth’s masses cannot understand.
Come, and I will reveal it:
in the midst of my mountain, the divine Zaphon,
    in the sanctuary, in the mountain of my inheritance,
in the pleasant place, in the hill I have conquered.’”
As soon as Anat saw the gods,
    her feet shook,
her back was as though shattered,
her face broke out in sweat,
her joints trembled,
her vertebrae became weak.
She raised her voice and shouted:
    “Why have Gapn and Ugar come?
What enemy has risen against Baal,
    what foe against the Rider on the Clouds?
 Didn’t I demolish El’s Darling, Sea?
    didn’t I finish off the divine river, Rabbim?
    didn’t I snare the Dragon?
I enveloped him,
    I demolished the Twisting Serpent,
the seven-headed monster.
I demolished El's Darling, Desire,
    I annihilated the divine calf, the Rebel;
I demolished El's bitch, Fire,
    I finished off El's daughter, Zebub.
I battled for the silver,
    I took possession of the gold.
Has Baal been driven from the heights of Zaphon?
    have they driven him from his royal chair,
    from his dais, from the seat of his dominion?
What enemy has risen against Baal,
    what foe against the Rider on the Clouds?"
Then the lads replied as follows:
"No enemy has risen against Baal,
    no foe against the Rider on the Clouds.
'Ba'al the Conqueror,
    the word of the Conqueror of Warriors:
Remove war from the earth,
    set love in the ground,
pour peace into the heart of the earth,
    rain down love on the heart of the fields.
Hasten! hurry! rush!
Run to me with your feet,
    race to me with your legs;
for I have a word to tell you,
    a story to recount to you:
the word of the tree and the charm of the stone,
    the word which men do not know,
    and earth's masses cannot understand:
the whisper of the heavens to the earth,
    of the seas to the stars.
I understand the lightning which the heavens do not know.
Come, and I will reveal it:
in the midst of my mountain, the divine Zaphon,
    in the sanctuary, in the mountain of my inheritance.' "
And the Virgin Anat replied,
    the Mistress of the Peoples answered:
"I will remove war from the earth,
    I will set love in the ground,
I will pour peace into the heart of the earth,
    I will rain down love on the heart of the fields. . . .
I will remove war from the earth,
    I will set love in the ground,
I will pour peace into the heart of the earth,
    I will rain down love on the heart of the fields.
And I have something else to tell you:
Go, go, divine powers;
    you are slow, but I am swift.
Is not my mountain far from El,
    my cave far from the gods?
Two fathoms under the earth's springs,
    three rods under the caves.”
Then she headed toward Baal on the heights of Zaphon,
    a thousand fields, ten thousand acres at each step.
Baal saw his sister coming,
    his father's daughter approaching;
he dismissed his wives from his presence.
He put an ox before her,
    a fatling in front of her.
She drew water and washed,
    the heavens' dew, the earth's oil,
dew which the heavens pour,
    rain which is poured from the stars. . . .

"But Baal has no house like the other gods',
    no court like Asherah's sons':
El's home, his son's shelter,
    Lady Asherah-of-the-Sea's home,
the home of Pidray, maid of light,
    the shelter of Tallay, maid of rain,
the home of Arsay, maid of the floods,
    the home of the beautiful brides.”
And the Virgin Anat replied:
BAAL

"My father, El the Bull, will answer me,
he'll answer me . . . or else
I'll push him to the ground like a lamb,
I'll make his gray hair run with blood,
his gray beard with gore,
unless he gives Baal a house like the other gods',
and courts like Asherah's sons'."
She stamped her feet and left the earth;
then she headed toward El,
at the source of the two rivers,
in the midst of the two seas' pools;
she opened El's tent and entered
the shrine of the King, the Father of Time. . .
And the Virgin Anat spoke:
"Don't rejoice in your well-built house,
in your well-built house, El,
don't rejoice in the height of your palace:
don't rely on them!
I'll smash your head,
I'll make your gray hair run with blood,
your gray beard with gore."
El replied from the seven rooms,
from the eight enclosures:
"I know you, daughter, how gentle you can be;
but there is no restraint among goddesses.
What do you want, Virgin Anat?"
And the Virgin Anat replied:
"Your decree is wise, El,
your wisdom is eternal,
a lucky life is your decree.
But our king is Baal the Conqueror,
our judge, higher than all:
all of us must bear his chalice,
all of us must bear his cup."
The Bull El, her father, shouted loudly,
El the King who brought her into being;
Asherah and her sons shouted,
the goddess and her pride of lions:
"But Baal has no house like the other gods',
no court like Asherah's sons':
El's home, his son's shelter,
Lady Asherah-of-the-Sea's home,
the home of Pidray, maid of light,
the shelter of Tallay, maid of rain,
the home of Arsay, maid of the floods,
the home of the beautiful brides."

"Cross Byblos, cross Qaal,
cross the islands on the far horizon;
proceed, Asherah's Fisherman;
advance, Holy and Most Blessed One;
then head toward Egypt,
the god of it all—
Kaphtor is his royal house,
Egypt is the land of his inheritance—
a thousand fields, ten thousand acres at each step.
At Kothar's feet bow down and adore,
prostrate yourself and worship him;
and speak to Kothar-wa-Hasis,
repeat to the Clever Craftsman:
'Message of Baal the Conqueror . . . .'"

III

The Bull El, her father, shouted loudly,
El the King, who brought her into being;
Asherah and her sons shouted,
the goddess and her pride of lions:
"But Baal has no house like the other gods',
no court like Asherah's sons':
BAAL

El's home, his son's shelter,
   Lady Asherah-of-the-Sea's home,
the home of the beautiful brides,
   the home of Pidray, maid of light,
the shelter of Tallay, maid of rain,
   the home of Arsay, maid of the floods.
But I have something else to tell you:
give gifts to Lady Asherah-of-the-Sea,
presents to the Mother of the Gods.
Have the Clever One go up to the bellows,
   have Hasis take the tongs in his hands;
have him cast silver, have him pour gold:
   have him cast a thousand bars of silver,
   have him cast ten thousand bars of gold.
Have him cast a canopy and a reclining couch,
   a divine dais worth twenty thousand,
a divine dais decorated with silver,
   laminated with a layer of gold;
a divine seat set on top of it;
   a divine stool covered with electrum;
divine sandals with straps
   which he has plated with gold;
a divine table filled with everything
   yielded by the earth's foundations;
a divine bowl with a handle shaped like a lamb,
   with a base like the land of Yaman,
   where there are tens of thousands of wild oxen."

She took her spindle in her hand,
   she raised her spindle in her right hand;
she tore off the garment which covered her flesh;
   she threw her robe into the sea,
   her two garments into the river;
she put a pot on the fire,
   a caldron on top of the coals.
She implored the Bull, El the Compassionate,
she entreated the Creator of All.
Then she raised her eyes and looked:
Asherah saw Baal coming,
the Virgin Anat coming,
the Mistress of the Peoples approaching.
Her feet shook,
her back was as though shattered,
her face broke out in sweat,
her joints trembled,
her vertebrae became weak.
She raised her voice and shouted:
"Why has Baal the Conqueror arrived?
why has the Virgin Anat arrived?
Have my enemies killed my sons?
have they finished off my pride of lions?"
But when Asherah saw the gleam of the silver,
the gleam of the silver and the shine of the gold,
Lady Asherah-of-the-Sea was glad;
she called to her lad:
"Look at the marvelous gifts,
Lady Asherah-of-the-Sea's Fisherman:
take your net in your hand . . . ."

.....................................................
Baal the Conqueror answered,
the Rider on the Clouds replied:
". . . He arose and spat at me
in the midst of the Assembly of the gods.
Filth has been set on my table,
bilge in my drinking cup.
Baal hates two kinds of banquets,
the Rider on the Clouds hates three:
a shameful banquet,
a degrading banquet,
a banquet with wanton women.
But here there is shameful behavior,
and here there are wanton women."
After Baal the Conqueror had arrived,
the Virgin Anat arrived;
she gave her gifts to Lady Asherah-of-the-Sea,
she gave her presents to the Mother of the Gods.
But Lady Asherah-of-the-Sea said:
"Why do you give gifts to Lady Asherah-of-the-Sea,
presents to the Mother of the Gods?
You should give gifts to the Bull, El the Compassionate,
and presents to the Creator of All."
But the Virgin Anat replied:
"We give gifts to you, Lady Asherah-of-the-Sea,
presents to the Mother of the Gods. . . ."

And Lady Asherah-of-the-Sea replied:
"Listen, Holy and Most Blessed One,
Lady Asherah-of-the-Sea’s Fisherman:
saddle an ass, harness a donkey,
attach the silver reins, the golden bridle,
fasten the reins to my she-ass."
The Holy and Most Blessed One obeyed;
he saddled the ass, he harnessed the donkey,
he attached the silver reins, the golden bridle,
he fastened the reins to the she-ass.
The Holy and Most Blessed One lifted her in his arms,
he put Asherah on the ass’s back,
on the splendid back of the donkey.
The Holy One began to lead,
the Most Blessed One like a guiding star.
The Virgin Anat followed her,
as Baal left for the heights of Zaphon.
Then Asherah headed toward El,
at the source of the two rivers,
in the midst of the two seas’ pools.
She opened El’s tent and entered
the shrine of the King, the Father of Time.
At El’s feet she bowed down and adored;
she prostrated herself and worshiped him.

As soon as El saw her,
he opened his mouth and laughed;
he put his feet on a stool,
his fingers danced with excitement;
he raised his voice and shouted:
"Why has Lady Asherah-of-the-Sea arrived? why has the Mother of the Gods come?"

Are you hungry . . .
or thirsty . . . ?

have something to eat or drink:
eat some food from the table,
drink some wine from the goblet,
blood of the vine from the golden cup.

Or does El the King's passion excite you? does the love of the Bull arouse you?"

But Lady Asherah-of-the-Sea replied:
"Your decree is wise, El,
your wisdom is eternal,
a lucky life is your decree.

But Baal the Conqueror is our king,
our judge, higher than all.
All of us must bear his chalice,
all of us must bear his cup."

The Bull El, her father, shouted loudly,
El the King, who brought her into being;
Asherah and her sons shouted,
the goddess and her pride of lions:
"But Baal has no house like the other gods',
no court like Asherah's sons':
El's home, his son's shelter,
Lady Asherah-of-the-Sea's home,
the home of the beautiful brides,
the home of Pidray, maid of light,
the shelter of Tallay, maid of rain,
the home of Arsay, maid of the floods."
BAAL

But El the Kind, the Compassionate, replied:
"Am I a servant, a power of Asherah?
am I a servant, holding a trowel,
or Asherah's brickmaker?
Let a house like the other gods' be built for Baal,
a court like Asherah's sons'."
And Lady Asherah-of-the-Sea replied:
"You are great, El, you are truly wise;
your gray beard truly instructs you . . . .

Now Baal will begin the rainy season,
the season of wadis in flood;
and he will sound his voice in the clouds,
flash his lightning to the earth.
Let him complete his house of cedar!
let him construct his house of bricks!
Let Baal the Conqueror be commanded:
'Call a caravan into your house,
a wagon train within your palace;
the mountains will bring you much silver,
the hills fine gold in abundance;
the camels will bring you jewels.
And build a house of silver and gold,
a house of purest lapis lazuli.'"

The Virgin Anat was glad;
she stamped her feet and left the earth;
then she headed toward Baal on the heights of Zaphon,
a thousand fields, ten thousand acres at each step.
The Virgin Anat laughed;
she raised her voice and shouted:
"I have good news for you, Baal:
a house like your brothers' will be built for you,
and a court like your cousins';
call a caravan into your house,
a wagon train within your palace;
the mountains will bring you much silver,
the hills fine gold in abundance;
and build a house of silver and gold,
a house of purest lapis lazuli."
Baal the Conqueror was glad;
he called a caravan into his house,
a wagon train within his palace;
the mountains brought him much silver,
the hills fine gold in abundance;
the camels brought him jewels.
He sent messengers to Kothar-wa-Hasis.

Now go back to the passage "When the lads were sent."*

After Kothar-wa-Hasis had arrived,
Baal put an ox before him,
a fatling in front of him.
A chair was brought, and he was seated
to the right of Baal the Conqueror.
When the god had eaten and drunk,
Baal the Conqueror spoke,
the Rider on the Clouds said:
"Kothar, hurry, build a house;
hurry, erect a palace;
hurry, build a house;
hurry, raise a palace
among the peaks of Zaphon.
Let the house extend over a thousand fields,
the palace over ten thousand acres."
And Kothar-wa-Hasis replied:
"Listen, Baal the Conqueror,
pay attention, Rider on the Clouds:

* A note to the reader of the tablet to repeat a formulaic passage (now lost) describing the journey of Baal's messengers to Kothar-wa-Hasis, their delivery of the message, and Kothar's journey to Baal.
I should put a casement in the house,
    a window within the palace."
But Baal the Conqueror replied:
"Don't put a casement in the house,
    a window within the palace. . . ."
But Kothar-wa-Hasis replied:
"You'll recall my words, Baal."
And Kothar-wa-Hasis repeated:
"Listen, Baal the Conqueror:
I should put a casement in the house,
    a window within the palace."
But Baal the Conqueror replied:
"Don't put a casement in the house,
    a window within the palace. . . ."
But Kothar-wa-Hasis replied:
"You'll recall my words, Baal."
They built his house,
    they erected his palace;
they went to the Lebanon for wood,
    to Sirion for the finest cedar;
they went to the Lebanon for wood,
    to Sirion for the finest cedar.
They set fire to the house,
    they inflamed the palace.
One day passed, then two:
    the fire ate the house,
the flames consumed the palace.
Three days passed, then four:
    the fire ate the house,
the flames consumed the palace.
Five days passed, then six:
    the fire ate the house,
the flames consumed the palace.
Then, on the seventh day,
    the fire died down in the house,
the flames died down in the palace:
the silver had turned into blocks,
    the gold had become bricks.
Baal the Conqueror was glad:
    "I have built my house of silver,
        my palace of gold."
Baal prepared the house,
    Hadad made preparations within his palace:
he slaughtered oxen,
    he killed sheep,
    bulls, fatling rams,
    yearling calves;
he strangled lambs and kids.
He invited his brothers into his house,
    his cousins within his palace;
    he invited Asherah's seventy sons.
He gave the gods lambs;
    he gave the gods ewes;
    he gave the gods oxen;
    he gave the gods cows;
    he gave the gods seats;
    he gave the gods thrones;
he gave the gods a jar of wine;
    he gave the goddesses a cask of wine.
Until the gods had eaten and drunk their fill,
    he gave them sucklings to eat,
    with a sharp knife carved the breast of a fatling.
They drank wine from goblets,
    blood of the vine from golden cups.

Baal captured sixty-six cities,
    seventy-seven towns;
Baal sacked eighty,
    Baal sacked ninety;
then Baal returned to his house.
And Baal the Conqueror said:
    "I will do it, Kothar, Sea's son,
BAAL

Kothar, son of the Assembly:
let a window be opened in the house,
a casement within the palace;
then a slit can be opened in the clouds,
as Kothar-wa-Hasis said."
Kothar-wa-Hasis laughed;
he raised his voice and shouted:
"Baal the Conqueror, didn’t I tell you:
‘You’ll recall my words, Baal?’"
He opened a window in the house,
a casement within the palace.
Then Baal opened a slit in the clouds,
Baal sounded his holy voice,
Baal thundered from his lips . . .
the earth’s high places shook.
Baal’s enemies fled to the woods,
Hadad’s haters took to the mountains.
And Baal the Conqueror said:
"Hadad’s enemies, why are you quaking?
why are you quaking, assailers of the Valiant One?"
Baal’s eye guided his hand,
as he swung a cedar in his right hand.
So Baal was enthroned in his house.
“No other king or non-king
shall set his power over the earth.
I will send no tribute to El’s son Death,
no homage to El’s Darling, the Hero.
Let Death cry to himself,
let the Darling grumble in his heart;
for I alone will rule over the gods;
I alone will fatten gods and men;
I alone will satisfy earth’s masses.”
Baal called to his lads:
“Look, Gapn and Ugar, sons of Galmat . . .

Then head toward Mount Targuziza,
toward Mount Tharumagi,
toward the mounds that block the way to the underworld.
Raise the mountain with your hands,
the hill on top of your palms;
then go down to the sanatorium of the underworld;
you will be counted among those who go down into the earth.
Then head toward the midst of his city, the Swamp,
Muck, his royal house,
Phlegm, the land of his inheritance.
But, divine powers, be on your guard:
don’t approach El’s son, Death,
lest he put you in his mouth like a lamb,
crush you like a kid in his jaws.
Sun, the gods’ torch, burns,
the heavens shimmer under the sway of El’s Darling, Death.
A thousand fields, ten thousand acres at each step;
at Death’s feet bow down and adore,
prostrate yourselves and worship him;
and speak to El’s son, Death,
repeat to El’s Darling, the Hero:
Message of Baal the Conqueror,
the word of the Conqueror of Warriors:
‘I have built my house of silver,
my palace of gold...’ ”

IV

“When you killed Lotan, the Fleeing Serpent,
finished off the Twisting Serpent,
the seven-headed monster,
the heavens withered and drooped
like the folds of your robes...
Now you will surely descend into the throat of El's son,
   Death,
into the watery depths of El's Darling, the Hero.”
The gods left; they did not turn back;
   they headed toward Baal on the heights of Zaphon;
then Gapn and Ugar spoke:
   "Message of El's son, Death,
   the word of El's Darling, the Hero:
'My appetite is like that of a lioness,
or the desire of a dolphin in the sea;
my pool seizes the wild oxen,
   my well grabs the deer;
when I have the appetite for an ass,
then I eat with both my hands...."

............... ........................................
"One lip to the earth, one lip to the heavens;
   he will stretch his tongue to the stars.
Baal must enter inside him;
   he must go down into his mouth,
like an olive cake,
   the earth's produce,
   the fruit of the trees."
Baal the Conqueror became afraid;
   the Rider on the Clouds was terrified:
"Leave me; speak to El's son Death,
   repeat to El's Darling, the Hero:
'Message of Baal the Conqueror,
   the word of the Conqueror of Warriors:
Hail, El's son Death!
   I am your servant, I am yours forever.’"
They left; they did not turn back;
   then they headed toward El's son Death,
to the midst of his city, the Swamp,
   Muck, his royal house,
   Phlegm, the land of his inheritance.
They raised their voices and shouted:
"‘Message of Baal the Conqueror,
the word of the Conqueror of Warriors:
Hail, El’s son Death!
I am your servant, I am yours forever.’"
El’s son Death was glad . . .

. . . . I will put him into the hole of the gods of the earth.
As for you, take your clouds,
your wind, your bolts, your rain;
take with you your seven lads,
your eight noble boars;
take with you Pidray, maid of light;
take with you Tallay, maid of rain;
then head toward Mount Kankaniya:
raise the mountain with your hands,
the hill on top of your palms;
then go down to the sanatorium of the underworld;
you will be counted among those who go down into the earth.
And the gods will know that you have died.”
Baal the Conqueror obeyed.
He fell in love with a heifer in the desert pasture,
a young cow in the fields on Death’s shore:
he slept with her seventy-seven times,
he mounted her eighty-eight times;
and she became pregnant,
and she bore him the Lord.

. . . . . . . . . . . . . . . . . . .

“We arrived at the pleasant place, the desert pasture,
at the lovely fields on Death’s shore.
We came upon Baal:
he had fallen to the ground.
Baal the Conqueror has died;
the Prince, the Lord of the Earth, has perished.”
Then El the Kind, the Compassionate,
came down from his throne,
sat on his stool,
and coming down from his stool he sat on the ground.
He poured earth on his head as a sign of mourning,
on his skull the dust in which he rolled;
he covered his loins with sackcloth.
He cut his skin with a knife,
he made incisions with a razor;
he cut his cheeks and chin,
he raked his arms with a reed,
he plowed his chest like a garden,
he raked his back like a valley.
He raised his voice and shouted:
"Baal is dead: what will happen to the peoples?
Dagon's son: what will happen to the masses?
I will go down into the earth in Baal's place."
Anat also was taking a walk and wandering
on every mountain in the heart of the earth,
on every hill in the heart of the fields.
She arrived at the pleasant place, the desert pasture,
the lovely fields on Death's shore.
She came upon Baal:
he had fallen to the ground.
She covered her loins with sackcloth.

V

She cut her skin with a knife,
she made incisions with a razor;
she cut her cheeks and chin,
she raked her arms with a reed,
she plowed her chest like a garden,
she raked her back like a valley.
"Baal is dead: what will happen to the peoples?
Dagon's son: what will happen to the masses?
Let us go down into the earth in Baal's place."
Sun, the gods' torch, went down with her.
When she had finished weeping,
    had drunk her tears like wine,
she called to Sun, the gods' torch:
    "Lift Baal the Conqueror onto me!"
Sun, the gods' torch, obeyed;
    she lifted up Baal the Conqueror;
she put him on Anat's shoulders.
She brought him up to the peaks of Zaphon;
    she wept for him and buried him;
she put him into the hole of the gods of the earth.
She slaughtered seventy wild oxen
    as an oblation for Baal the Conqueror.
She slaughtered seventy plow oxen
    as an oblation for Baal the Conqueror.
She slaughtered seventy sheep
    as an oblation for Baal the Conqueror.
She slaughtered seventy deer
    as an oblation for Baal the Conqueror.
She slaughtered seventy mountain goats
    as an oblation for Baal the Conqueror.
She slaughtered seventy asses
    as an oblation for Baal the Conqueror.

Then she headed toward El
    at the source of the two rivers,
in the midst of the two seas' pools.
She opened El's tent and entered
    the shrine of the King, the Father of Time.
At El's feet she bowed down and adored,
    she prostrated herself and worshiped him.
She raised her voice and shouted:
    "Now let Asherah and her sons rejoice,
    the goddess and her pride of lions:
for Baal the Conqueror has died,
    the Prince, the Lord of the Earth, has perished."

El called to Lady Asherah-of-the-Sea:
BAAL

"Listen, Lady Asherah-of-the-Sea:
give me one of your sons;
I'll make him king."
And Lady Asherah-of-the-Sea replied:
"Why not make Yadi-Yalhan king?"
But El the Kind, the Compassionate, replied:
"He's much too weak to race,
to compete in spear-throwing with Baal,
with Dagon's son in contest."
And Lady Asherah-of-the-Sea replied:
"Can't we make Athtar the Awesome king?
Let Athtar the Awesome be king!"
Then Athtar the Awesome
went up to the peaks of Zaphon;
he sat on Baal the Conqueror's throne:
his feet did not reach the footstool,
his head did not reach the headrest.
And Athtar the Awesome spoke:
"I can't be king on the peaks of Zaphon."
Athtar the Awesome descended,
he descended from Baal the Conqueror's throne,
and he became king of the underworld, the god of it all.

One day passed, then two;
and the Maiden Anat approached him.
Like the heart of a cow for her calf,
like the heart of a ewe for her lamb,
so was Anat's heart for Baal.
She seized Death by the edge of his clothes,
she grabbed him by the hem of his garments;
she raised her voice and shouted:
"Come, Death, give me my brother!"
And El's son Death replied:
"What do you want, Virgin Anat?
I was taking a walk and wandering
on every mountain in the heart of the earth,
on every hill in the heart of the fields;
I felt a desire for human beings,
a desire for earth's masses.
I arrived at my pleasant place, the desert pasture,
the lovely fields on Death's shore.
I approached Baal the Conqueror;
I put him in my mouth like a lamb,
he was crushed like a kid in my jaws.”
Sun, the gods' torch, burned;
the heavens shimmered under the sway of El's son
Death.
One day passed, then two;
the days became months.
The Maiden Anat approached him.
Like the heart of a cow for her calf,
like the heart of a ewe for her lamb,
so was Anat's heart for Baal.
She seized El's son Death:
with a sword she split him;
with a sieve she winnowed him;
with fire she burned him;
with a hand mill she ground him;
in the fields she sowed him.
“May the birds not eat his remains,
may the fowl not consume his parts:
let flesh cry out to flesh!”

“. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
“And if Baal the Conqueror lives,
if the Prince, the Lord of the Earth, has revived,
in a dream of El the Kind, the Compassionate,
in a vision of the Creator of All,
let the heavens rain down oil,
let the wadis run with honey;
then I will know that Baal the Conqueror lives,
that the Prince, the Lord of the Earth, has revived.”
In a dream of El the Kind, the Compassionate,
in a vision of the Creator of All,
the heavens rained down oil,
the wadis ran with honey.
El the Kind, the Compassionate, was glad:
he put his feet on a stool,
he opened his mouth and laughed;
he raised his voice and shouted:
"Now I can sit back and relax;
my heart inside me can relax;
for Baal the Conqueror lives,
the Prince, the Lord of the Earth, has revived."
El called to the Virgin Anat:
"Listen, Virgin Anat—
speak to Sun, the gods' torch:
'Sun, the furrows in the fields have dried,
the furrows in El's fields have dried;
Baal has neglected the furrows of his plowland.
Where is Baal the Conqueror?
where is the Prince, the Lord of the Earth?"
The Virgin Anat left;
she headed toward Sun, the gods' torch;
she raised her voice and shouted:
"Message of the Bull, El your father,
the word of the Kind One, your parent:
'Sun, the furrows in the fields have dried,
the furrows in El's fields have dried;
Baal has neglected the furrows of his plowland.
Where is Baal the Conqueror?
where is the Prince, the Lord of the Earth?"
And Sun, the gods' torch, replied:
"Pour sparkling wine from its container,
bring a garland for your relative;
and I will look for Baal the Conqueror."
And the Virgin Anat replied:
"Wherever you go, Sun,
wherever you go, may El protect you."
Baal seized Asherah's sons;
he struck Rabbim on the shoulder;
he struck the Waves with his club;
he pushed sallow Death to the ground.
Baal returned to his royal chair,
to his dais, the seat of his dominion.
The days became months,
the months became years.
Then, in the seventh year,
El's son Death spoke to Baal the Conqueror;
he raised his voice and shouted:
"Baal, because of you I suffered shame;
because of you I suffered splitting with a sword;
because of you I suffered burning with fire;
because of you I suffered grinding with a hand mill;
because of you I suffered winnowing with a sieve;
because of you I suffered scattering in the fields;
because of you I suffered sowing in the sea.
Give me one of your brothers,
so that I may sit down and eat..."

"Let Baal give his little brothers for me to eat,
his mother's sons for me to consume."

He returned to Baal on the peaks of Zaphon;
he raised his voice and shouted:
"Let Baal give his little brothers for me to eat,
his mother's sons for me to consume."

They butted each other like camels—
Death was strong, Baal was strong.

They gored each other like wild oxen—
Death was strong, Baal was strong.

They bit each other like serpents—
Death was strong, Baal was strong.

They kicked each other like stallions—
Death fell, Baal fell.
BAAL

Sun shouted from above:
“Listen, El’s son Death:
how can you battle with Baal the Conqueror?
how can you keep the Bull, El your father, from hearing you?
He will surely undermine the foundations of your throne;
he will surely overturn your royal chair;
he will surely smash your scepter of judgment.”

El’s son Death became fearful;
El’s Darling, the Hero, was terrified;
Death was afraid of her voice.

“But you will eat the sacrificial meal,
you will drink the offertory wine.”

Sun judged the Healers,
Sun judged the divine ones:
“Gods, Death is yours;
Kothar, your friend, is yours,
and your acquaintance Hasis.

In Sea—Desire and the Dragon—
Kothar-wa-Hasis wandered,
Kothar-wa-Hasis roamed.

The scribe was Ilimilkku from Shubbani;
the reciter was Attanu-Purlanni, the chief priest,
the chief herdsman;
the sponsor was Niqmaddu, king of Ugarit, master of Yargub,
lord of Tharumani.
Bibliography


Akkermans, P. M. & Schwartz, G. M. 2003. The archaeology of Syria: from complex hunter-gatherers to early urban societies (c. 16,000-300 BC), Cambridge University Press.


Batty, M. 2010. Generating cities from the bottom up. Embracing complexity in design, 1.


Bonelli, R. 1959. Architettura e restauro. Venezia


Available: [http://goo.gl/00Bg7i](http://goo.gl/00Bg7i) [Accessed 10 November 2015].


ICOMOS 1979. The Burra Charter, the Australia ICOMOS Charter for the Conservation of places of cultural significance. ICOMOS Australia (Burra Burra).


Norberg-Schulz, C. 1968. *Intentions in architecture.*


