Public Baths Built in the Urban Centers of Syria during the Mamluk Period

By

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To My Loving Kids, Husband and Parents Who Have Supported Me All the Way

Through.
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Without the help and support of so many people this project would not have been accomplished.

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Public Baths Built in the Urban Centers of Syria during the Mamluk Period

Noura Hamasni

ABSTRACT

Baths stood as one of the most significant public institutions found in Syria during the Islamic period. It was commonly known that baths structure grew from simple Roman and Byzantine models, yet they matured the most following their implementation in different urban contexts during the Mamluk period. Public Baths, becoming an essential element in urban life, have witnessed several changes on a social, economic and architectural levels. Yet, not all aspects have been covered. This paper highlights the various aspects and factors behind the bath’s significant growth. The paper’s main focus is on the great effect that the urban context had not only on the bath’s social and economic level but on its architectural variations in terms of plans and elevations.

Keywords: Public baths, Urban context, Architectural evolution, Social evolution, Economic evolution, Central plan, Linear plan, Area’s predominance.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>xi</td>
</tr>
<tr>
<td>List of Figures</td>
<td>xii</td>
</tr>
<tr>
<td>Chapter One</td>
<td>1</td>
</tr>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter Two</td>
<td>7</td>
</tr>
<tr>
<td>II. General Overview</td>
<td>7</td>
</tr>
<tr>
<td>2.1 The Roman and Byzantine Influences on the Bath’s Architecture</td>
<td>7</td>
</tr>
<tr>
<td>2.2 The Evolution of Damascus and Aleppo during the Mamluk Period</td>
<td>10</td>
</tr>
<tr>
<td>2.3 The Different Factors Behind the Bath’s Continuous Construction</td>
<td>15</td>
</tr>
<tr>
<td>and Development in Damascus and Aleppo</td>
<td></td>
</tr>
<tr>
<td>Chapter Three</td>
<td>19</td>
</tr>
<tr>
<td>III. Architectural Analysis of the Public Baths that were built in</td>
<td>19</td>
</tr>
<tr>
<td>Damascus and Aleppo during the Mamluk Period</td>
<td></td>
</tr>
<tr>
<td>3.1 The Baths Architectural Analysis - External Facades</td>
<td>19</td>
</tr>
<tr>
<td>3.2 The Baths Architectural Analysis - Internal Layout</td>
<td>24</td>
</tr>
<tr>
<td>3.3 The Bath's Architectural Analysis - Embellishment</td>
<td>28</td>
</tr>
<tr>
<td>3.4 The Bath’s Entry Fees in Relevance to its Architectural Development</td>
<td>32</td>
</tr>
<tr>
<td>Chapter Four</td>
<td>34</td>
</tr>
<tr>
<td>IV. Public Bath’s General Aspects</td>
<td>34</td>
</tr>
<tr>
<td>4.1 The Type of Clients Entering the Bath and The Different Opening</td>
<td>34</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
</tr>
<tr>
<td>4.2 The Baths Attendants</td>
<td>35</td>
</tr>
<tr>
<td>4.3 The Public Bath Heat Preservation</td>
<td>36</td>
</tr>
<tr>
<td>4.4 The Bath's Water System</td>
<td>38</td>
</tr>
<tr>
<td>Chapter Five</td>
<td>40</td>
</tr>
<tr>
<td>V. Conclusion</td>
<td>40</td>
</tr>
</tbody>
</table>
Bibliography ............................................................................................................. 42

VI. Appendix A: Damascus .......................................................................................... 45
A1. Al Shaghour Quarter .............................................................................................. 45
A 1.1 Al Sourouji Bath ............................................................................................. 45
A 1.2 The Ezen Bath ................................................................................................. 48
A. 1.3 Al Nasiri Bath ............................................................................................... 50
A 1.4 Al Tayrouzi Bath ............................................................................................. 52
A2. Saroujah Quarter ................................................................................................. 55
A 2.1 The Es-Silsile Bath ......................................................................................... 55
A 2.2 Al Joze Bath ................................................................................................. 57
A 2.3 The Bath of Ammounah ................................................................................. 59
A 2.4 The Omari Bath ......................................................................................... 61
A 2.5 Al Sultan Bath ......................................................................................... 62
A 2.6 The Bath of Al Wared ................................................................................. 65
A3. Al Salihya quarter ............................................................................................... 67
A 3.1 Al Jisr Bath .............................................................................................. 67
A4. Inside the city walls ............................................................................................ 69
A 4.1 Al Safi Bath .............................................................................................. 69
A 4.2 Al Qaymariyeh Bath ..................................................................................... 71
A 4.3 Al Hajib Bath ......................................................................................... 73

VII. Appendix B: Aleppo .............................................................................................. 75
B 1. Bab Al Hadid ......................................................................................................... 75
B 1.1 Al Haddadin Bath ............................................................................................ 75
B 1.2 The Bath of Al Jadida ..................................................................................... 77
B 1.3 The Bilbal Bath ............................................................................................. 79
B 1.4 The Bath of Al Bayada ................................................................................... 81
B 1.5 Al Maji Bath .............................................................................................. 84
**List of Tables**

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1. 1</td>
<td>Baths located in Areas surrounding the old City old Damascus (Very close to the city walls).</td>
<td>104</td>
</tr>
<tr>
<td>Table 1. 2</td>
<td>Baths located inside the city walls</td>
<td>104</td>
</tr>
<tr>
<td>Table 1. 3</td>
<td>Baths outside the city walls – Al Saroujah Quarter</td>
<td>104</td>
</tr>
<tr>
<td>Table 1. 4</td>
<td>Baths built outside the city walls in Al Chaghour Quarter</td>
<td>105</td>
</tr>
<tr>
<td>Table 1. 5</td>
<td>Baths built outside the City walls in Al Qanawat area</td>
<td>106</td>
</tr>
<tr>
<td>Table 1. 6</td>
<td>Baths built outside the City walls in Al Salihya quarter</td>
<td>106</td>
</tr>
<tr>
<td>Table 1. 7</td>
<td>Baths built inside the city walls</td>
<td>107</td>
</tr>
<tr>
<td>Table 1. 8</td>
<td>Bab Al Haddid, Aleppo</td>
<td>107</td>
</tr>
<tr>
<td>Table 1. 9</td>
<td>Bab Al Nerab</td>
<td>108</td>
</tr>
<tr>
<td>Table 1. 10</td>
<td>Bab Al Naser</td>
<td>109</td>
</tr>
<tr>
<td>Table 1. 11</td>
<td>Bab al Maqam</td>
<td>109</td>
</tr>
<tr>
<td>Table 1. 12</td>
<td>Inside the City walls</td>
<td>109</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

**Figure** | **Page**
---|---
Figure 1. The Bath of Khirbat Al Darih | 111
Figure 2. Doura Europos plan | 111
Figure 3. Lejjun Bath plan | 111
Figure 4. Element from a Byzantine bath in Antioch (Antakya, Syria) | 111
Figure 5. The plan of Apolausis bath in Antioch, Syria | 112
Figure 6. Damascus Map | 112
Figure 7. The old city of Damascus map | 112
Figure 8. Damascus city gates | 112
Figure 9. Aleppo city map | 113
Figure 10. The Umayyad bath at the Amman Citadel | 113
Figure 11. Linear Type of plan | 113
Figure 12. Central Type of Plan | 114
Figure 13. Al Bouzouriyeh Bath | 114
Figure 14. Al Bouzouriyeh Bath Elevation | 115
Figure 15. Al Bouzouriyeh Bath Decoration | 115
Figure 16. Sitti Adra bath Plan | 116
Figure 17. Sitti Adra Elevation | 116
Figure 18. Sitti Adra Elevation | 116
Figure 19. Al Sourouji bath plan | 117
Figure 20. Al Sourouji Bath Ceiling plan | 117
Figure 21. Al Sourouji Bath elevation | 118
Figure 22. Al Sourouji bath entrance from Al Chaghour Quarter | 118
Figure 23. Al Sourouji mosque Main entrance | 119
Figure 24. Ez-Zen Bath................................................................. 119
Figure 25. Ez-Zen Bath ceiling plan........................................ 120
Figure 26. Ez-Zen bath. Elevation................................................. 120
Figure 27. Ez-Zen bath Elevation................................................... 121
Figure 28. Ez-Zen Bath Main Façade............................................. 121
Figure 29. Ez-Zen Main façade........................................................ 121
Figure 30. Afridouniyah Madrassa Known also as al Ajami mosque main entrance ................................................................. 122
Figure 31. Al Nasiri Bath.............................................................. 122
Figure 32. Al Nasiri Bath Ceiling. .................................................. 123
Figure 33. Al Nasiri Bath Elevation.................................................. 123
Figure 34. Al Nasiri Bath Elevation.................................................. 123
Figure 35. Al Nasiri Bath Muqarnas Details................................. 124
Figure 36. Al Nasiri Bath Decorative Details............................... 124
Figure 37. Al Nasiri bath from the street level.............................. 124
Figure 38. Al Nasiri Bath Main entrance....................................... 125
Figure 39. Al Tayrouzi Bath.......................................................... 126
Figure 40. Al Tayrouzi Bath Decorative Elements...................... 126
Figure 41. Al Tayrouzi Bath Decorative Elements...................... 126
Figure 42. Al Tayrouzi Bath Decorative Elements...................... 127
Figure 43. Al Tayrouzi Bath Main Façade...................................... 127
Figure 44. Al Tayrouzi Bath Main facade showing the window and Main entrance................................................................. 128
Figure 45. Al Tayrouzi Bath date of Construction........................ 128
Figure 46. Al Tayrouzi Bath Main entrance and secondary façade ................. 128
Figure 71. Al Sultan Bath plan................................................................. 137
Figure 72. Al Sultan Bath ceiling plan.................................................. 139
Figure 73. Al Sultan Bath Elevation....................................................... 139
Figure 74. Al Sultan Bath Elevation....................................................... 139
Figure 75. Al Sultan Bath Decorative Elements. ................................. 140
Figure 76. Al Sultan Bath entrance elevation...................................... 140
Figure 77. Al Sultan Bath medalion..................................................... 141
Figure 78. Al Qasab mosque main entrance........................................ 141
Figure 79. Al Qasab mosque minaret .................................................. 141
Figure 80. Al Wared Bath plan............................................................. 142
Figure 81. Al Wared Bath ceiling plan................................................ 142
Figure 82. Al Wared Bath Elevation...................................................... 143
Figure 83. Al Wared Bath Elevation...................................................... 143
Figure 84. Al Wared Bath Elevation...................................................... 143
Figure 85. Al Jisr Bath.......................................................... 144
Figure 86. Al Jisr Bath Ceiling Plan...................................................... 144
Figure 87. Al Jisr Bath Main Entrance................................................ 145
Figure 88. Al Jisr Bath Elevation......................................................... 145
Figure 89. Al Safi Bath................................................................. 146
Figure 90. Al Safi Bath Elevation......................................................... 146
Figure 91. Al Qaymariyeh bath............................................................. 147
Figure 92. Al Qaymariyeh Bath............................................................ 147
Figure 93. Al Qaymariyeh Bath Elevation........................................... 147
Figure 94. Al Qaymariyeh Bath Elevation........................................... 147
Figure 95. Al Hajib bath............................................................. 148
Figure 96. Al Hajib Bath Exterior View............................................................... 148
Figure 97. Al Hajib Bath Elevation .................................................................... 148
Figure 98. Al Hajib Decorative Element ............................................................ 149
Figure 99. Al Hajib Decorative Element ............................................................ 150
Figure 100. Tankiz Mosque Main entrance ....................................................... 150
Figure 101. Al Tankiz Mosque Minaret ............................................................. 150
Figure 102. Tankiz Mosque Minaret .................................................................. 151
Figure 103. The Inscription found on the Minaret ............................................. 151
Figure 104. Tankiz Mosque muaqarnas Portal .................................................. 151
Figure 105. Tankiz Mosque Façade ................................................................... 152
Figure 106. Tankiz Mosque Façade ................................................................. 152
Figure 107. Dar Al Hadith Main entrance in Damascus ...................................... 153
Figure 108. Mausoleum of Sit Sutaytah In Damascus ....................................... 153
Figure 109. Al Haddadin Bath ......................................................................... 154
Figure 110. Al Jadida Bath ............................................................................... 154
Figure 111. Bilban Bath .................................................................................... 155
Figure 112. Al Bayada bath ............................................................................... 155
Figure 113. Al Maji Bath .................................................................................. 156
Figure 114. Ishtikmar bath ............................................................................... 156
Figure 115. Al Qawas bath ............................................................................... 157
Figure 116. Al Basatin Bath ............................................................................. 157
Figure 117. Bath of Al Mikhan ......................................................................... 157
Figure 118. Yalbugha Al Nasiri bath location on map. Archnet ......................... 158
Figure 119. Yalbugha al Nasiri bath ................................................................. 158
Figure 120. Yalbugha Al Nasiri ceiling plan. archnet ........................................ 159
Figure 121. Yalbugha al Nasiri main elevation. archnet .............................................. 159
Figure 122. Yalbugha Al Nasiri Main Facade. Archnet .................................................. 159
Figure 123. Yalbugha Al Nasiri doorway ...................................................................... 160
Figure 124. Yalbugha Al Nasiri. Facade ornamentation ................................................. 160
Figure 125. Yalbugha Al Nasiri Entryway stone benches .............................................. 160
Figure 126. Yalbugha al Nasiri door lintel ...................................................................... 161
Figure 127. Yalbugha Al Nasiri Portal showing the radiating ablaq and lintel .......... 161
Figure 128. The Dry zone ............................................................................................. 161
Figure 129. Wall inscription in the dry zone .................................................................... 162
Figure 130. The bath of Yalbugha al Nasiri Caldarium ...................................................... 162
Figure 131. The dome of the central zone ....................................................................... 162
Figure 132. Citadel of Aleppo palace .............................................................................. 163
Figure 133. Mamluk Bridge of the Citadel ...................................................................... 163
Figure 134. Citadel of Aleppo. The Tower of the Mamluk period ..................................... 163
Figure 135. The Tawashi Palace in the citadel entryway ................................................. 164
Figure 136. Al Tawashi Palace Entrance from the courtyard side, Citadel of
Aleppo ............................................................................................................................. 164
Figure 137. Bab al Ahmar bath. ..................................................................................... 165
Figure 138. Al Salihiya bath. .......................................................................................... 165
Chapter One

Introduction

Public baths (Hammams), are an essential type of building in Islamic architecture, well recognized in Syria since the Roman period. Baths grew mainly from simple Roman and Byzantine models. They were constantly built in Syria’s major provinces, Damascus and Aleppo, and have achieved their perfect state of construction during the medieval period.¹ The baths extensive construction and endurance was not only related to their hygienic concerns but to their prominent social² and economic roles.³ During the Mamluk period, the increase in luxury manners, cleanness and purity have made of the public baths a main element in urban planning. A bath or sometimes more were found in every quarter depending on the population density and needs. Baths were built in many ways to suit different social levels knowing that they were mostly visited by the middle class. This public institution became very profitable with time.⁴ Its revenues were either saved for the founder himself or set as endowment foundations, covering the needs of some religious institution like mosques or madrassas that were built at the same time by the same founder or in the same area.


Despite their significance, the bath’s presence on the street level was very modest when compared to other monumental structures found during the Mamluk period. The public baths that were found in Damascus and Aleppo shared many resemblances due to their comparable operating system. Nevertheless, they have matured on various levels in order to adapt to different urban settings. In terms of architecture, the size of the baths reflected their prominence. The internal spatial composition as well as the decorative elements implemented varied in respect to the bath’s surrounding, whether built inside the city walls or outside, in overpopulated areas, facing large mosques, madrassas or in small neighborhoods.

Previous studies have been made on the public baths that were built all over Syria throughout the Islamic period, discussing their main characteristics and architectural evolution. Archeologist Michel Ecochard and Claude Le Coeur showed great interest in studying the baths that were built in Damascus between the 12th – 18th centuries AD. Ecochard and Le Coeur started by stating the importance of water in the city of Damascus which explained the construction of a notable number of baths. Then, a comprehensive description of the public baths has been presented, focusing mostly on the bath’s exterior, plan, building materials, building techniques,

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5 Public baths were rarely recognized from the street level. Bath had simple facades, basically covered with ablaq marble and pierced with windows. The only decorated part was mainly the main entrance. Yet, during the Mamluk period, the bath’s exterior could not be differentiated from other institutions built at the same time, only through their roof design, which consisted of a series of domes in different sizes filled with glass cups creating a beautiful pattern.

6 In overpopulated areas, baths were supposed to be large in size in order to encompass and satisfy the needs of a notable number of visitors expected every day.

etc. Their research was supplemented with technical drawings clarifying the bath’s major changes in terms of plans and elevations.8

Mounir Al Keyal in his book “Al Hammamt al Dimashkiyah wa Takalidiha” relied mostly on the work of Ibn Asakir (1176AD), Ibn Shaddad (674 Hijri), Ibn Abed al Hadi (909 Hijri), and many others along with Ecochard and Le Coeur (1942AD). Al Keyal formulated a list in which he enumerated most of the public baths that were built in Damascus, differentiating the ones that remained operating from the ones that stopped. Al Keyal discussed the various aspects stressing on the bath’s social significance, baths attendants, watering system, etc.9

In a later study, Magda Sibely complemented the work of the authors previously mentioned. Being more familiar with the topic and exposed to a large number of models, Sibely’s main focus was on the bath’s internal spatial evolution. She classified the different types of plans implemented in the baths that were built between the 12th – 18th centuries and outlined the variations in the areas predominance which were highly affected by the inhabitants emerging needs. For a better understanding, Sibely compared a notable number of public baths built at different times in the same area. This helped her question and explore the importance of the urban development as well as the notable effect that it had on the bath’s architecture especially the interior.10 Sibely states that the two types of plans which she refers to as organizations were respectively implemented: the linear based on

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Roman models and the central organizations based on Byzantine models. The warm area, followed by the hot area, became the predominant on plan and was encountered by small private rooms satisfying the emerging bathing services.

Abed Al Razak Mouawad showed great interest in studying the public baths that were built in Aleppo. He relied on the baths models that were previously listed by Ibn Shuhna, between the Ayyoubid and the Ottoman period. Mouawad’s main concern was the identification of the different factors behind the wide spread of the public baths in Aleppo. In the research, he included a detailed architectural examination of a selected number of baths separating the ones that were demolished from the ones that remained standing for him to come up with a clear approach.

It is difficult nowadays to have a novel and complete idea of the baths built in Damascus and Aleppo, for many of them had been demolished. Truthfully, numerous were the reasons behind their gradual disappearance. Baths became less beneficial through time, especially following their implementation in private residence. The last was accompanied by the move of the prosperous population into the emerging quarters as well as the increasing expenses to keep the baths

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13. الدر المنتخب في تاريخ مملكة حلب. دار الكتاب العربي سورية. دمشق

14. الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتب العربي للمعرف

15. الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتب العربي للمعرف

Another reason was that people started to complain from the smoke and the burn residues that affected their health negatively when built in residential neighborhoods. The ones that remained standing were the ones mainly built in touristic areas, around important monuments like the great mosque of Damascus. Tourist, when passing by either Damascus or Aleppo, intended to visit structures that reflected the city’s cultural heritage. Last but not least, the Syrian civil war came to target the most important institutions that remained standing, leaving no way for a clearer approach.

This paper discusses the constant growth of the public baths that were built in Damascus and Aleppo during the Mamluk period following their implementation in different urban context. The selection of public baths examples used for this study was based on the work of the authors mentioned above. Along with the social, economic and architectural changes, the paper’s main focus is on analyzing the decorative elements implemented on the baths external and internal facades, marking out the different styles used and their major influences. In fact, scholars have left aside the bath’s embellishment since most of the elements have faded due the humid weather and poor maintenance. Yet, it turned out that the institutions built around the baths, sometimes by the same patron, had a great effect of the bath’s architecture, not only in terms of plan composition but also in terms of elevation. The majority of the decorative elements implemented on the bath’s external and internal facades, along

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with the drums supporting the roof, have mirrored the styles implemented on structures found nearby. Additionally, following this deep analysis, a novel approach came to life, this time illuminating the great effect of the bath’s architecture on its varying financial revenues.
Chapter Two

General Overview

2.1 The Roman and The Byzantine Influences on the Bath’s Architecture.

Scholars have agreed on the fact that baths architecture was based on Roman and Byzantine models, modified in various ways to fit in different urban settings. The baths that were found during the Roman period were classified into Thermea and Balnea types. The thermea type formed a large structure which included the bathing services as well as gardens, libraries, gyms, etc. The balnea type, which was the one adopted during the Islamic period, consisted of small baths visited mostly for their washing services.

Baths following the balnea type consisted of a simple plan divided into two zones, dry and wet, with consecutive rooms of varying temperatures known as Frigidarium, Tepidarium and Caldarium. The linear type of plan was the one adopted in later periods for it helped in controlling the climatic changes as well as the bather’s circulation within the bath. The best known example could be the bath of Khirbat al Darih, built during the late 1st – early 2nd century AD in southern Jordan.

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The bath opted for a simple rectangular plan divided into three main areas of increasing temperature following the linear type. All three areas were almost equal in size, leaving no clue which one was the predominant. Baths plans have matured through time, becoming more comparable to the Doura Europos structure which was built during the 3rd century AD on the Euphrates River (Fig.2). The structure became larger in size. The cold area, known as Frigidarium, became the predominant used mainly for resting, relaxing and socializing. The best known example was the bath of Lejjun, built in Jordan during the 3rd century AD. It consisted of a huge dry zone, assuring its ceremonial function, followed by three consecutive rooms of increasing temperature forming the wet zone (Fig.3).

Henceforth, baths built during the Byzantine period, mainly in Antioch, opted for a different type of plan. Baths have followed the same bathing program found during the Roman period, yet chose a different type of plan with varying proportions, following the addition of a notable number of small private rooms.

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24 Linear organization: the adoption of the linear organization helped in controlling the bather’s movement by providing a smooth circulation within the bath without being bothered by any climatic change.


This led to the adoption of the central octagonal plan characterized by an area in the middle surrounded by small private rooms (Fig.4).\textsuperscript{30} The bath of Apolausis could be used as a good example reflecting the baths that followed the central type of plan, built during the Byzantine period in Antioch.

This type of plan continued to be seen during later Islamic periods (Fig.5). The baths that were built during the Mamluk period in either Damascus or Aleppo have followed the Roman and Byzantine models with some modifications in plan due to their implementation in different urban settings.\textsuperscript{31} However, major architectural characteristics have been deducted due to major religious concerns. For example, the implementation of large pools, a notion greatly seen in Roman models, have been replaced by small water basins used for private showering since the Umayyad period.\textsuperscript{32} The heating system shifted from hypocaust to steam and underfloor ducting system.\textsuperscript{33} The decorative style, which was based on mosaics and figural representation since the Umayyad period, shifted towards the use of muqarnas, arches and some vegetal forms to enhance the major structural elements. This notion will be deeply investigated later on in the paper.


2.2 The Evolution of Damascus and Aleppo during the Mamluk period.

The paragraph below presents a general overview on Syria’s major urban centers, Damascus and Aleppo. It presents the different changes that took place in both cities during the Mamluk period on a social, economic and architectural level. Such a discussion helped in affirming the reasons behind the selection of these two cities in specific when analyzing the development of the public baths.

Damascus and Aleppo were Syria’s major provinces during the Mamluk period. Damascus, was considered the Mamluk’s royal base after Cairo \(^{34}\) and an important commercial center.\(^{35}\) The city witnessed a demographic and economic growth. It is believed that its population was around 100,000 inhabitant that varied between local Arabs and non-Arabs of different social classes and occupations like merchants, laborers, farmers, government officials, etc.\(^{36}\) People used to move in seeking stability, luxury and knowledge. Some of the European travelers,\(^{37}\) who were present during the 14\(^{th}\) century, attested to that Damascus formed an important trade center during the Mamluk period. It satisfied the needs of most of its inhabitants and the areas surrounding it in terms of markets and the goods available in it.\(^{38}\) The city’s expansion and urban development benefited the most from the large number of pilgrims who used to stop by along with their caravans during the hajj season in an


area known as Maydan al Qadam.\textsuperscript{39} The city of Damascus was divided into several quarters (Fig.6).\textsuperscript{40} Ziadeh in his book “Damascus under the Mamluks” offered a full investigation, describing the expansion of the existing quarters like Souq Sarouja as well as the emerging ones like Maydan Tahet Al Qalaa (Fig.6).\textsuperscript{41} Ziadeh referred to Ibn Battuta\textsuperscript{42} in order to classify the quarters that have experienced a quick evolution.\textsuperscript{43} Quarters have gained a unique identity. They encompassed religious and public institutions like mosques, madrassas, markets, and public baths.\textsuperscript{44} Al Nayrab, Al Mizzah, Al Rabwa and Al Saliihiya were from the most important quarters that encouraged people to move into it.\textsuperscript{45} The area of Damascus was extremely rich in water supply which source was mainly the Barada River. Water was perfectly distributed to different areas through water channels, satisfying various needs.\textsuperscript{46}

Aleppo, on the other hand, was considered the second major Syrian province after Damascus. Its geographical location assisted in the formation of a major commercial center which attracted a lot of merchants to move into it and facilitated its exposure to international markets. Merchants used to stop by, either to buy or to sell their products in a way that affected the city’s continuous growth.\textsuperscript{47}

\textsuperscript{42} Ibn Battuta is a Moroccan traveler who has spent time in Damascus during the 14\textsuperscript{th} century.
divided into several quarters, each with a notable number of khans, souqs, shops, mosques, public baths, etc. (Fig.9). Being compared to Damascus, Aleppo was considered poor in water supply relying mostly on two rivers: the Kuweik and the Dahab River because the Euphrates river was more on the borders. Most of what was stated explains the governor’s focus on adding extra water supplies and building new water channels that could easily satisfy the inhabitant’s needs and assured the functioning of the public baths.

Since then, Damascus and Aleppo, were in prompt urban and social development reaching their peak during the Mamluk period. Both cities were inhabited by different communities that varied between ruling elite, notables and regular people. Quarters were formed by a mixed community of rich and poor, while few, especially the ones located around the citadels, were known to be occupied by wealthy people like emirs, ulamas, merchants, etc.

When discussing politics, each of the Syrian provinces was ruled by a governor recognized as Na’ib al Saltana. The golden days of Syria, as in the whole of the Mamluk Sultanate, prospered the most under the reign of Sultan al-Nasir

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48 The souqs in each quarter were different, they were specialized souqs, like souq al attarin, souq al khashhabin, etc.


Muhammad (1310 - 1342). The architectural activity that emerged in Syria notably flourished during the reign of the governor Tankiz Al Nasiri who was well-known for his contributions in different cities. Particularly in Damascus, along with the renovation of the Umayyad great mosque, Tankiz main focus was on the foundation of public and religious endowments as well as the improvement of the water resources. In fact, Tankiz revealed great interest in water supply, adding new canals in the year 1313-1314AD. Moreover, he assisted in the emergence of important neighborhoods and markets like Souq Sarouja which took the name of one of his emirs. In the year 1315-1316AD, Tankiz built a Qaysariyeh known as “Dahshat al Nisa’” set as an endowment foundation, which revenues went back to the Umayyad great mosque found next to it. In the year 1317AD, Tankiz Al Nasiri established the first congregational mosque outside the city walls. He added a


59 Religious endowments were of high importance because it helped patrons to save their properties and provide work for their children, etc.


mausoleum, public baths and few shops near the mosque in a way forming a large complex. In fact, Tankiz’s congregational mosque presented an ample architectural repertoire that influenced the structures found nearby on a greater scale. When it came to the mosque’s exterior, the main façade was adorned with Ablaq marble and the magnificent portal was characterized by series of muqarnas that ended by a half dome, both being known as Mamluk period architectural features.

However, Kenney in reference to Meinecke’s approach attested to that such an amplified portal, characterized by its radiating multiple fan, was not seen earlier in Damascus, but frequently implemented in Cairo. A significant example that could support this theory was the entryway of the madrassa - mausoleum of Amir Sunqur Al Sa’di found in Cairo between the years 1315-1316AD. On another note, the exact location of the bath built by Tankiz was not very clear, but known to be very close to the mosque and operated in the year 1312AD. The bath was hardly investigated due to the lack of tangible information. Nevertheless it was known for its magnificent architecture what caused an escalation in its rental cost, reaching 40 dirhams a day. Henceforth, the bath was very profitable and was set as a waqf foundation for Tankiz’s mosque as well as the mausoleum next to it. More of Tankiz urban projects in Damascus were the Dar al Dhahab al Jadid built in the year

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1327-1328,\textsuperscript{69} the mausoleum of Sit Sutaytah found in the year 1330AD,\textsuperscript{70} Dar al Quaran wal Hadith al Tankiziyah built in 1337- 1338AD.\textsuperscript{71} Unfortunately most of the magnificent monuments executed in Damascus did not stand for long nor were they well documented.\textsuperscript{72} Some of them will be restated in chapter three in a way supporting the approach offered.

\textbf{2.3 The Different Factors behind the Bath’s Continuous Construction and Development in Damascus and Aleppo.}

Public baths were considered by art historians as one of the most prominent structures, extensively built in Damascus and Aleppo, due to their significant role in urban context. Public baths used to be found by different patrons like Emirs, Qadis, merchants, etc. for several reasons other than hygienic, mostly for their social and economic motives which will highly investigated in the paragraph below.

In addition to cleanliness and purity, public baths were considered a place for entertainment, recreation, and social activities, especially for women. It is said that going to the bath was taken as an opportunity for looking for brides of a woman’s son.\textsuperscript{73} In Aleppo, baths were mostly visited by a notable number of people in the absence of other source of entertainment, like theaters or coffee shops, etc.\textsuperscript{74} This


\textsuperscript{73} زعور, أ. (1990). الحياة الاجتماعية في بلاد الشام في القرنين الثالث والرابع عشر. جامعة دمشق.

positively affected the number of public baths built and reflected in a way the type of plan adopted in which the main focus shifted towards the bathing zone. This feature will be greatly investigated later on throughout this paper.

Baths became present in almost every quarter depending on the population density, in order to satisfy the needs of the largest number of people, as well as the number of travelers passing by the area each year.\textsuperscript{75} It was evident that the Mamluk architects attentively chose the perfect location when building any of their structures due the prominent effect that the urban setting had on the architecture in general.\textsuperscript{76} The same notion was applicable on the public baths construction, which were mostly found in major souqs like for example souq Sarouja in Damascus which included Al Joze bath (12\textsuperscript{th} century), Al Omari bath (12\textsuperscript{th}-13\textsuperscript{th} century), Al Wared bath (1462AD), and many more.

Another feature that elucidated the endurance and persistence of the public bath construction was the novel economic feature they have gained.\textsuperscript{77} In fact, public baths became such a profitable institution, providing a fixed income either for the owner himself\textsuperscript{78} or set as waqf foundation covering the needs of many religious institutions like mosques, madrassas or even cemeteries.\textsuperscript{79} It was commonly known

\begin{itemize}
\item \textsuperscript{75} Zurrour, A. (1990). الحياة الاجتماعية في بلاد الشام في العصرين الإلخوبي و المملوكي. جامعة دمشق.
\item \textsuperscript{78} Mouawad in his book “Hammamt al amma fi madinat halab monzo bidayat al aser al ayoubi hata nihayat al aser al othmani” mentioned that all the revenues of the bath of Itab built in Aleppo during the mamluk period were divided, a small part went for the owner’s benefit and part of it as an endowment. The bath of Itab was built by a drinks maker person who has left his job and built this bath to benefit and live from it. Pp. 190- 192.
\item \textsuperscript{79} عبد الرزاق معوض, م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب العربي للمعرفة. ص 42-43.
\end{itemize}
that whenever there is a mosque, there is a bath. A well-studied example could be the Ishtikmar bath, built in Al Ajam area in Aleppo very close to the Ishtikmar mosque during the same year in 1374AD.\textsuperscript{80} Another example is Al Tayrouzi bath which was built in Damascus between the late 14\textsuperscript{th} - early 15\textsuperscript{th} century, found very close to Al Tayrouzi mosque which was built by the same patron in the year 1421AD.\textsuperscript{81} In addition to this, baths were found near cemeteries similar to Al Bayada bath built in Aleppo in 1450AD and set as a waqf foundation for the Nafisiyat cemetery erected nearby.\textsuperscript{82} In the outcome, Damascus much like Aleppo, showed proximity between the bath building structure and some religious institutions. Such proximity was not surprising when structures were set as a waqf foundation or they were built by the same patron.

In addition to this, Mouawad in his book stated that the notable amount of mosques found in Aleppo had positively affected the public bath’s construction in different ways.\textsuperscript{83} Most of the mosques that were found in Aleppo formed part of a religious complex complemented with shrines and tombs.\textsuperscript{84} Such complexes, which were not necessarily found during the Mamluk period, formed an important sight of


\textsuperscript{84} عبد الرازق معوض. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأموي حتى نهاية العصر العثماني. المكتب العربي للمعارف. ص41-42.
attraction.\textsuperscript{85} People from all over the world proceeded towards Aleppo, planning for a stay in order to visit the shrine and get blessed. This created a flow of people in the city, causing an economic as well as an architectural growth.\textsuperscript{86} The best known example of such complexes was the Ansari mosque, found to the south of the Joshen Mountain, thought to have the tomb of Abdallah al Ansari for people to visit.\textsuperscript{87} Another well-known example was a mosque located inside the Aleppo citadel, thought to have a part of Yahia Ibn Zakariyah’s head, which people prominently wanted to visit and get blessed from.\textsuperscript{88}
Chapter Three

The Architectural Analysis of the Public Baths that were built in Damascus and Aleppo during the Mamluk Period.

This chapter presents a comprehensive architectural analysis of the most important baths built in Damascus and Aleppo during the Mamluk period. A detailed investigation, taking into consideration the various influential aspects, will be offered in order to clarify the development of the bath’s plans and elevations.

3.1 The Baths Architectural Analysis – External Facades.

Public baths have been in constant architectural evolution since the Umayyad period. In Damascus as well as in Aleppo, the baths models have witnessed a significant architectural growth. At first, the geographical location was one of the most common features that affected the bath’s construction, especially in terms of dimensions. The size of the baths varied respectively whether built in small neighborhoods or facing a congregational mosque or a madrassa. This explains the fact that Mamluk architects have attentively chose the perfect layout for each model that fits best in a specific urban setting.

One of the major consequences when building a bath in a crowded neighborhood, surrounded by existing structures, was the absence of predominant street facades. Despite the magnificent architecture present at that time, public baths rarely showed an imposing architecture on the street level. The majority of the baths erected were

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discreet. A well-known example was Al Nasiri bath built in Damascus during the Mamluk period (Fig.31). Architects when building Al Nasiri’s bath were forced to create a specific layout that could fit best in the surrounding (Fig.31). This in a way clarified the U shape plan adopted. Furthermore, due to the bath’s location, the portal was the only part present on the street level, flanked by other existing structures one on either side, giving no hint that a bath was found behind these walls (Fig.37 & Fig.38). Few other examples were recognized by the passerby, this time only through their roof design which consisted of a series of domes found in different sizes pierced and filled with colored glass cups.

However, when the setting allowed, the bath’s main façade used to be very appealing. A very well-known example identified when tackling this notion was the bath of Yalbugha al Nasiri which was built in Aleppo during the 14th century (Fig.121). The bath was built free standing inside the city walls, encircled by vital monuments, like the Citadel of Aleppo, Al Tawashi mosque (1372AD), and Al Zahiriyah madrassa known as well as the Sultaniyah madrassa (13th century AD). Unfortunately, the mosque of Yalbugha, which was erected by the exact same patron as the bath, did not stand for long. This left scholars with no way for any additional exploration or comparison.


93 The mosque of Yalbugha was located in Al Adiliyeh palace.

Indeed, the analysis of the yalbugha’s bath main façade helped in demonstrating the great influence that the urban setting had on the public bath’s architecture itself. Despite the fact that the entire structure was erected with perfectly cut limestone, a local material frequently used in many other structures during the same period of time,95 the bath’s main façade was the only one embellished. It overlooked the palace of justice as well as the citadel of Aleppo, while the side facades were kept plain due to their location on the street level.96 Therefore, the main façade of the bath of Yalbugha presented a symmetrical composition virtually divided into two parts (Fig.122), very similar to the Ayyoubid palace’s façade found within the citadel of Aleppo (Fig.132). The first part was the one erected with perfectly cut limestone while the second part was the one enhanced (Fig.122). The implementation of certain elements, commonly found during the Mamluk period, helped in emphasizing the façade. In that sense, architects used ablaq stones strips (Fig.123) to cover the part of the façade that was delineated by a band made of stones and filled with vegetal carvings (Fig.124). A magnificent recessed entryway was placed exactly in the middle of the facade flanked by window openings, two on either side (Fig.121). The entryway itself consisted of a rectangular door opening, flanked by two stone benches, one on either side (Fig.125). The rectangular doorway was surmounted by a lintel filled with bent ablaq pattern (Fig.126) and terminated by a half arch filled with radiating ablaq stones (Fig.127). The window openings were filled with metal grills and topped by lintel of the same pattern (Fig.121).97

A comprehensive analysis drew the attention to the main façade’s influences. Starting with the bent ablaq pattern found on the lintels, it formed a copy of the ones executed on the gate of the Aleppo citadel facing it, basically on the monuments erected during the Mamluk period. The pattern was identified on top of the windows of the main gate’s façade (Fig.134). It also appeared matching with the one placed over the throne hall’s doorway of Al Tawashi palace built during the early 14th century (Fig.135). Following this, the bath’s entryway ended by a vaulted arch, filled with radiating strips of ablaq (Fig.127) very similar to the form detected in the throne hall entryway from the courtyard (Fig.136). It was also evident that the rows of muqarnas filling the part of Al Tawashi palace’s entryway, followed by a half dome filled with shell pattern, was frequently seen in several baths examples built in Damascus during the Mamluk period which will be discussed later on in this paper. The same feature appeared also on the main entryway of the Ayyoubid palace complex that was re-built during the 12th century inside the citadel of Aleppo (Fig.132). Hence, the comparable architectural composition, which consisted of the bent ablaq pattern on top of the windows, the radiating strips covering the half arch, the rows of muqarnas as well as the half dome filled with shell pattern, made us examine the fact that these monuments might have been executed by the same team of architects or belonged to the same patron.

According to Warner, who based his study on the baths models that were built in Cairo during the Mamluk period, the bath’s main entryways were best compared to mosques and palatial complexes. In his opinion, entering a bath through such a decorated portal was very similar to entering a palace due to its monumentality and prosperous architecture. Warner referred to the bath of Bashtak built in Cairo during
the Mamluk period to supplement his interpretation.\textsuperscript{98} The discussion presented in this chapter proves that the same implies on some of the baths models built in Syria during the Mamluk period. Such baths have been highly affected by their location in an urban setting, mirroring the structures found nearby, erected either by the same patron or during the same period of time.

The definite influence of the buildings erected nearby was also evident in other examples, this time not free standing like the Yalbugha bath but placed in tight neighborhoods in Damascus. The best known example was Al Tayrouzi bath, which was built along with a mosque and a tomb, during the late 14\textsuperscript{th}- early 15\textsuperscript{th} century in Al Tawrizi Street (Fig.43). The bath presented two façades on the street level (Fig.46). The eastern façade was the main one, not as monumental as the Yalbugha al Nasir’s bath, yet worth mentioning (Fig.43). It offered a lot of similarities with the Tayrouzi mosque built nearby in the year 1421AD (Fig.47 & Fig.48). The bath’s main façade was fully covered with strips of ablaq stones, a feature commonly seen during the Mamluk period in both Damascus and Aleppo. It was pierced by one window opening in its middle overlooking the interior (Fig.43). The window itself was built inside a tall recess much like the windows present on the Tayrouzi mosque built nearby (Fig.47). This recess ended by a fluted half dome supported by several rows of muqarnas very similar to the one already seen surmounting the mosque’s main entrance and side façade as well (Fig.48). The window was flanked by two circular medallions (Fig.44), one on either side, already seen on the mosque’s façade (Fig.47).

3.2 The Bath’s Architectural Analysis – Internal Layout.

A profound consideration addressing the public baths plans proved the fact that baths have emerged from simple Roman and Byzantine models and have passed through many modifications during the Mamluk period. It was evident, since the Umayyad period, that the dry zone was the most important in the bath, reflecting its ceremonial function. The linear organization was the one adopted, characterized by setting the three bathing areas, cold, warm and hot, one after the other in a very clear way. This type of plan was perfectly implemented since the Umayyad period like in the Amman citadel’s bath for example (Fig.10).

Hence, the baths that were executed during the Mamluk period showed drastic changes on an architectural level, mainly in terms of plan composition and area’s predominance on plan. During the Mamluk period, the introduction of new facilities like scrubbing, hair removal, and massage have led to the addition of small private rooms in either the wastani or the juwani and sometimes both. This major shift have made of the wet zone, whether equal or a bit bigger in size than the dry zone, the most important zone on plan. The last have led to the adoption of two different

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100 This variation could have been affected by the economic situation where heated rooms could have been decreased in size in order to reduce the cost and increased when the economic situation was stable.

types of plans depending on the bath’s social context: the linear (Fig.11) or the central (Fig.12).\textsuperscript{102}

The linear type of plan was best identified in Al Sourouji bath which was built during the late 12\textsuperscript{th} century in Damascus (Fig.19). When compared to the Umayyad bath at the Amman citadel (Fig.10) the major changes were well identified. Both baths exhibited the same type of plan, following the linear organization where the dry zone was as big as the wet zone. Nevertheless, the minimal variations that appeared inside the wet zone mainly due to the urban development were clearly detected. The wastani as well as the juwani consisted of square central areas flanked by iwans used for private showering. The juwani area presented a small private room on one of its sides. It was obvious that such change in plan came along with the implementation of water basins as well, added since bathers preferred to shower in private not in large pools, like the ones found in Roman baths.\textsuperscript{103} Bathing by immersion was not recommended during the Islamic periods which explained why people have leaned more towards showering in private. Several other examples of baths following the same type of plan have been examined like the Ammouneh bath (Fig.60), Al Omari bath (Fig.66) and Al Qaymariyeh bath (Fig.91), all erected during the 13\textsuperscript{th} century in Damascus.

The second type of plan implemented was the central plan which was characterized by an area in the middle surrounded by small private rooms (Fig.12).


Definitely, the basic architectural elements (Barrani, Wastani, Juwani and Furnace) were still present, yet in different proportions, clarifying how the area’s predominance on plan varied. The type of plan implemented formed a continuation of the Ayyoubid period, previously seen in Al Bouzouriyeh bath (Fig.13) and Sitti Adra bath (Fig.16). The wastani area became the most important one since the 12th century AD. However, plans have been in constant evolution up until the 14th century during which they were characterized by a central zone surrounded by small private rooms. This type of plans remained in use up until the 17th century during which it took back the rectangular shape. The most important examples of baths following the central type of plan with the wastani area being the predominant were Es-Silsile bath (Fig.50), Al Joze bath (Fig.55), Al Safi bath (Fig.89), Ez-zen bath (Fig.24) and Al Sultan bath (Fig.71). The juwani area passed through a recognizable shift in plan as well since the 14th century AD, becoming more decagonal with 10 sides, surrounded by iwans and private rooms. This plan remained in use until the 16th century during which it took back its rectangular shape. A well-documented model was Al Tayrouzi bath (Fig.39) assuring the turning point where the central type started to be implemented in both, wastani and juwani areas, aligning their

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104 Al Bouzouriyeh bath built during the Ayyoubid period in Damascus followed the central / octagonal plan.


predominance. Al Jisr (Fig.85) as well as Al Hajib bath (Fig.95) followed the same layout as Al Tayrouzi bath (Fig.39).

As for the baths that were built in Aleppo, being compared to the ones found in Damascus, assisted in re-assuring the relationship between the urban centers and the building architecture. Contrary to Damascus, the public baths that were built in Aleppo were better executed, in a way clearly showing dependency on pure squares and rectangular shapes. This feature was mostly related to the bath’s location on the street level. The use of octagonal plan in the juwani area when being the predominant was very clear, dividing the zone into a central area surrounded by small private rooms. The best considered example was Al Haddadin bath (Fig.109). The circular plan like the one seen in Al Tayrouzi (Fig.39) or the cubic plan like the one seen in Al Ammouneh bath (Fig.60) in Damascus were not detected in Aleppo. The private rooms built were characterized by being square in shape and equal in size like Al Haddadin bath (Fig.109) or Al Jadida bath (Fig.110), unlike Al Tayrouzi in Damascus which showed different layouts (Fig.39). Throughout this examination, the main focus remained on the plans variations in relevance to the bath’s social function, satisfying different needs. Indeed, the baths built in Aleppo followed the same sequence of rooms (Barrani, Wastani, Juwani and Furnace) as the baths found in Damascus while still amplifying the dry zone. The predominance of the wet zone was apparent in few examples only, like Al Bayada (Fig.112), Al Salihiyah bath (Fig.138), and the bath of Yalbugha al Nasiri (Fig.119) built during the 14th century. The area’s predominance varied inside the wet zones as well. The juwani area was

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108 It seems that in Aleppo the public baths were not built in such crowded neighborhood like in Damascus which helped in formulating a clear interior layout. Sometime in Damascus, baths were forced to follow a specific type of plan or a specific shape that could best fit between the already existing structures. This was rarely seen in Aleppo, most of the time the public baths presented perfect square or rectangular shapes.
the predominant one in most of the examples with a notable number of private rooms added, like the Haddadin bath (Fig.109), Al Jadida bath (Fig.110), Bab al Ahmar bath (Fig.137), Al Qawas bath (Fig.115), Al Salihya bath (Fig.138), Mikhan bath (Fig.117), Al Maji bath (Fig.113), and Al Basatin bath (Fig.116). The Wastani as well Juwani were both predominant areas in other examples like Yalbugha Al Nasiri bath (Fig.119), Al Bilban bath (Fig.111) and Al Bayada bath (Fig.112).

Despite the fact that twin baths were not apparent in Syria, this important feature was revived during the Mamluk period only in Aleppo. This time, the idea of adjacent baths consisted of a small bath that was added to the main structure, mostly visited for different purposes not by opposite genders as it used to be.\textsuperscript{109} The adjacent bath, known also as the secondary bath, presented the basic bathing elements like barrani, wastani and juwani, visited by people who needed to get their body clean before prayers and have no time to pass through the entire bathing process. \textsuperscript{110} The best known example was the bath of Ishtikmar in Aleppo (Fig.114).

\textbf{3.3 The Bath’s Architectural Analysis – Embellishment.}

The Public baths, especially the ones built in Damascus, with their prosperous interior assured the implementation of two styles for enhancement. Unlike the Umayyad period, none of the styles used have showed any reliance on figural representation. Architects either continued to use the style that was already implemented during the Ayyoubid period or relied on a new decorative repertoire which was mostly influenced by some of the buildings erected nearby or by the same

\textsuperscript{109} عبد الرؤف معوض, م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتبة العربية للمعارف.

\textsuperscript{110} عبد الرؤف معوض, م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتبة العربية للمعارف، ص 104.
patron either mosques or madrassas. Indeed, both styles will be deeply investigated in the paragraph below.

Much like the bath’s exterior discussed earlier, the internal facades reflected the great influence that the urban setting had on architecture. Enhancement was mainly condensed within the bathing zones, covering the structural elements, like the drums supporting either the domes or the vaults. In earlier periods, architects used to implement either pendentives or squinches as a way of transition from square to circular shape. Yet, Mamluk architects leaned more towards the use of a series of blind arches, series of fluted half domes, and muqarnas to fill the drums.\textsuperscript{111} Although the use Muqarnas was not new, well depicted in the public baths built since the 12\textsuperscript{th} century like in Al Joze bath (Fig.58), it was perfected during the 14\textsuperscript{th} century. This notion was evident in some of the baths models that were well-studied like the Ez-zen bath (Fig.27), Al Nasiri bath (Fig.34) and Al Tayrouzi bath (Fig.41) built in Al Chaghour quarter in Damascus during the 14\textsuperscript{th} century AD.

In addition to this, some of the monuments stated above, highlighted a great resemblance to the architectural work of Governor Tankiz Al Nasiri in Damascus, whether the Tankiz mosque (Fig.104), mausoleum, and minaret (Fig.101), Dar al Quran wal hadith (Fig.107), or even the Mausoleum of Sit Sutaytah (Fig.108). In that sense, the minaret built in the year 1317AD (Fig.104)\textsuperscript{112} presented an ample architectural repertoire that showed a great impact on the baths that were erected


during the same period. The Ez-zen bath was one of the monuments that could be referred to in order to testify such a relationship. Ez-zen bath was set as a waqf foundation for the Afridouniyah madrassa located in the Jabiyah area (Fig.30). It presented a very rich interior (Fig.27), yet, the architectural work was not influenced by the madrassa itself but by Tankiz’s architectural activity. Similarities were mostly evident in the wet zone’s embellishment, especially the rows of muqarnas filling the drums holding the domes (Fig.27). In addition to this, a small doorway inside the bathing zone which led the bathers towards one of the rooms consisted of a rectangular wall opening surmounted by rows of muqarnas and topped by a fluted half dome (Fig.27). The last was similar to the style of architecture presented by Tankiz especially Dar al Quran wal Hadith (Fig.107).

Moreover, a different decorative style was implemented simultaneously in some of the baths that were built in Damascus during the Mamluk period. It formed a continuation of the style already implemented during the Ayyoubid period in two main examples: Sitti Adra (Fig.17 & Fig.18) and Al Bouzouriyeh bath (Fig.14). The drums in each of the bathing zones were filled either with a series of fluted protruding half domes or with blind arches filled with different vegetal forms and sometimes both. The sourouji, bath built during the 12th century AD in Al Shaghour quarter, presented a very simple architectural layout following the linear organization (Fig.19). Embellishments were mainly condensed on its upper part, on the roof which consisted of domes, as well as the drums supporting it. Domes, fluted or not, were pierced and filled with glass cups creating a magnificent design (Fig.20) while the drums supporting the domes were enhanced by a series of fluted protruding half domes.

domes (Fig.21) similar to the ones already implemented in Sitti Adra’s bath (Fig.18). The same design was detected in Al Silsile bath (Fig.51 & Fig.54) which was built during the 13th century. The last presented a mix of styles in a way that the drum supporting the fluted dome covering the central zone inside the wet zone was adorned with blind arches each filled with a different vegetal composition (Fig.53) much like Al Bouzouriyeh bath (Fig.15).

The Ammouneh bath, built during the 12th-13th centuries in Al Saroujah area, presented a simple architectural layout (Fig.60). However, the bath was characterized by its prosperous interior which showed the implementation of both styles within the same area. The bath of Ammouneh presented a ceiling plan worth deep analysis as each area, whether covered by a dome or a vault, presented a different design (Fig.61). The same applied on the drums supporting the domes where its decoration differed from one room to another (Fig.62). The wastani’s central area was characterized by its beautiful drum decoration, which consisted of a series of protruding fluted half domes standing on a row muqarnas (Fig.62). A different decorative pattern was implemented in the juwani area. The central zone consisted of a series alternating blind arches filled with vegetal patterns as well as fluted half domes (Fig.63). The last was found standing on a row of muqarnas. The same pattern was implemented in the small private rooms except for one which showed a great difference and was covered by a fluted dome resting on two rows of blind arches (Fig.62).

Last but not least is Al Omari bath, which in elevation, showed a beautiful mix of styles decorating the bathing zone (Fig.67). A totally different design was implemented in each room. The transitional area, located exactly between the dry and wet zone was covered by a vault resting on a series of blind arches (Fig.67). The
central zone of the wastani area was characterized by the use of a series of protruding fluted half domes very similar to the ones seen earlier (Fig.67 & Fig.68). The juwani area, which this time was covered by a vault not a dome, rested on several rows of muqarnas (Fig.67).

3.4 The Baths Entry Fees in Relevance to its Architectural Development.

Archeologist Michel Ecochard and Claude Le Coeur have offered a table specifying the different aspects of the Mamluk baths built in Damascus in terms of: opening hours, gender entrance, entry fees, rental cost, etc. 114 The last used to vary from one bath to the other for various reasons that will be discussed below.

For a better understanding, a series of tables were presented in this paper based on the one offered by Ecochard, grouping the baths according to their location (Table1.3 – Table1.7). Dependency on such tables helped in analyzing the bath’s various aspects in terms of location, date of construction, size, type of plan adopted, influence, opening hours, gender type entrance, entry fees and rental cost, etc. From the most apparent feature that had a great effect on the entry fees effects was the number of private rooms added. This statement could be well supported by documented baths models. The Ammouneh bath for example, which was built as a waqf foundation during the 12th – 13th century in Al Saroujah quarter had three small private rooms and two iwans inside the bathing zone (Fig.60). The bath was entered by 2-5 Liras (Table 1.3). Al Omari bath (Fig.66), following similar characteristics, was entered by similar fees 3 Liras (Table 1.3). When compared to either al Sultan bath or al Wared bath, both set as waqf foundations during the 14th century, a huge

increase in entry fees was detected, up to 5 Liras back then. Al Wared bath presented a condensed plan with an octagonal central zone surrounded by four private rooms in the wastani area while the juwani area presented three private rooms only placed on one side of the large rectangular juwani area (Fig.80). Al Sultan bath presented a very well-structured layout inside the wet zone, following a central plan (Fig.71). The bath had approximately five private rooms.

In Assumption the majority of the public baths have been perfectly executed, following the central type of plan, yet varied in the number of small private rooms implemented. It is therefore not surprising that the bath’s entry fees were the highest, alternated mainly according to the number of private rooms in which different services had been offered. In addition to this, the entry fees of the same bath varied respectively between winter and summer. Yet, it was still not very clear whether the rental fees were also affected by any of the preceding factors or not.


Chapter Four

The Public Bath’s General Aspects.

4.1 The Type of Clients Entering the Bath and the Different Opening Hours.

One of the prominent characteristics when investigating public baths architecture, whether in Damascus or in Aleppo, was the type of clients entering it. Bathers varied respectively\(^{117}\) between men and women from the middle class.\(^{118}\) Baths were frequently entered by both genders separately, either in different days of the week or in different times of the day.\(^{119}\) Some baths used to work throughout the day and the night while other baths were open until 7:00 pm only.\(^{120}\) In most cases managing the bath was in the hands of a renter.\(^{121}\) According to Écochard and Le Coeur, from the 41 baths that were found operating in Damascus during the medieval period, 34 only welcomed men and women independently in different times of the day while the rest were reserved for men only.\(^{122}\) However, most common was that women used to spend more time inside the baths with their kids than men, even

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\(^{117}\) For example, in Damascus some baths were visited by Amirs like the bath of al Sultan, some were visited by the merchants of souq saroudja like the bath of Malike, some were reserved from kurds and Persian clients like the bath or Er-Ras.


\(^{121}\) عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتب العربي للمعرفة. ص100-104.

though their visit was not much recommended in Islam as a religion. Furthermore, it was most likely that wealthy families used to rent the entire baths for their special occasion when needed. Without any doubt, same as in Cairo, the bath’s busiest day in Syria was on Friday for people used to shower (act of tahara) before Friday’s prayer.

4.2 The Baths Attendants

The baths attendant’s profession was mainly inherited from father to son. The number of attendants in each baths varied from one another following their geographic location, type of plan related to the services presented in it and the client’s social level. It was evident that when built in souqs, public baths expected a big number of visitors per day, which created a need for a big number of attendants. Definitely such variation was also affected by the client’s social level. Clients from the high society preferred to shower in private, usually in a private room with a private attendant, which clarified the increase in the number of baths attendants. On the other hand, the regular bathers accepted to be served by a minimal number of attendants at the same time.

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As a result, the number of baths attendants increased, each given a different occupation. Abel al Razak Mouawad in his book, approached in a very clear way the different occupations found in the baths built in Aleppo. It must be similarly applied in Damascus. Mouawad first depicted the Hammamy, who was the person managing the bath instead of the owner himself. The concierge was the one in charge of the bath’s safety and the bather’s personal belongings. Al Tabee was the person in charge of leading the bathers from the barrani area towards the wastani and juwani areas. Al Qaym, known also as the Mukayyess, had the most important profession which consisted of pampering the bathers by a massage or warm shower and so on right after sitting on bilat at nar inside the juwani area. The kahwaji used to offer coffee for the bathers. Al Zabbal was the person in charge of the bath’s cleanliness. Fatah al anabib was responsible of opening the water channels found behind the water basins facilitating the flow. Al Qumaymy main focus was on boiling the water inside the furnace. Many more occupations were to be mentioned, varying between men and women, depending on the services offered within each bath. Indeed, the prompt number of baths as well as the notable number of its attendants caused the need for a person to be on top and in charge of everything known as sheikh al hammamin.129

4.3 The Public Bath Heat Preservation.

The heat preservation within a bath was easily achieved in different ways. The use of varying internal walls thickness,130 built with stone rubble and fired bricks

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was the most common.\textsuperscript{131} The thickness of the walls varied according to the
temperature needed in every room. The bath’s roofing system played an important
role as well. Roofing system varied between vaults and domes, made of bricks,
esting either on squinches, series of blind arches or muqarnas.\textsuperscript{132} Window openings
remained in the dry zone only, filled with metal grills with great respect to privacy
purposes. Occasionally, the drums of the domes covering the dry zone were pierced
with window opening like for example Al Tayrouzi bath (Fig.43). Yet, the wet
zone’s main source of light were the circular openings in the domes and the vaults
filled with glass cups, facilitating the penetration of sun light and ventilation in a way
preserving the maximum heat inside the rooms.\textsuperscript{133} As for the flooring system, marble
or ceramics were used in different areas in a way helping in preserving the heat.\textsuperscript{134}
Marble was much recommended because it reflected the steam and gave a nice
relaxing effect for the bathers. It was thought that adding some salt to the marble
floor would help as well.\textsuperscript{135} It was evident in most of the baths examined that the
heating system used was not new. Architects have relied mostly on systems that were
found since the roman and pre-Islamic periods,\textsuperscript{136} focusing more on the underfloor

\textsuperscript{131} عبد الرؤّاق معوض. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب العربي للمعارف.

\textsuperscript{132} These transitional elements provided a smooth transition from a square to a circular shape.

\textsuperscript{133} Écochard, M., & Le Coeur, C. (1942). Les Bains de Damas, monographies architecturales, par

\textsuperscript{134} Sibely, M. (2006). The Historic Hammams of Damascus and Fez: Lessons of Sustainability and
future developments. University of Manchester.

\textsuperscript{135} Écochard, M., & Le Coeur, C. (1942). Les Bains de Damas, monographies architecturales, par

\textsuperscript{136} Sibley, M., & Jackson, I. (2012). The architecture of Islamic public baths of North Africa and the
Middle East: an analysis of their internal spatial configurations. Architectural Research Quarterly,
16(2), 155-170. doi: 10.1017/s1359135512000462.
heating system using ducts. The furnace was located exactly behind the juwani area, placed on a level lower than the rest of the bath mainly in order to preserve the maximum heat, not allowing it to travel vertically, and working all night in order to keep the bath warm. Smoke used to pass through ducts that were set under the entire floor of the wet area in order to keep it hot, moving from the furnace to heat both the warm and hot room. The hypocaust system which was familiar during the Umayyad period was replaced by ducts and smoke coming from the furnace. Small wall openings facilitated as well the movement of heat all around.

4.4 The Bath’s Water System.

Water formed one of the most important elements in the baths, mainly brought from a river nearby. In case of Damascus, water was brought to the baths from the Barada River. According to Shams al Din al Dimashki, there was a whole city underground with a perfectly built ducting system that helped water distribution into every bath, house, mosque and even a madrassa. The system consisted of an external water channel supplying all the residential houses, mosques, madrassas, and baths. For the public baths in particular, the major water channel used to open every morning moving the water directly into a secondary channel filling the cistern placed

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on the bath’s roof. Once this cistern is full, part of the water will be channeled to a secondary cistern placed in the furnace to boil the water. This way, water will be distributed through tubes, built within walls, equally to the bath’s faucets graining cold and hot water along with steam to the wet zones. On the other hand, constantly flowing cold water used to reach the barrani area only through metal pipes. Indeed, the flow of water has created a need for water evacuation system which was accomplished mainly by a little floor inclination as well as small window opening at the lower part of the walls or by water channels which were found on the floor, both allowing water to circulate easily.


Chapter Five

Conclusion

The public baths that were built in Syria during the Mamluk period have been considered as a major element in urban setting. Public baths architecture has been thoroughly studied by scholars, especially the ones that were built in Syria between the Ayyoubid and the Ottoman period. Scholars presented various approaches for this topic, stating the basic characteristics like the water system, the bath attendants, the bathing services, etc. Their main focus was on the bath’s social, economic and architectural evolution. Such features were best emphasized by the different types of plans adopted as well as the areas predominance on plan. Proximity between public baths and some religious institutions explained the bath’s emerging economic features, being set as a waqf foundation, covering their expenses. In other words, scholar’s main aim was to clarify the great effect that the urban context had on public bath’s architecture. Yet, not all characteristics have been targeted.

This paper approaches, in a different way, the baths that were built in Damascus and Aleppo during the Mamluk period. The bath’s architectural, social and economic evolution were restated throughout this paper yet the main emphasis was on studying the bath’s internal and external facades. Following this examination, a new approach was conducted, clarifying the major influence that the urban setting had on the decorative repertoire implemented. It turned out that the public baths mirrored the architectural style of many of the religious institutions that were built in the same neighborhood or were built by the same patron. This feature was made clear on the main external and internal facades with the use of specific decorative elements mostly influenced by the mosques or even madrassas built nearby.
Baths, being considered as an important public institution, presented a very rich content worth deep investigation. It is strange how such a beautiful heritage haven’t been well preserved or given much attention by scholars. Unfortunately baths construction have been in constant decline after being implemented in private residences, yet it has been said that such structures have never been completely abandoned. On the contrary, nowadays baths became present but in different forms. They were found as luxurious spas in the most famous hotels offering services like massage, scrub, facials, etc pampering the users.
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Appendix A

The list of the public baths built in Damascus presented below was used as a main support in the thesis. Baths have been chosen based on the examples documented by Ecochard and Le Coeur in their research during the Mamluk period. For a better understanding, baths have been grouped according to their geographic location and proximity.

A1. Al Shaghour Quarter

Al Shaghour quarter is one of the most important and oldest areas in Damascus (Fig.6). It consisted of two parts: part inside the old city walls and the largest part outside the city walls. Al Shaghour quarter was inhabited by different communities, but mainly Jews because they have a neighborhood known as the Jewish neighborhood.

A1.1 Al Sourouji Bath

Al Sourouji bath was built during the late 12th century, in al Shaghour quarter, south east of Bab Al Saghir (Fig.8). The bath was built during the Mamluk period. Its wet zone remained as is but the dry zone was renovated in the 19th century AD. Al Sourouji mosque, thought to be built during the ottoman period by Sheikh Ahmad al Sourouji, was located in the same area (Fig.23).\textsuperscript{146} Al Sourouji bath was set as a waqf foundation and its rental fees was 225 liras. The bath used to operate
during the day only, for men and women at different times of the day. Its entry fees varied between 3-5 liras.\textsuperscript{147}

Al Sourouji bath was built between existing structures in a way that the western and part of the southern exterior façades were the only ones seen from the street level (Fig.22). The western façade had a very simple architecture, giving no hint that a bath was found behind its walls. It had two rectangular windows overlooking the barrani area and a main entryway at its southern end (Fig.19). The southern façade had one rectangular window overlooking the barrani area as well.

The analysis of the plan showed that architects have used the same wall thickness for the whole bath, whether the interior or the exterior.\textsuperscript{148} In plan, the bath presented a simple square shape, divided equally into two zones, dry and wet, following the linear organization (Fig.11). Al Sourouji bath followed the same sequence of rooms as the Amman citadel’s bath that was built during the Umayyad period (Fig.10).\textsuperscript{149} When bathers entered from the main entrance, they faced a small wall partition that was added to grant the maximum privacy for the bathers inside in the absence of corridors. The first room entered was the barrani. It consisted of a large rectangular room with an octagonal fountain in the middle surrounded by benches on all sides except for the southern side which had a stairway leading down (Fig.19).\textsuperscript{150} Four small wall separations were found on western and eastern sides


\textsuperscript{149} Two main zones: dry and wet zones.

forming sitting areas. The barrani area was covered by a tunnel vault (Fig.20). On the
northern side, a doorway was found leading bathers into a rectangular zone which
function was not very clear. On the eastern side, another doorway was located,
leading the bathers directly into the wet zone (Fig.19). Three rectangular areas of
equal dimensions were placed one after the other satisfying variant functions. The
first one acted like a transitional zone between the dry and wet zone. It had several
small rooms which were used as latrines and few other services. The second one was
entered by a small doorway on the northern side which led directly to the warm
wastani zone. It consisted of a rectangular plan, virtually divided into three parts: a
central square area flanked by two rectangular iwans, one on either side, all filled
with water basins (Fig.19). The wastani area was topped by three domes of different
sizes and heights (Fig.20). The dome covering the central space was the largest,
fluted, resting on squinches decorated with a shell shape with five branches (Fig.21).
The dome resting on 12 sides was very similar to Al Bouzouriyeh bath (Fig.14).

Domes covering the iwans were smaller in size, resting on pendentives with drums
fully decorated with niches (Fig.21). These domes were pierced and filled with glass
cups creating a star shape pattern which facilitated the penetration of natural light
within the rooms (Fig.20). Another doorway, placed on the same axis, led the bathers
into the juwani area which followed a similar layout (Fig.19). The only difference
was that a small private room was located to the west instead of an open iwan. As for
the roof design, each area was covered by a dome of different sizes and decorative

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pattern (Fig.20).153 The last room in the bath was the furnace, located directly behind the juwani area, of equal dimensions (Fig.19). Following Sibely’s research, the bath remained operating for men and women up until the 20th century during which it was closed.154

A1.2 The Ezen Bath

The Ezen bath was built in al chaghour quarter, in al Souweiqa area, exactly between the Sinaniyeh mosque and al Naqeshbandi mosque (Fig.6). The bath’s date of construction was not very clear, attributed to the 14th century due to a house built next to it, mentioned as a waqf foundation of the Madrassa Al Afridouniyah (Fig.30).155 In fact, the owner of this madrassa was found dead in the year 1348AD which made it clear that the bath must have been built around this period. The bath used to work throughout the day and night for men only. The rental and entry fees were not documented.

The Ezen bath was large in size, with two facades, the northern and the eastern ones, showing on the street level (Fig.24). The eastern façade, being the main one, had four window openings overlooking the interior and a main entryway at its southern end (Fig.28). Ezen bath had a simple rectangular plan, divided into two zones, this time the wet zone a bit bigger than the dry zone, in a way clarifying its predominance (Fig.24). Rooms were placed following the same sequence seen in earlier models. Bathers used to enter from the main entrance, followed by a small


bent corridor that led them directly into the dry zone.\footnote{Écochard, M., & Le Coeur, C. (1942). Les Bains de Damas, monographies architecturales, par Michel Écochard et Claude Le Coeur. Vol.2. Beyrouth. Pp. 47-50.} The first room in the bath was the Barrani. It consisted of a square central space with an octagonal fountain in the middle surrounded by benches on all its sides. Four small wall partitions were found on the northern and southern side forming seating areas. A stairway leading downwards, was found on the southern side with no clear explanation.\footnote{Écochard, M., & Le Coeur, C. (1942). Les Bains de Damas, monographies architecturales, par Michel Écochard et Claude Le Coeur. Vol.2. Beyrouth. Pp. 47-50.} From the western side, bathers can access the wet zone. They can either go to the latrines on the northern side or enter through a transitional zone known as wastani awal on the southern. They were all covered by domes of different sizes (Fig.26). Once in the wastani awal, bathers moved directly into the wastani thani area which was the predominant area in the bath following the central plan (Fig.24). It consisted of a huge central circular space, surrounded by four private rooms, two on either side. The room on the southern side was connected to the juwani area through a doorway. It was clearly showing that the walls in the wastani area were a bit thicker than the rest. Each space was covered by a dome, different in size and height, resting on drums decorated with muqarnas (Fig.26 & Fig.27). On the exact same axis, another doorway to the west was found leading the bathers directly into the juwani area. It presented elongated rectangular space virtually divided into three equal squares, a central zone flanked by an iwan on either side. The last encompassed niches on the sides and were all covered by domes of different sizes and heights, resting on drums decorated with muqarnas (Fig.26 & Fig.27).\footnote{Écochard, M., & Le Coeur, C. (1942). Les Bains de Damas, monographies architecturales, par Michel Écochard et Claude Le Coeur. Vol.2. Beyrouth. Pp. 47-50.} The roof itself became more
complicated in a way reflecting luxury and prosperity. The furnace was the last room within the bath location directly behind the juwani area.159

A 1.3 Al Nasiri Bath

The Nasiri bath, named in relevance to Tankiz al Nasiri, was built in an area known as Madinat ech-chahem, 100 meters away from Al Nasiri Street. The bath’s location in the neighborhood was very interesting. It was embraced between existing structures in a way where none of its facades appeared on the street level except for the main entryway (Fig.37 & Fig.38). The bath used to work through the day only, for men and women independently. It was set as a waqf foundation. The rental fee was low compared to others, 100 lira, while the entry fees were high and varied between 4-5 liras.160

When building the bath, Mamluk architects were forced to create a specific layout that goes with the surrounding, which clarified the U shape plan adopted. The bath was divided equally into two zones, dry and wet zone, following the linear organization (Fig.31). The plan could be compared to Al sourouji bath (Fig.19) as well as Al Qaymariyeh bath which will be discussed later (Fig.91) in terms of the sequence of rooms and type of plan adopted but with few additions of course due to their location in different urban settings. The main entrance on the western side was flanked by structures which function was not very clear. A long and bent corridor linked to the main entrance used to lead the bathers directly into the barrrani area.161


It had a rectangular plan, placed on a level lower than the street, with an octagonal fountain in the middle surrounded by benches on all its side. Like the previous models, small wall partitions were built, on the northern and southern wall creating different seating areas. A rectangular garden was linked to the barrani area, on its eastern side, with few stairs upwards. It has three windows overlooking the barrani area. Much like the sourouji bath, the barrani area was covered by a flat roof, with a higher level in the middle over the fountain, presenting a clearstory (Fig.33). A doorway on the southern side led the bathers into the wet zone, through a small rectangular transitional area and latrines at the first place. From here, bathers moved into the wastani awal through a second doorway located on the southern side.¹⁶² The last consisted of a square room with niches on both sides. Following this was the wastani thani which consisted of a square central room linked to a rectangular small iwan with niches on both side (Fig.31). The last were all covered by domes of different sizes (Fig.32). A small doorway located on the western side led the bathers into the juwani area which had a cruciform plan very similar to the wastani area in Sitti Adra from the Ayyoubid period (Fig.16). The area consisted of a square central space, covered by a dome, flanked by two iwans, one on either side, as well as two private rooms (Fig.31). The northern and southern iwans had niches on either side filled with water basins used for showering. Only one of the two niches was covered by a dome. The room on the northern side was the only covered by a dome (Fig.32). These domes covering the wet zone were definitely lower in height than the rest of the bath (Fig.32).¹⁶³ Even though the plan showed great similarities to Al Sourouji


bath and Al Qaymariyeh bath, yet each bath has adopted different decorative element creating different interior spaces. The transitional part between the walls and the domes, known as the drums, where the most enhanced. Decorative elements varied between squinches, muqarnas and spherical pointed vault squinch which seemed to be very familiar during the Burji Mamluk (Fig.33 & Fig.34 & Fig.35 & Fig.36). In elevation, the central space of the juwani area showed great resemblance to the Al Sourouji bath in terms of recessed arches (Fig.21). The muqarnas used looked similar to the ones implemented in Al Qaymariyeh bath (Fig.93 & Fig.94). Indeed, the wet zone’s interior showed great similarities to Tankiz’s architectural style. The recessed arches looked like the ones supporting the dome of the Tankiz’s mosque (Fig.106). Same for the muqarnas used inside the bath and could have been compared to the muqarnas found on the Tankiz’s mosque entrance (Fig.104). A royal Mamluk Blazon was found in one of the sections as well stating the name of Al Nasiri. The furnace was located exactly behind the juwani area. In fact, the bath has passed through many renovations which made it hard to analyze it.

A 1.4 Al Tayrouzi bath

Al Tayrouzi bath, known as well as Al Tawrzi, was built during the late 14th – early 15th century by the Mamluk amir Gharis Al Din Khallil Al Tawrizi. The bath formed part of a complex, built along with a mosque and a tomb, located in al Tawrizi Street. The bath was set as a waqf foundation for the mosque built next to it.


The bath was open for men only throughout the day and night. It was offered for rent every day for an amount that varies around 40 dirhams.\textsuperscript{167}

Al Tayrouzi bath was one of the largest built in town. It consisted of a large rectangular space divided in two zones, highly developed, seen for the first time during the Mamluk period (Fig.39). The wet zone, which was much bigger than the dry zone, clarified its predominance. In plan, the wastani area was very similar to the wastani area in Al Wared bath in terms of central space and small private rooms surrounding it (Fig.80).\textsuperscript{168} First of all, the bath’s exterior mirrored the facades of Al Tawrirzi mosque built next to it. The bath’s eastern and southern façades were the ones shown on the street level (Fig.46). The eastern façade, which was the main one, was covered by ablaq stones following the mamluk style of architecture. A window was found in the middle overlooking the interior and the main entryway located at its southern end (Fig.43).\textsuperscript{169} The window, filled with metal grills, was encompassed within a recessed rectangle topped by half a dome resting on rows of muqarnas (Fig.43). This combination was influenced by the Tayrouzi’s mosque façade facing it where windows were placed within a recessed rectangle (Fig.47) and the doorway was covered by half a dome resting on muqarnas (Fig.48). Two circular medallions were found flanking the window (Fig.44). The same was found on the mosque’s façade (Fig.47). Interesting to note that a cup bearer shape was engraved several times on the bath’s façade which refer back to Tankiz Al Nasir, thought to be his


blazon (Fig.43). It was already seen in many of Tankiz’s monuments like the Tankiziyah madrassa in Jerusalem (Fig.49) and Al Tawashi palace in Aleppo mentioned before (Fig.135). The southern façade of Al Tayrouzi bath encompassed only one window overlooking the interior as well (Fig.46). Bathers used to enter from the main entrance directly into a small rectangular vestibule to face a small wall partition which was added for privacy concerns (Fig.39). The first room accessed was the Barrani. It had a cruciform plan with an octagonal fountain in the middle surrounded by iwans and stone benches on all sides. The floor was covered by black stones with a beautiful patterns. A huge dome resting on pendentive covered the area. Its drum was filled with arched window opening and a cupola on top pierced with rectangular window openings (Fig.43). Two entryways were placed on the western side. One of them led to a stairway which was not very clear where it led to. The second one was linked to a long corridor which led towards the latrines at the very end. On the western side as well, before reaching the latrines, a small doorway led into the wet zone, which was highly developed in this example. A rectangular wastani area was reached first covered by a tunnel vault. From here bathers moved on towards the wastani al thani which followed the central type of plan. It had a circular central area with four niches and four private rooms all covered by domes of different sizes. The four private rooms were preceded by a small bent corridor which assured more privacy. Bathers ten move towards the juwani which presented a cruciform plan. It consisted of a central spaces surrounded by three iwans and four small private rooms of different sizes. Interesting to note that the central space had an octagonal shape surrounded by small private rooms of different sizes. The first room,

on the left hand side, was rectangular with double domes above while a small square plan was located on the other hand side. The rest of the private rooms were mirrored, the rectangular iwans as well as the rectangular private room both covered by vaults. The juwani walls were all covered with red colored tiles, having a special shape and topped by muqarnas. The flooring was covered by black and pink stones. The drums supporting the domes covering the wet zone were richly embellished with sophisticated muqarnas (Fig.40, Fig.41 & Fig.42). They showed great resemblance to the ones found in Tankiz al Nasiri mosque (Fig.104) and minaret (Fig.101). The furnace was placed behind the juwani area as usual.

A2. Saroujah Quarter

Saroujah quarter was located outside the city walls (Fig.6). It was one of the quarters that flourished the most during the mamluk period. It was considered the best area for a beautiful architectural activity, the perfect place to build mosques, madrassas, baths, etc.

A2.1 The Es-Silsile bath

The Es-Silsile bath was built in an area known as Al Klasah, to the north of the Umayyad mosque, facing the mosque of Ikhna’iyeh. The bath’s date construction was not very clear but its resemblance in plan to the Bouzuriyeh bath (Fig.13), and the introduction of the central octagonal layout allowed its attribution to the late 12th – early 13th century. The bath was open from sunrise until midnight.

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173 Bouzouriyeh bath was located to the south of the Umayyad mosque between 1154AD – 1172AD.

for men only. It was set as a waqf foundation. The rental fees was considered high, 590 Lira, in relevance to others in the same quarter. The entry fees were high too, varied between 4-5 Liras. In the year 1940AD the bath was in an excellent state of preservation and remained operating along with the mosque next to it.175

In terms of architecture, the bath presented a plan that looked a lot like al Bouzouriyeh bath (Fig.13). The bath had only one façade, the southern one, showing on the street level. The rest were connected to other existing structures. The main façade had two windows overlooking the barrani area and two entryways (Fig.50). The first one was located at the western end, followed by a long bent corridor that led directly into the service area behind the furnace used for heating and maintenance. The second entryway, which was the main one, led the bathers directly into the barrani area with no respect to privacy concerns (Fig.50) Indeed, Es-silsile bath had a simple and organized plan, divided into two main zones, dry and wet, of equal dimensions. The barrani area, which remained as is, consisted of a square shape with small wall separations on the western and eastern side.176 Benches for sitting as well as the water fountain in the middle were missing. To the east, an entrance led the bathers into a square domed room that acted like a transitional zone with latrines on the side (Fig.50). Bathers continued their way towards the wastani area, which was influenced by Al Bouzouriyah model (Fig.13). The byzantine and Ayyoubid influence shows a lot in this bath. 177 The wastani area consisted of a central

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octagonal space with wall niches on the corners and two small private rooms on the southern side. All the rooms forming the wastani area were covered by domes of different sizes, the central one being fluted. The drum supporting the fluted dome inside the wastani area was filled with blind arches filled with different organic shapes (Fig.51, Fig.52 & Fig.53), very similar to the ones seen in Al Azem palace next to it or even to the great mosque of Damascus. Another decorative style, which consisted of a series of fluted half arch filling the drum (Fig.51 & Fig.54), was used in the wet zone very similar to the one seen earlier in Al Sourouji (Fig.21). The last was as mentioned before influenced by sitti adra bath (Fig.18). Interesting to note that the thickness of the walls were a bit different, being thicker in the wastani area than the rest of the bath. A doorway on the northern side led the bathers into the juwani area which was the last and the hottest room in the bath. It consisted of an elongated rectangle covered by a vault, similar to Sitti Adra bath (Fig.16) from the Ayyoubid period, with wall niches on the corners and three small private rooms, one on the southern side and two consecutive ones on the eastern side (Fig.50). The small private rooms were covered by domes of different sizes except for the last room on the eastern side which was covered by a cross vault (Fig.50). Exactly behind this area was the furnace followed by the service area discussed earlier.

A2.2 Al Joze Bath

Al Joze bath was built in Souq Sarouja, in the street coming from Souq El Kheyl. The bath was set as a waqf foundation but this time for a very low rental fees,

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Lira, compared to others. The bath operated throughout the day only, open for men and women in different times.\textsuperscript{180}

Al Joze bath had no facades showing on the street level, for it was surrounded by existing structures (Fig.55). The bath could be accessed through a small doorway located on the southern side, linked to a long corridor that led bathers directly inside the bath (Fig.55). This helped in achieving the perfect bathing experience, providing the maximum privacy for the bathers inside. In plan, the bath was so similar to Al Same bath (Fig.56) and to Es-Silsile bath previously discussed (Fig.50). This clarified its attribution to the early 12\textsuperscript{th} century.\textsuperscript{181} The bath consisted of two zones, equally divided and parallel to each other, encompassing the wet and the dry zones, following the linear organization (Fig.55). The first room in the bath was the barrani, rectangular in plan with stone benches all over its walls. A small entryway was located on the northern side leading the bathers either to the latrines or to the wet zone succeeding it. Much like Al Bouzouriyeh bath (Fig.13), Al Joze bath encompassed a rectangular wastani awal which was virtually divided into two zones each covered by a dome (Fig.55). A small doorway was found on the eastern side leading directly towards the Wastani thani which has adopted the central octagonal plan with four niches on its corners, exactly like Al Same bath (Fig.56), flanked by two small private rooms, one on either side. The central zone as well as the private rooms were all covered by domes (Fig.57). Another doorway on the same axis led the bathers into the last room within the bath, the Juwani. It consisted of a rectangular area topped by a vault (Fig.57). The ceiling plan, with the different types


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of domes and the vaulted juwani area (Fig.59), looked a lot like Al Same bath. The furnace was located directly behind the juwani area. A doorway on the eastern side, directly on the street level, led the bather’s attendants to the service zone located directly behind the furnace (fig.55).\textsuperscript{182}

A2.3 The Bath of Ammouneh

The bath of Ammouneh was located south east of the Dahdah cemetery in Al Mazra’a quarter in Al Saroujah area as well as the Tawba mosque. Its date of construction was not very clear, yet the bath could be attributed to the end of the 12\textsuperscript{th} century or early 13\textsuperscript{th} century. It was set as a waqf foundation that opened throughout the day for men and women independently. Its rental fees were high, 400 Lira, compared to others. The entry fees were low, varied between 2-5 Liras.\textsuperscript{183}

In terms of architecture, the bath had a very clear plan, all compressed in one large rectangle.\textsuperscript{184} The main façade, on the eastern side, was the only one was showing on the street level (Fig.60). The main façade had two equidistant windows overlooking the interior and a main doorway at its southern end. The bath’s internal layout was very well structured, encompassing a dry and wet zone of equal dimensions, following the linear organization.\textsuperscript{185} Bathers first pass through a long corridor linked to the main entrance in order to reach the Barrani area. A stairway was found at its very end but it was not very clear where it led to. The Barrani area


\textsuperscript{184} Abou khater, R. (2016). The restoration of a historical bathhouse of the 12\textsuperscript{th} century in Damascus, Syria.

consisted of a huge square plan with stone benches all over its walls, octagonal fountain in the middle and covered by a huge dome. All these features assured the area’s social function. A small doorway in the middle of the western side led the bathers into the wet zone passing by a latrine on the northern side. Bathers continued straight until they reach the wastani area which this time was smaller in size compared to the juwani area behind it. The wastani area consisted of a square central area with one iwan on its southern end and one private room at its eastern side filled with water basins used for private showering.186 All of the three areas were covered by a dome on top varying in size (Fig.61). A doorway on the western side, this time on a different axis preserving the maximum heat inside, led the bathers into the juwani area. In this bath, the Juwani area was the predominant. It consisted of a square central space with water basins on its corners, flanked by iwans on either side and two small private rooms on the northern side. All areas were filled with water basins used for private showering. Each of the spaces mentioned above were covered by a dome, different in size (Fig.61), except for the southern iwan which was covered by a vault.187 In elevation, the drums supporting the domes of the wet zone were very similar to the ones seen in earlier during the Ayyoubid period. They varied between a series of half dome filled with star shape pattern like Sittit Adra (Fig.18) for example and Al Sourouji bath for example (Fig.21). Another pattern was the use of alternating half dome and blind arches, like never seen before. The blind arches were enhanced with stucco ornamentation (Fig.63 & Fig.64) like the ones seen earlier in Al Bouzouriyeh bath (Fig.15) from the Ayyoubid period and Es-silsile (Fig.51) from the


Mamluk period. The drums and dome enhancement was unique, like never seen before (Fi.65). This time the furnace was not showing on plan.\textsuperscript{188}

A2.4 The Omari bath

The bath of Al Omari was located in Souq Sarouja, facing the mosque of Tawbe. Its date of construction was not very clear, yet according to the plan analysis the bath was best attributed to the late 12\textsuperscript{th} – early 13\textsuperscript{th} century. The bath was not set as a waqf foundation. It operated during the day only and was entered by men and women independently in different times. The rental fees was very high 540 Lira and the entrance fees varied between 3-5 Liras as well.\textsuperscript{189}

In terms of architecture, the bath was large in size. It consisted of two main zones equal in size, dry and wet, clearly shown because of the small deviation to the west (Fig.66). This could have been made due to the buildings surrounding the bath, which underwent through many modification because it was not found in a good state of preservation. The southern façade was the only one shown on the street level. Three windows overlooking the interior were located from one side while the main entrance was located on the eastern end on the same façade. Bathers entered from here and passed through a small corridor followed by few steps downward, to find themselves in the barrani area. The last had a square shape with an octagonal fountain in the middle surrounded by benches on all sides. Another staircase led the bathers into a mezzanine found in the barrani area which had a double height and was covered by a magnificent dome resting on pendentives where its drum was pierced with arched window openings (Fig.67). In fact, the barrani layout, whether in


plan or elevation, assured its social function as a space where people could sit, relax, talk and enjoy their time in the bath. From the northern side, bathers can easily move into the wet zone. First, they entered a rectangular transitional zone, covered by a vault, with latrines on its eastern side. Another doorway on the northern side as well led the bathers directly into the wastani area which consisted of a rectangular space divided into three parts, a square central zone with two iwans one on either side. Iwans had niches, one on either side, all covered by domes of different sizes. The domes drums were decorated in a way very similar to Al Sourouji bath, with the implementation of a series of fluted half dome arch (Fig.67 & Fig.68). On the southern side a small square private room was found for private washing. According to the plan, the wastani area had thicker walls then the rest of the bath in order to keep the heat well preserved. On the northern side as well, a door was found, on the same axis as the one leading to the wastani, led the bathers into the juwani area. Even though both areas were equal in size, the juwani was the predominant in terms of the number of private rooms presented (Fig.66). It consisted of a simple rectangular plan with niches on its walls and three private rooms on its sides. The central space was covered by a vault resting on muqarnas as a transitional zone (Fig.69 & Fig.70). A furnace was located behind this room. Behind the furnace was a rectangular room that was accessed only from outside the bath but its function was not very clear.

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A2.5 Al sultan Bath

The bath of Al Sultan, known as well as the bath of Sultan Qaytbay, was built to the west of Al Qasab mosque and Bab al Salam was to the east. The bath was set as a waqf foundation for Al Qasab mosque. Dating it was a bit challenging, but a royal medallion was found on top of the main entrance lintel with the name of the Mamluk sultan Qaytbay who reigned from the year 1458AD – 1495AD (Fig.72 & Fig.73). In fact, these dates could have been referring only to the barrani area because some archeological studies made have proved that the bath might have been built around the year 1303AD. In other words, the bath could have been best attributed to the 14th century. The bath operated during the day only for men and women independently. It had a regular rental fees 300 Lira but the entrance fees were high enough, varied between 4-5 Liras.193

The bath was large in size. Being located near a mosque clarified its notable size, serving a notable number of bathers at the same time.194 The bath had two entryways, one to the north and one to the east, yet none of its facades were present on the street level (Fig.71).195 Contrary to the mosque’s simple entrance (Fig.78), the bath’s main entrance was monumental, very similar to the entrance of Tankiz mosque (Fig.100 & Fig.104). It consisted of a rectangular doorway, topped by rows of muqarnas that were executed in the exact same way as Tankiz’s mosque (Fig.104). The rows of muqarnas emerged from two squinches, one on either corner, filled with

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a fluted half dome shape. The rows of muqarnas ended with a fluted half dome as well, a bit different as the one used in Tankiz’s mosque (Fig.104). A circular medallion was placed over of the door lintel mentioned the sultan’s name (Fig.77). The script style used was very similar to the inscription found on Tankiz’s minaret, using the thuluth style (Fig.103).

The interior of the bath was very well structured. It was built within a huge rectangular form, equally divided into two zones, dry and wet (Fig.71). The plan looked very similar to the Ezen bath but a bit more sophisticated, despite the wastani area which looked different. Bathers used to enter the bath, through one of the two entryways to find themselves directly in a large square room known as the barrani. The last had four columns in the middle mainly supporting the roof, which was flat but very high with a series of rectangular windows forming a clearstory (Fig.73). A fountain was found in the middle with benches on the sides. Bathers then move either to the west reaching two small square private rooms used for washing. The last were used for a very quick shower by people who did not enter the whole bath or pass through the entire bathing process. Bathers could choose to take the doorway on the eastern side with latrines at first followed by a corridor leading into the wastani area. The last had the same plan of an octagonal central space surrounded by small private rooms on the sides, all covered by domes of different sizes (Fig.72). A doorway to the south led the bathers into the last area within the bath known as the juwani which followed a previously seen plan. It consisted of a square central space with water basins on the corners flanked by two small private rooms with water basins one on either side. Each rooms was covered by a dome, equal in size, pierced

and filled with glass cups creating different patterns (Fig.72). In fact, all the domes covering the baths were not seen from the main street level because the barrani area had the highest ceiling (Fig.73). This assured that the bath was somehow discreet, not shown from the street level. Behind the juwani area was the furnace.

As for the elevations, the wet zone was mostly decorated. The main focus was on embellishing the transitional elements which helped in moving from a square to a circular shape. All of the wet rooms have adopted the same style with little variations. Differences were between the series of half dome arches, exactly like the one supporting the dome in Tabnkiz’s mosque, or blind arches (Fig.74). In the central zone, some of the blind arches were decorated with vegetal ornaments or shell shapes (Fig.75). The decorative elements could be compared to the ones found in Al Bouzouriye bath as well (Fig.15).

A2.6 The bath of Al Wared

The bath of Al ward was built during the 14th century, mainly in the year 1426AD, by Al Hajib Sayf Al Din Barsbay Al Nasiri, at the end of souq saroujah. The bath was set as a waqf foundation and it was mentioned along with al madrassa al Jamousiyah. It operated during the day only and was entered by men and women independently. It had a high rental fees, 450 Lira, and one of the highest entry fees, 5 Liras.

Al Wared bath was surrounded by existing structures which forced the architects to use of a specific layout (Fig.80). The bath didn’t have any façade.

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present on the street level, despite the entryways. The last had two entryways, the
main one being placed on the western side which led from the street level directly
into the dry zone. The second entryway, located on the opposite side, lead the bathers
into the dry zone after passing through a long bent corridor delineating the entire
bath (Fig.80).

In plan, the bath had two zones, dry and wet, of equal dimensions and parallel
to each other. (Fig.80). A similar layout was already seen in Al Silsile bath (Fig.50)
if not before in Al Bouzouriyeh bath (Fig.13). Indeed, bathers enter through the main
entrance which was linked to a bent corridor with a small window facing the
doorway, overlooking the interior. The first area in the bath was the barrani area
which had a cruciform plan (Fig.80). A square central area with an octagonal
fountain in the middle, with four iwans one on each side. Elevated benches
surrounded the entire area. The central area was covered by a magnificent dome
resting on pendentives (Fig.82), higher in level than the rest of the bath. Its drum was
decorated with arch niches and a cupola was located on top allowing natural light to
penetrate inside (Fig.82). A door opening on the eastern side was followed by a long
and bent corridor leading the bathers into the wastani awal which consisted of a
rectangular area, covered by a vault pierced with glass openings creating a beautiful
pattern (Fig.81). A doorway on the northern side led the bathers into the wastani
thani, which was the most important area within the bath, having a central plan. The
area consisted of a central space, with niches on the corners and surrounded by six
small square private rooms known as khalwas (Fig.80), each covered by a dome
different in size (Fig.81). A water basin was found inside every room for bathers to

wash themselves. Another doorway led the bathers into the juwani area, which was the hottest and the last room within the bath. It consisted of a rectangular area, covered by a vault pierced with glass openings creating a pattern. Four water basins were found, one on each of the eastern and western side and two on the northern side. A small square private room was located on the western side, covered by a dome with a water basin in it. The wet zone whether covered by a vault or domes, were all lower in level than the one seen in the barrani area, yet they pierced with circular openings creating an interesting pattern that differed from one room to the other (Fig. 81). A furnace was located exactly behind the juwani area, similar in side.

In elevation, al Wared bath looked different than Al Silsile or Al Bouzouriyeh. Decorative elements were mainly stressed on the transitional zones from square to circular shape holding the dome. The decorative elements varied between squiches, series of arches and rows of perfectly executed muqarnas (Fig. 82, Fig. 83 & Fig. 84).

A3. Al Salhiya quarter

A3.1 Al Jisr Bath

The bath of Al Jisr, also known as Abd al Baset bath, was located in Al Jisr area in Al Salhiya quarter. The bath was built during the 14th century, not clear if it

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was set as a waqf foundation. The bath had a very low rental fees 112.5 Liras in relevance to its entry fees which varied between 3-5 Liras. The bath operated day and night for men and women alternatively.\(^{203}\)

The bath was large in size and formed an amazing complex along with the mosque next to it. Being surrounded by existing structures has limited the number of facades visible from the street level, the main one being located on the northern side with three window openings (Fig.85). In fact, the bath’s has passed through many changes, were only the wastani and juwani remained standing. The main entrance located on the northern side was detected and described before being demolished.\(^{204}\) It consisted of a stone façade with zigzag ablaq cornice over the doorway (Fig.87). A small rectangular window filled with a metal grill was located on top, surmounted by a fluted arch. The entire doorway was framed with an interlocking pattern on top forming and arc. The old barrani area has disappeared, with only few traces remaining showing where it used to be. The changing area was transformed into a bakery later on.\(^{205}\) In fact, a new barrani area was added later on at the southern end, reached through a small doorway on the street level following by a small transitional area providing privacy for the bathers inside. Bathers enter directly into a large rectangular area known as the barrani (Fig.85). The last had three windows on its northern side overlooking the exterior and benches on its sides creating a seating area with a fountain the middle. The central area was covered by a dome (Fig.86). The Barrani area was characterized by its thick walls preserving the temperature inside.


From here, bathers move through a doorway on the northern wall, followed by a bent corridor, into the wastani area which was very sophisticated. It consisted of a polygonal central area with niches on every corner and two rectangular private rooms, one on either side. The central area was covered by a dome whereas the private rooms were covered by vaults (Fig.86). From the middle of the northern wall, a small entryway led the bathers into the last area within the bath known as the juwani which was the predominant in this case. The last presented a cruciform plan which consisted of a polygonal central area with three iwans covered by vaults and four small private rooms, one on every corner, covered by a dome. The wet zone was very rich in terms of decoration with muqarnas squinches (Fig.88). In the juwani area, the private room’s portals lintel were decorated. In the wet area the doorways leading towards the khalwas or anything were also decorated covered by a lintel with medallions on the walls, etc.206

A4. Inside the city walls

A4.1 Al Safi bath

Al Safi bath was located to the west of the Midhat Basha Street, on the way towards Bab al Saghir. Its date of construction was not very clear but it could be best attributed to the early 13th century because of the decoration that was a bit similar to Al Omari bath discussed earlier.207 The bath operated only during the day for men and women independently. It was not clear if the bath was set as a waqf foundation


yet had a very reasonable rental fees, 300Lira, and entry fees that varied between 3-5
Liras.208

The bath was large in size, consisted of an irregular layout, clarified by its
construction between already existing structures. The main façade to the east was the
one showing on the street level with a main entryway in the middle flanked by two
windows one on either side (Fig.89). It seems that the bath had two entryways, the
second one being on the southern side, linked to an elongated corridor and directly
reaching the barrani area. Two stairways leading down were found but it was not so
clear where they led to. In fact, the plan was very compact with two main zones, dry
and wet, that followed the linear organization. Bathers first enter into a large
rectangular space that has a cruciform plan with an octagonal fountain in the middle
and benches on all the sides creating different seating areas. The barrani area was
characterized by its flat roof higher than the rest of the bath and also the middle part
was even higher than the rest. A small doorway at the north western side led the
bathers into a corridor, with latrines on the northern side, leading towards the wet
area. Bathers reach a transitional space known also as the wastani awal. To the south
a small entryway led the bathers into the wastani area which consisted of a central
square room surrounded by iwans on three sides with water basins for private
washing. All zones were covered by domes of different sizes (Fig.89). The drum of
the dome covering the central space was the most decorated, with sides pierced by
half a dome with shells (Fig.90).209 A rectangular private room was located on the
eastern side with a water basin. The wall thickness in the wastani area were a bit


thicker than the rest of the bath. Indeed, bathers passed by a doorway on the western side that led directly into the juwani area. The last was rectangular in shape filled with water basins on its corners along with a small private room connected to its northern side. The private room had two water basins used for private washing. It was covered by a dome. The last room within the bath was the furnace, located exactly behind the juwani area.²¹⁰

The bath presented simple elevations (Fig.90). The decoration was mainly focused in the wet zone. The drums were covered by series of shelled half domes very similar to the ones seen earlier in Al Sourouji bath.

A4.2 Al Qaymariyeh bath

The Qaymarieh bath was built during the 13th century, by Abu Maali Naser Al Din Abu Al Fawares Al Qaymari AL Kurdi, north of Al Qaymariyeh Street. It was known also as Al Qitat bath. It operated nonstop during the day and night for men and women independently. It was not clear if the bath was set as a waqf foundation. The rental fees were normal in comparison to others 360 Lira while the entrance fees varied between 3-5 Liras.²¹¹

The bath had a simple rectilinear plan, equally divided into two zone, the dry and wet which were parallel to each other (Fig.91). The bath’s plan was very similar to Al Sourouji more than Al Nasiri bath discussed earlier. The bath’s had two facades present on the street level. The western façade, which was the main one, consisted of three windows overlooking the interior along with a main entryway at its northern


Passing through the doorway, bathers used to take a long corridor. A small wall partition was built intentionally to provide more privacy for the bathers inside. Bathers entered directly into a rectangular room with an octagonal fountain in the middle, surrounded by benches on all its sides, with niches under it for the bathers to leave their belongings safe. Small wall partitions were built in order to create some seating areas. A small bent corridor to the south led the bathers into a square room covered by a dome which acted like a transitional zone between the dry and the wet zones. Following this is a rectangular area thought to be acting like the wastani awal. It consisted of two square areas following each other, each covered by a dome. From here, bathers enter into the wastani thani which had an interesting plan. It consisted of a square central area covered by a dome (Fig.92). An iwan on the western side covered by a small dome in the middle was open to the juwani area. The area on the eastern side had a different plan which consist of three circular niches with two domes on top (Fig.93 & Fig.94). A doorway in the central area led the bathers into the last room within the bath known as the juwani. It consisted of a square central area in the middle covered by a dome (Fig.92). Two rectangular areas on either side, each covered by a dome. The western one was the one open to the wastani followed by a small square private room covered by a dome as well. In fact, the iwans roofing system was unique, seen for the first time. It consisted of a combination of a dome in the middle and vaults on the side which made it very interesting. As for the drums, they were decorated with muqarnas or a series of

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recessed arches (Fig.93 & Fig.94). The furnace was located exactly behind this area.214

A4.3 Al Hajib bath

Al Hajib bath was built in an area known as al kurd quarters, 20 meters south of Al Madrassa al Omariyah. The bath was very well preserved. Its plan and elevation haven’t passed through any changes worth mentioning. The bath was set as a waqf foundation that operated only throughout the day for men and women in different times. The rental fees was from the highest, 525 Liras, while the entry fees varied between 2-5 Liras.215

Al Hajib bath was large in size and very well structured (Fig.95). It was divided into two zones following the linear organization, giving a hint back to the Tayrouzi bath. The wet zone was larger than the dry zone where the juwani area was the predominant this time. The bath had three façades directly on the street level. The main façade was placed on the south-western side, with a tri-lobed doorway on right hand side (Fig.96). Five windows filled with metal grill were found overlooking the interior. Two on the main façade, two on the eastern façade and one on the western façade while the rest remained plain. The bath’s interior was very interesting. The barrani area consisted of a rectangular space with benches all around its wall.216 The central part was covered by a dome that ends with a large cupola (Fig.97). The roof of the barrani area was higher than the rest, similar to most of the previous examples.

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A doorway on the northern side led the bathers into an elongated vaulted corridor that led the bathers into either the latrines on its very ends or to a rectangular space that acted like a transitional zone between the dry and wet zone known as the wastani awal. This elongated space was vaulted with a small square domed room linked to it. A small doorway on the same axis was found leading the bathers into the wastani area. The last consisted of a polygonal central space with two square private rooms one on either side all covered by domes. Water basins were found in each of the rooms for bathers to wash themselves. Again, on the same axis a doorway was found leading bathers into the last area within the bath known as the juwani area. It turned out that the juwani area was the predominant and the larger in size. It had a cruciform plan with a polygonal central area and three iwans. Four small square private rooms were found one on each corner. Water basins were found as well in each and every room. The iwans were vaulted while the rooms were topped by domes. Interesting to note that the wet zone presented a very rich ornamentation, arches were filled with vegetal forms stucco which remained in an excellent state of preservation (Fig.97, Fig.98 & Fig.93).  

Appendix B

Public baths were extensively built in Aleppo and have spread differently inside and outside the city walls, trying to satisfy the different urban needs (Fig.9).\textsuperscript{218} Public baths were found in highly populated areas, known for their souqs, shops, mosques, etc. During the Mamluk period, baths were found free standing, either around the citadel of Aleppo and in the north eastern part of Aleppo especially Bab al haddid (Table.2.1). As mentioned previously, only the plans will be discussed and analyzed in the paragraphs below, focusing on the effect of the geographic, demographic, economic and social variations had on the bath’s architectural development. Baths showed many differences in terms of plans with the ones built in Damascus during the same period of time. It was clear that the dry zone was the largest in size in most of the models discussed below which assured its bath’s social function. The juwani area was the predominant in Aleppo with a notable number of private rooms added. This helped in understanding how different needs were present in different cities and how plans varied in a way to satisfy these emerging needs.

B1. Bab Al Hadid

B1.1 Al Haddadin bath

Al Haddadin bath was built outside the city walls, in the Bankousa area which was part of a large Souq near khan al Sabil (Fig.9). The area, very close to Bab al Qanat, was known as Bab al Hadid as well. The bath’s date of construction was not very clear but the fact that it was mentioned by Ibn Suhna assured its attribution to the Mamluk period, being built in the same year as bath Al Jaded in

\textsuperscript{218} عبد الرازق معوض, م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبوي حتى نهاية العصر العثماني. المكتب العربي للمعرفة.
Well, the bath was mentioned along with al jaded bath. The Haddadin bath was very close to al haddadin mosque also known as al atiq mosque.

Al Haddadin bath plan consisted of two rectangular shapes, almost equal in size and perpendicular to each other (Fig.109). This simplified its division into two zones, the first rectangle being the dry zone and the second rectangle being the wet zone, following the linear organization. Following the plan presented by Mouawad, the whole bath was built with very thick stone walls in order to maintain the maximum heat inside. The bath’s main façade was on the southern side and appeared on the main street. It had only one small window opening overlooking the interior as well as the main entrance on the side. Bathers used to enter through a small doorway followed by a long bent stairway tiled with varied colors which led them directly into the Barrani area. Based on the analysis presented by Mouawad, the barrani area was large in size with a typical cruciform plan. It consisted of four iwans, two of them large and square in shape having windows one to the north one to the south used to ventilate and lit the area. Both iwans were covered by one dome each. The eastern and western iwans were not that deep, rectangular in shape. A central area, lower than the rest of the iwans by 15cm and topped by a dome was surrounded by stone benches all over its walls. The size of the Barrani area clarifies its ceremonial function. A small entryway on the western side, followed by a long bent corridor led the bathers directly into the wet zone. They can either go straight towards the latrines or enter to the right hand side towards the Wastani area. Its plan was interesting, adopting a different shape which consisted of two rectangles of


different sizes following each other. The first rectangle had a central area and two
iwans, each covered by a dome, but without water basins. The last were followed by
two small private rooms one on either side acting like small private rooms. On the
western side as well bathers can continue straight towards the juwani area which was
the predominant following the central plan. The juwani area consisted of an
octagonal central space, placed on a level lower than the rest and surrounded by four
iwans and four square private rooms. The northern and southern iwans were alike,
having a wide square shape. Four square private rooms, one on each corner, provided
different bathing services. The furnace, rectangular in shape, was located directly
behind the juwani area.  

B1.2 The bath of al Jadida

The bath of Al Jadida was located in Al Bankoussa Quarter, in an area known
as shmisatiya (Fig.9). The bath was called so because of its location, very close to al
Haddadin bath known as the Atik bath as well. According to Al Ghazi’s writings,
two bath were found in the same location. The first one was known as the bath of Al
Afandi, thought to be used as a waqf al Takiya al Moulawiyat, while the second one
was known as Al Jadid bath.  

Al Ghazi has stated the bath’s date of construction, 1407AD, location and attribution to Mohammad Khass Beik Ibn Yuussuf. He
mentioned also that a mosque known as the mosque of Al Jadid, was built by the
same owner near the bath which clarified the bath’s use as a waqf foundation.
The bath presented a plan very similar to Al Haddadin bath built next to it, with two facades shown on the street level (Fig. 110). The main facade was on the southern side, dressed with ablaq stones, very similar to the Yalbugha al Nasiri’s bath, with only one main entrance. In fact, the only window which used to be present on the southern façade was later on transformed into a doorway and then blocked later on. The secondary façade was on the western side (Fig. 110). This façade overlooked the Haddadin bath and was also entirely covered by simple perfectly cu lime stones. The bath’s plan was simple, consisted of two rectangles forming the wet and dry zone following a linear organization. Bathers used to enter from the main entrance into a small vestibule that acted like a transitional zone between the exterior and interior assuring more privacy for the bathers inside before reaching the Barrani. The Barrani area had a cruciform plan, with a central zone surrounded by three iwans equal in size. A water fountain was placed in the middle and covered by a dome that ends with a cupola on top pierced with windows all around. Stone benches with niches underneath them were built all around the barrani area. The western iwan, which was almost equal in size as the northern and the western one, had small wall recesses creating private seating areas. The three of them were covered by domes of different sizes. A small door in the middle of the eastern wall was found, flanked by two rectangular niches on either side, leading towards the wet zone. The first area, known as the wastani awal, was rectangular in shape and acted like a transitional zone between the dry and wet zone with latrines on the southern side. On the eastern side, following the same axis, a doorway led towards the wastani...
thani. The last had a square central space, with water basins in every corner and was covered by a dome. One large iwan and a small private room, both square in shape, were located at the southern side used for private showering. Both areas were covered by domes. To the north, two doorways were found. The first in the middle led to the juwani area while the second one, on the right hand side, led into the private room found in the juwani area. The juwani area was the predominant in this bath. It consisted of an octagonal central space surrounded by four iwans and four private rooms equal in sizes. The central space was covered by a huge dome, pierced and filled with glass cups creating a star shape pattern. The iwans as well as the private rooms were all covered by domes of different sizes as well.226

B1.3 The Bilban Bath

The Bilban bath was located in Mahal Moustadam beik, outside the city walls, behind Bab al Haddid (Fig.9). The bath’s date of construction was not very clear but being mentioned in Ibn Suhna’s list assured its attribution to the Mamluk period, not more than the year 1485AD.227 According to its name, the bath could be attributed to several different persons including Amir Ali ibn Bin Bilban al hajib which was the amir of Aleppo who died in the year 1355AD and Amir Mohammad Bin Bilban who was present at the same time as Amir Yalbugha al Nasiri but died in the year 1390AD. This means that the owner of the bath order its construction during the 14th century. The bath was later on transformed into a wood and shoe factory.228
In terms of architecture, the bath presented a unique plan, based on four rectangular zones. The two rectangular wet zones were parallel to each other while the dry zone also rectangular in shape was perpendicular to both (Fig.111). It was from the rare ones found in Aleppo as dual bath.\textsuperscript{229} The first rectangle formed the dry zone while the other two formed the wet zone, clarifying the areas predominance. Indeed, the bath was entered through a recessed entryway on the southern side, with an inscription on top shedding the light on the year of its reconstruction 1911AD.\textsuperscript{230} Behind this doorway, a long stairway was found, leading the bathers downwards into the first area within the bath which was known as the Barrani area. In fact, the entrance part was modified, a bent corridor on the eastern side leading the bathers directly into the secondary zone was eliminated. Yet, another doorway on the western side, followed by a stairway that led the bathers into the barrani area’s main’s main entrance was thought to be the women’s entry. The Barrani area had a rectangular shape, with a space in the middle covered by a dome with a cupola on top pierced with windows allowing the penetration of natural light and ventilation, and two iwans one to the north and one to the south covered by domes as well. Stone benches were placed all over the area’s wall used by bathers so they can sit and relax. A small doorway on the eastern side, followed by a corridor, led the bathers into the wet zone. The last consisted of two parts, wastani awal and wastani thani. In fact, the wastani awal consisted of a central area with two iwans one on either side. As for the wastani thani, which was accessed through a small doorway as well, was double in size. The last had followed the same layout as the first one with a large central area.
and four iwans, equal in size and covered by domes.\textsuperscript{231} One of the iwans, the one to
the north, had a door opening linking it to one of the rooms in the juwani area. As for
the rest, they consisted only of square rooms, 2m wide, each covered by a dome and
filled with water basins. From the central area, a small doorway on the eastern side
led the bathers into the juwani area which presented a totally different layout. It had a
cruciform plan, consisted of a central area surrounded by four iwans and four private
rooms, all covered with domes in different sizes.

The secondary bath was parallel to the main one, was a bit smaller in size
with few variations. It used to be reached by a long corridor attached to the main
bath’s corridor. This entrance was closed and the bath was later on accessed by
secondary doorway with a staircase that led the bathers directly to the juwani area. Al
Bilban secondary bath had its own barrani area. It consisted of a small square area,
with an iwan on the southern end, both covered by domes. The wastani had a central
area with four iwans, two on either side, all covered by domes of different sizes. The
juwani area had a different layout than the one found in the first bath. It looked
similar to the wastani area consisted of a central space, surrounded by four iwans
with a small private room on the northern end. All areas previously mentioned were
covered by domes. The bath was later on used as a shoe factory.

B1.4 The bath of Al Bayada

Al Bayada bath was located in the Bayada area, from where the bath took its
name. The area itself took the name from the existing khan for selling each which
could be easily reached through Bab al Haddid and Moustadam beik (Fig.9).\textsuperscript{232} Al

\textsuperscript{231} عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب
العربي للمعارف. ص 372-382.

\textsuperscript{232} عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب
العربي للمعارف. ص 372-382.
Bayada bath was flanked by al Srouwi mosque from one side, and Khandak al Roum from another side. It was built by Sheikh Jamal Al Din Abou Al Mahasen Ibn Al Zini Mohamad Bin Nafis Bin Abd Al Samad Al Sharouni Al Soufi Al Tayfouri Al Bastami who was known as one of the most important (اعيان) of Aleppo in the year 1450AD. In fact, during the Mamluk period the bath undertook many names. It used to be known as Al Nafis bath in relevance to its owner, Al Bayada bath in relevance to the area it was built in or Al Srouwi bath in relevance to the srouwi mosque next to it. The bath was set as a waqf foundation for the cemetery Al Nafisiyat which was itself added to the Bayada mosque built in Nafis Beik area. The bath was entered by men and women separately and from different entryways. Women used to enter from the secondary doorway while men entered from the main one. With time, the bath became visited by women only.234

The bath’s main façade was on the eastern side. It was filled with eight small rectangular spaces whose function was still not very clear (Fig.112). It was mentioned that these private spaces could have been rented and used for storage.235 Two main entryways were found on the eastern side, facing the Srouwi mosque. One was placed in the middle and was blocked later on because it provided no privacy for the bathers inside. The second one was located at the northern end remained in use with three steps downwards. The northern façade was the secondary one overlooking the Kourani area. It consisted of a long plain façade with one small window.

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233 The owner was buried in this cemetery after his death.

234 (أعمال عامية بالمدينة، 2013). المكتب العربي للمعارف ص. 372-382.

overlooking the interior. The façade was gradually inclined until it reached a person height at the very end.

In plan, the bath looked different than the ones seen earlier. It was equally divided into two main zones, dry and wet, of equal importance. The Barrani area, had a cruciform plan. It consisted of a central space with a fountain in the middle and covered by a huge dome with a cupola allowing the penetration of natural light and ventilation. The floor tiles covering the central area was interesting, filled with yellow color stone tiles. Four iwans were surrounding the central area, one on either side. The northern iwan had a rectangular shape covered by a pointed vault ceiling. The eastern side used to have an entrance which was blocked later on so it formed a space for bathers to site with a small private room on one side. The southern iwan presented a small wall partition which as well created a seating area. In fact, the entire space was filled with stone benches and niches where bathers can sit and leave their belongings. The western iwan had a doorway in the middle of the seating area which led the bathers into the wet zone. The last had a long corridor which led the bathers either to small private room at its northern end, covered by a dome, thought to be the latrines or directly into the wastani area. The wet zone consisted of the the wastani and the juwani both predominant this time, much like Al Tayrouzi built in Damascus. Both areas in the wet zone had a central space, surrounded by iwans and small private rooms. It looked developed exactly like the Yalbugha Al Nasiri’s bath which will be discussed later on. Walls covering the wet zone were much thicker than the dry zone, preserving the heat inside. The wastani had a cruciform plan as

well with four iwans and three private rooms, one on either side. The central area as well as the southern iwan were covered by domes pierced forming a star shape pattern, while the rest were covered by vaults. Stone benches were found in those iwans where people can usually sit and water basins for bathers to wash. The western iwan had three doors, two of them leading towards the private rooms and the one in the middle led the bathers into the juwani area. The last presented exactly the same layout as the wastani area with a central octagonal space surrounded by iwans and private rooms. The central area as well as the private rooms except for the one to the east were covered by domes while the iwans were covered by vaults. A water basin was found within each iwan. The eastern iwan had the door opening leading from the wastani to the juwani. The western iwan had an opening leading to the furnace and water reservoir. As for the four private rooms found in the juwani area, that were squares in shape covered by domes except for the one located to the north east which was covered by a vault. The floor was covered with stone tiles as smooth as marble. The furnace was located exactly behind the juwani area. A Mulhak was located delineating the whole juwani area being accessed from the northern side.

B1.5 Al Maji bath

Al Maji bath was known also as Khawaja Badr al Din or Al Mardal bath in relevance to the people living in the area who used to come from Mardin. The bath was located near the famous Midani mosque in Aleppo, facing the mosque of Farra.
No additional information were given regarding the bath’s owner other than what was mentioned by Al Ghazi in his writings. He mentioned that the bath was known to be a waqf by Badr al Din al Khowaji. The date of construction was not very clear, yet the bath was attributed to the Mamluk period because it was mentioned in Ibn Shuhna’s writings. Al Maji bath used to be visited by Christian women during the week, every day except Sunday.

Al Maji bath had three important facades present on the street level (Fig. 113). The eastern façade was the main one, built with perfectly cut limestone, on a level lower than the street level, facing the mosque of al Fara. Following its construction, A Qastal was added on the northern part of this façade. The year 1727 AD was added on the qastal’s main façade, which was the year of its construction. In the middle of the eastern façade, to the south of the qastal, a rectangular window opening was found with a metal grid, overlooking the barrani area through the eastern iwan. The main entrance was placed on the façade’s southern end. The eastern part of this façade overlooked the bath as for the western part formed part of the Qumaym. This façade was plain with no window openings. The secondary façade was on the southern side, purely built with stones. The western façade, near the qumaym, was made of stones, overlooking the small street behind the bath.241

The bath presented the typical plan that was found in Aleppo which consisted of two rectangles perpendicular to each other. The first one was larger in size and encompassed the dry zone. This reflected the importance of the barrani area and its

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social role. The second rectangle was a bit smaller in size and formed the wet zone, in which the juwani was the predominant. From the main entrance, a rectangular vestibule linked to a bent corridor covered by a vault, led the bathers directly into the Barrani area. The last had a cruciform plan which consisted of a central area with a fountain in the middle surrounded by iwans on all sides (Fig.113). The southern iwan was rectangular in shape covered by a vault with some window openings allowing natural light and air to penetrate easily. Iwans were all filled with stone benches and niches under it used by bathers to leave their belongings safe. The western iwan had a door opening which led the bathers into the wastani of the bath with kashani floor tiles. The wastani of the bath could be reached from the western iwan through a corridor. This bented corridor left the bathers into the wastani al awal. Three iwans were found filled with stone benches were bathers can sit. Two small rooms were used as latrines. Another corridor led the bathers into the wastani al thani. A central area in the middle was covered by a dome pierced with openings. The area had two iwans. The eastern side of the central area a door opening created a link between the wastani awal and the wastani thani. Exactly facing this opening, another opening led the bathers into the juwani area.²⁴² Facing the northern side of the wastani’s central area, a rectangular iwan was covered by a vault with a water basin for bathers to wash themselves was present. As for the southern iwan it was equal in size with the same roofing system, yet a bit different from the previous one that it had an opening in its back. The central area was covered by a dome, surrounded by iwans and private areas. A water basin was found in each one of the iwans. The central area of the

juwani had an octagonal shape surrounded by four iwans and four small private rooms each filled with a water basin in it to wash.  

B2. Bab al Nerab

B2.1 The bath of Ishtikmar

The bath of Ishtikmar, known also as the bath of Ashek, was considered as one of the most important bath built in Aleppo during the Mamluk period. The bath was built inside Bab el Nerab in Al Ajam area. It was attributed to Amir Sayf al Din Ishtikmar bin Abd Allah al Maridani al Nasiri who was known for his architectural achievements. He built a mosque and the bath of Ishtikmar was exactly next to it, set as a waqf. This notion helped in defining the bath’s year of construction which was not very clear. It was thought to be built during the same year as the mosque 1374AD. The bath remained operating even during the Ottoman period, until the year 1985AD when it stopped functioning as a bath and was used as a storage for car tiers. Ishtikmar bath was built between in a crowded area, surrounded by existing structures which forced architects to adopt a specific plan (Fig. 114). It was from the rare structures in Syria to have a twin bath, this time not to be entered by different sexes, but for different purposes. The bath’s main entrance was located on the eastern side. The doorway only could be recognized, flanked by a rectangular space to the north which function was still not very clear and a small bath to the south used for


quick showering. Indeed, the bath was divided into two main zones, the dry being a bit larger than the wet zone. 246

In plan, the bath’s main entrance was linked to a long and bent stairway that led bathers directly into the Barrani area (Fig.114). This dry area had a rectangular plan with a fountain in the middle and iwans facing each other on either sides. Stone benches were built all around the barrani area. The floor was covered with marble stones, black and white color. For the first time in Aleppo, the bath’s central space was covered by a cross vault instead of a dome or a flat roof. Two windows pierced the roof facilitating the penetration light and its ventilation. 247 A small doorway on the western side of the Barrani area led the bathers directly into the wastani awal. It consisted of a simple rectangular space filled by a series of water basins all over its walls. The area was covered by a cross vault as well. From here, bathers had the choice either to go towards two small private rooms to the east which acted like latrines or to continue straight directly towards the wastani thani which consisted of a central space covered by a dome and surrounded by iwans with water basins for private showering. Another doorway on the eastern side led the bathers into the juwani area. It consisted of a central area covered by a dome and surrounded by iwans and small private rooms filled with water basins. 248

The small bath attached to main structure’s southern end was interesting. It consisted of two small rectangular zones, forming the dry and wet zone,
perpendicular to each other. Bathers used to enter from the southern side into a rectangular open space. To the west, six small private rooms, each with a water basin for quick and private showering. This type of quick showering was rarely seen during the Mamluk period, it was mainly visited by people who had no time to enjoy the full bathing services and wanted to shower quickly. 249

B3. Bab Al Nasr

B3.1 The bath of Ibn Al Qawas

The bath of Ibn Al Qawas was built outside Bab al Nasr in the area of Al Qawas, near khan al Kasis. The bath’s date of construction was not very clear. Being mentioned in Ibn Shuhna’s writings assured its attribution to the Mamluk period, yet before the year 1485AD. The bath was as well mentioned in Al Ghazi’s writings, being set as a waqf foundation by Hussein Basha Al Babi, almost half of it was set as a waqf for Al Atwi cemetery built outside Bab al Maqam in 1551AD. This clarified that it remained operating during the ottoman period. 250 Ibn Al Qawas bath was mostly visited by non-Muslim women on Saturdays and by Muslim women the rest of the week.

The bath had an irregular plan that was highly affected by its surroundings (Fig. 115). 251 It had two important facades on the street level. The eastern façade was the main one, built with perfectly cut stones, yet not straight, trying to adapt with the street. The main façade was virtually divided into two parts, mainly due to the

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irregular layout that was followed. The first part was straight and consisted of a main
doorway flanked by benches on either side known as miskala where the guards can
rest, linked to a long corridor from inside. The second part of the main façade,
behind which the barrani area was located, was protruding with a series of windows
overlooking the interior. As for the secondary façade which was on the northern side
overlooking a different neighborhood, it was inclined in a way cooperating with the
surrounding. The facade had a series of window openings overlooking the interior.252

Much like the bath discussed earlier, the bath’s interior was equally divided
into two zones, dry and wet, which were almost equal in size. Bathers used to enter
from the main entrance, taking a long corridor inclined to the right hand side, with
some wall partitions assuring privacy for the bathers inside. Bathers then take three
steps down before reaching the barrani area, which was huge in size. The last had an
irregular cruciform plan. Its walls were not straight, protruding in a way, trying to
adapt to its surrounding.253 The barrani area had a central zone with a water fountain
in the middle and was covered by a huge dome that ended by a cupola facilitating the
penetration of natural light and ventilation. In fact, four iwans were detected, one on
either side. They varied in size and layout adopted, yet all covered by vaults. The
estern iwan was the largest divided into two parts, with two window openings
allowing natural light and ventilation. The iwan had an extension to the south, in a
way allowing some privacy to the bathers sitting there. The western iwan consisted
of a regular rectangular space with stone benches. The southern iwan was rectangular
in plan. Much like the western, the northern iwan had the same layout but smaller in
size in relevance to the rest. A small corridor covered by a vault, located on the northern side, led the bathers directly into the wet zone, which was characterized by its extremely thick walls. Bathers could either go to the latrines on the western end, or continue straight towards a rectangular space acting like the wastani awal, or go towards the east in order to reach the wastani thani. The wastani awal consisted of a square central area covered by a flat roof. From here, bathers could either go straight towards one of the juwani’s private rooms or through a small doorway towards the wastani al thani. The area was rectangular in plan, smaller than the wastani awal in size, with one iwan on the side having some private showering spaces. The central space was covered by a dome and the iwan was covered by a vault. Another corridor on the northern side covered by a vault led the bathers into the juwani area. It consisted of a central octagonal plan, covered by a dome and surrounded by four private rooms and four iwans.\textsuperscript{254} The furnace was supposed to be located exactly behind the juwani’s iwan, yet a doorway led into a large swimming pool and private rooms used mainly by tourists. In fact, this area used to be reserved for the “Iqmaym” where they used to store all what was needed for heating the bath. Yet when the bath was renovated, the Iqmaym’s area function was transformed into the following, for touristic reasons, like the large pool bathing, but the year of renovation was not clear.\textsuperscript{255}

B3.2 The Basatin bath

The basatin bath was located in Al basatin area, from which came the name of the bath, one of the areas in the old city of Aleppo. It was located outside the city


walls, near the famous mosque of al Qanbar or known also as the mosque of Al Qastal. To reach the bath, bathers needed to cross Bab al Nasr into the northern side, passing by the zakir mosque and the bath of Al Qawas. Al Basatin bath took its name from its location in the gardens. ²⁵⁶ Nothing was mentioned regarding the bath’s year of construction. The bath used to be rented. It was reserved on Saturdays and Sundays by Christian women. The fact that the bath used to be visited by soldiers who were located in the area in the year 1970AD and then it stopped working for a while before being open again and operating. The bath was later on used as a shoe factory.

Al Basatin bath had simple plan based on the ones seen earlier. It was divided into two zones, dry and wet, equal in size. The bath had one main façade on the eastern side, overlooking the main street (Fig.116). ²⁵⁷ The bath had a simple façade with one rectangular window, on its northern end, overlooking the barrani area and a doorway in the middle flanked by stone benches on both sides for guards to sit and rest. Bathers used to enter the bath from the main entrance, followed by a long corridor covered by a vault. It led the bathers either directly into the dry zone or to the wet zone. The barrani area was large in size. It consisted of a central area, surrounded by three iwans. The wastani of the bath could be accessed from the main corridor as well, a doorway on the bathers right hand side led to the barrani and a doorway on the left hand side leading towards the wastani. The wastani had a rectangular shape as well. It consisted of a central room with two iwans, one on either side, covered by a dome pierced and filled with glass cups forming a star shape.

pattern. The western iwan had a rectangular shape, 3m wide, covered by a vault. On the southern side a doorway led the bathers into the juwani of the bath. The eastern iwan was larger from the one before, covered by a dome. A wide opening was found in the middle of this iwan which was covered by a vault as well. A doorway led the bathers towards the juwani additional zone. The juwani area consisted of a central octagonal zone with two iwans and two private rooms. The central area had an octagonal form covered by a pierced dome with glass cups allowing in sun light and ventilation while the iwans were covered by vaults.258

B4. Inside the City walls

B4.1 The bath of Mikhan

The bath of Mikhan was located in al Safhiyah area, very close to the Adiliyah mosque and Al Safhiyah madrassa. The bath took the name of its owner. It was not very well documented. It underwent many renovations which made it hard to date it, yet being mentioned in Ibn shuhna’s writings assured its attribution to the Mamluk period, before the year 1418AD. The bath used to be rented for three consecutive years for a good amount of money in return.259

The bath had two important façade on the street level (Fig.117). The southern facade was the main one facing the mosque and madrassa al safhiya. It had a recessed entryway at its very end followed by a staircase that led the bather down towards the barrani area. This entrance was old and no more in use because the staircase were demolished. A second doorway, located in the middle of the same

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258 عبد الرازق معوض, م (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأموي حتى نهاية العصر العثماني. المكتب العربي للمعرف. ص 433-442

259 عبد الرازق معوض, م (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأموي حتى نهاية العصر العثماني. المكتب العربي للمعرف. ص 415-422
façade, was blocked as well. The only doorway that was used later on was placed at the eastern end, followed by a long and bent corridor that led the bathers towards the barrani area. The secondary facade, on the eastern side, was less important but longer in size and aligned with the street level. This facade had a doorway which was mostly used leading towards the bath’s interior when the other doorways were no longer in use. This entryway was followed by a rectangular transitional zone, followed by the barrani area. The last had a rectangular plan with a central space and stone benches all around its walls. A small doorway was found on the western side leading towards the wet zone. Latrines were first accessed as well as a small private room, on the right hand side, with a water basin in the middle. On the left hand side, a door opening led into the wastani which consisted of two areas open to each other, rectangular in size. From here, on the western side, a doorway led the bathers into the juwani area. It consisted of a central space, with three private rooms and six iwans all around. These iwans differed in terms of size covered by a vault. As for the private rooms which were accessed through doorways, consisted of square areas covered by small domes.

B4.2 Bath of Yalbugha Al Nasiri

The bath of Yalbugha al Nasiri is one of the most important baths built in Aleppo. It was found by the governor of Aleppo “Yalbugha Al Nasiri” during the Mamluk period. The bath was built over the ruins of a pre-existing structure which was demolished by Timur during his conquest in the jdeideh quarter near souq al Khayl. It was found free standing facing the citadel of Aleppo and surrounded by

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important monuments like dar Al Adel, the madrassa al Zahiriyah known as well as Al Sultaniyah madrassa and the khousrouwiyah mosque built over a different period of time (Fig.118). The bath set as a waqf foundation for the yalbugha mosque built by the same owner inside Dar al Adel. Unfortunately the mosque was no longer present, leaving no chances for analysis. In fact, the bath’s construction work has started in the early 13th century and ended in the year 1419AD. Like many others, the bath was transformed into a felt factory and then abandoned during the 19th century. Yet, the erection of the justice palace facing it during the 20th century brought back the bath’s significance which clarified the ministry of tourism great concern in rebuilding it and calling it “Hammam al Lababidiyah”. Indeed, the bath started operating once again as it used to be before with the addition of new services for sure in response to the emerging needs. The bath was open for men every day except for Thursdays and Saturdays during which it was reserved for women only. Unfortunately, the bath was demolished during the Syrian civil war.

Yalbugha al Nasiri’s bath had a very interesting architectural style. In plan, the consisted of three main geometric forms, each following a slightly different orientation in a way to face major the monuments built nearby (Fig.119). The bath was built free standing facing the citadel of Aleppo. The entire structure was built with perfectly cut limestone. The main façade, facing the citadel’s gate, was the one

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ornamented following the Mamluk style of architecture (Fig.121). This monumental façade consisted of two parts, previously analyzed, one built with plain limestone while the other one was dressed up with ablaq was delineated by a band filled with vegetal ornamentation (Fig.121). A recessed arched entryway was located in the middle, a bit taller than the rest of the building in order to emphasize the doorway, flanked by two windows with metal grills on either side. A rectangular metal door in the middle was set exactly between two benches. The doorway was surmounted by a lintel made of Zig zag ablaq marble and was topped by a vaulted arch filled with radiating ablaq (Fig.127). The architectural resemblance between the bath’s façade and few structures in the citadel of Aleppo facing it, built during the Mamluk period, were discussed earlier.

In plan, the bath consisted of three main parts very clear from outside: Barrani, Wastani and Juwani (Fig.119). Each part presented a different geometric shape, linked to each other, varying in size and height. The dry zone being equal to the wet zone when combined but they all looked predominant. From the main entrance, bathers used to pass through a long and bent corridor to find themselves directly in the Barrani area. It was characterized by its cruciform plan and the thick exterior walls which helped in controlling its temperature during summer and winter. An octagonal water fountain was placed in the middle and benches were built all over the walls. Small wall partitions were found on both side creating some private seating areas. The barrani area had the highest roof, which affected its ventilation, covered by a huge dome that was unfortunately demolished later on (Fig.120).

huge and simple dome resting on pendentives surmounted the area in the middle, exactly over the fountain, with a cupola on top allowing natural light and ventilation (Fig. 128). The rest of the area was covered by a simple and flat roof on a lower level. The lower part of the walls was made of perfectly cut stones while the upper part was made of bricks. The upper part of the walls as well as the domes in the bath were decorated in a very beautiful way with an inscription and some ornaments (Fig. 129). A small doorway was located on the eastern side leading the bather either to the latrines or to a long corridor which leads to the wastani area. The last was set within a rectangle as well, the smallest in size, with a cruciform plan. It presented a domed central area surrounded by four iwans and three private rooms with a water basins along with wooden taps placed in each room with hot and cold water flow. These taps were later on replaced by metal ones. These private rooms were used for private showering and different bathing services. These rooms were covered by small domes as well, stabbed, filled with circular glass cups creating a star shaped pattern which allowed the penetration of natural light (Fig. 120). The juwani was built exactly behind this space. Bathers used to enter through a small doorway on the eastern side, followed by a long and bent corridor which led the bathers directly into the juwani area. The idea of a bent corridor was excellent for controlling privacy and the heat inside different zones. It had the same plan as the wastani which consisted of a domed central area surrounded by iwans and private rooms but bigger in size. In fact, the domes found covering areas in the baths were all stabbed and filled with glass cups creating a certain floral pattern (Fig. 120). A door opening was found on the eastern side of the wastani area followed by a small


269 Due to the lack of resources it was a bit hard to detect there location on the plan.
corridor that led to the Juwani area. Interesting to note that the use of bent corridors between areas was an excellent way to control both privacy and climate. Similar to the ones previously discussed, this room had a cruciform plan, bigger than the wastani, yet smaller than the barrani. It encompassed three iwans and four private rooms, one on every corner. The small private rooms on either side of the iwans created an octagonal shape in the middle area. An arched doorway flanked by two arched niches led the bathers inside those private rooms. Water basins were available, one in every room and iwan. The area in the middle was covered by a huge dome, stabbed with circular light openings filled with glass cups forming a star shape pattern (Fig.130 & Fig.131). A small dome covered each of the private rooms. The entire bath was made of perfectly cut stones topped by either vaults or domes made of bricks.

The bath was renovated, yet with few modifications, focusing more on adding new services and on the restoration of walls and ceilings. The last were repainted or plastered again. For example the dome found in the barrani area was carefully restored and painted while the dome in the Juwani was left as it is not plastered to show the brickwork. The other straight parts of the roof were carefully restored with the addition of some mosaics to it. Walls in the wet zone as well as the corridors were painted with red color. During the renovation phase, the red paint was replaced by red tiles which was more durable in such a humid space. The structure that was added later on delineating the wastani area was made of concrete. All the materials used are local, found in Aleppo. The heating area was discovered, located

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exactly under the justice palace, with a ducting system located in both floor and walls facilitating the circulation of hot air. This way was harder than the hypocaust system. It needed more to help bath attendants in reaching their preferred temperature within every room.  

B3.3 The bath of Bab al Ahmar

The bath of Bab Al Ahmar was located near the citadel of Aleppo’s Khandak, in al Aghlabeik area. The bath was named after Bab al Ahmar very close to it, which was demolished later on. It was built by Amir Othman bin Aghlabeik in the year 1480AD who has ordered its construction as a waqf foundation for the mosque he already built. In fact, the same owner had ordered the construction of two bath but one of them was demolished, only the Bab al Ahmar bath remained standing.

The bath was huge in size and presented a very well structure plan. It consisted of a dry and wet zone equal in size (Fig.137). The bath had two important facades, the main one was on the western side while the secondary façade was on the southern side. As for the northern and eastern façades they were surrounded by residential buildings. The main façade was built with perfectly cut limestone, overlooking the khandak of the Qa’aa. It had a small doorway which led into a small rectangular space at its right hand side while the bath’s main entrance was located at its left hand side. The main entrance was followed by a corridor leading the bathers directly into the Barrani area. The last consisted of a central area, with a floor level lower than the rest covered by marble tiles. It had a water fountain in the middle and

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was covered by a huge dome. This area was surrounded by small rooms on all sides. The whole space was covered by benches and niches underneath them. The eastern side was interrupted by two doorways, one leading towards a rectangular space filled with water basins and the second one led to the wastani area preceded by latrines. The rectangular area might have been used by the bathers who don’t have time to go through the whole bathing process and needed a quick shower. The wastani area was small in relevance to others seen previously and covered by vaults. It had a rectangular shape with one small private room at its northern end covered by a flat roof. A small doorway on its eastern side led the bathers directly into the Juwani which was the predominant. It consisted of an octagonal central area surrounded by four iwans and four private rooms, all filled with water basins for private showering. The central area was covered by a huge dome. Each of the iwans found in this area were different, for example the eastern iwan had elevated stone benches used for massage and other bathing services. As for the four private areas of the juwani, they had a square shape with water basins in each, covered by domes of different sizes. Indeed, instead of having a furnace directly after the juwani area, a small door opening in the eastern iwan led the bathers into a rectangular central area, flanked by two rectangular rooms as well and covered by flat roofs. Here bathers could find the


big pools, which was a services newly added to the bath seen during the Islamic period.\textsuperscript{276} A huge Iqmim was located directly after this rectangular space.\textsuperscript{277}

**B4. Bab Al Makam**

B4.1 Al Salihiya Bath

Al Salihiya bath, known also as the Azdamr bath or Al zimer bath, was located inside Bab al maqam, very close to the Aslan mosque. The bath was built in the year 1485AD and attributed to Amir Azdmer Bin Mazid Bin Abd Allah Al Jarkasy Al Malky Al Ashrafi. It remained operating in an excellent condition even during the Ottoman period. The bath used to be visited by women from 6:00am till 6:00pm and for men from 6:00pm till 3:00am the next day.\textsuperscript{278}

The bath was small in size compared to the ones analyzed previously (Fig.138). The bath had one main façade on the eastern side, built with perfectly cut stones, overlooking Bab al Maqam. It consisted of a straight wall, pierced with three equidistant windows, overlooking the barrani, decorated with vegetal ornamentation with the name of Prophet Mohammad along with other caliphs in Kufic style on top of each window. Each of these walls were surmounted by another small window on top (Fig.126). The main entryway was located at the southern end of the main façade. It was highly decorated with vegetal forms and an inscription mentioning the bath’s date of construction on top. In fact, the year 1710AD might have been the year of the

\textsuperscript{276} عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتبة العربية لل المعارف. ص 383-395

\textsuperscript{277} عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتبة العربية لل المعارف. ص 383-395

bath’s renovation and not construction. The plan was condensed, all set in one large square, divided into two parts, dry and wet, the dry zone being smaller than the wet zone. Bathers used to enter through the main entrance, taking three steps downwards followed by a small corridor which was covered by a vault. The first room entered was the barrani which had a square shape, with a central area with a fountain in the middle all covered by marble tiles. Four equal iwans covered by vaults were placed, one on either side, along with stone benches. The northern iwan was interrupted, exactly in the middle, by a doorway which led the bathers directly into the bath’s mulhaq. Indeed, this area, located behind the barrani and the juwani from both sides, was known to be used to store all the equipment used for heating the bath. The area, rectangular in shape, built with stones, used to act like a mulhaq for the barrani area with a large pool where bathers can celebrate, enjoy their time, and rest after passing through the entire bathing process. As for the western iwan, it was interrupted at its very end as well by a doorway which led the bathers into the wet zone. Bathers could either use the latrines on the left hand side or proceed directly through the long bent and vaulted corridor that led them into the wastani area. The last had a very well-structured plan that consisted of a square central area covered by marble tiles, and topped by a dome. Three iwans and two private rooms overlooked this central space. Both rooms were square in plan, equal in size with water basins used for private showering and covered by vaults. As for the iwans, they differed in sizes, yet all filled with water basins and covered by vaults. Interesting to note that the wastani area started to look a bit similar in plan to the juwani area.

( . الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب العربي للمعرف . ص 396 - 407)

( . الحمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب العربي للمعرف . ص 396 - 407)
small doorway on the northern side led the bathers directly into the juwani area, which was the hottest but not the last area within the bath this time. The juwani area presented the exact same plan as the ones seen before in Aleppo during the Mamluk period. The last consisted of a central octagonal space topped by a dome, surrounded by three iwans and five private rooms. The central area was covered by marble tiles. The iwans were almost equal in size, filled with two water marble basins each and covered by vaults. Well, instead of having an iwan on the southern side, a small private room was found along with a dika made of marble used as Bayt al nar. 281 As for the private rooms, they had a square shape covered by marble flooring with two water basin each used for private washing, all covered by domes of different sizes. One of the private rooms, located at the north eastern side had a stairway which led the bathers into the mulhaq of the bath discussed previously. 282


TABLES

Table 1. 1 Baths located in Areas surrounding the old City old Damascus (Very close to the city walls).

<table>
<thead>
<tr>
<th>Location</th>
<th>Bath 1</th>
<th>Bath 2</th>
<th>Bath 3</th>
<th>Bath 4</th>
<th>Bath 5</th>
<th>Bath 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarouja area</td>
<td>Es-Silsile</td>
<td>Al Joze</td>
<td>Ammouneh</td>
<td>Omari</td>
<td>Al Wared</td>
<td>Al Sultan</td>
</tr>
<tr>
<td>Al Chaghour</td>
<td>Al Sourouji bath</td>
<td>Al Nasiri</td>
<td>Al Tayrouzi</td>
<td>Ezen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qanawat area</td>
<td>Al Qanatir bath</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al Salihiyah</td>
<td>Al Jisr bath</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. 2 Baths located inside the city walls

<table>
<thead>
<tr>
<th>Location</th>
<th>Bath 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midhat Basha street</td>
<td>Al Safi bath</td>
</tr>
<tr>
<td>Al Qaymariyeh street</td>
<td>Al Qaymariyeh bath</td>
</tr>
<tr>
<td>Al Kurd Quarter, 20south of Al Qaymariyeh</td>
<td>Al Hajib bath</td>
</tr>
</tbody>
</table>

Table 1. 3 Baths outside the city walls – Al Saroujah Quarter

<table>
<thead>
<tr>
<th>Bath name</th>
<th>Date</th>
<th>Size</th>
<th>Type of plan</th>
<th>Influence</th>
<th>Open / close</th>
<th>M/W</th>
<th>Entry Fees</th>
<th>Rent Fees</th>
<th>Waqf /not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Es-Silsile</td>
<td>12th century</td>
<td>Medium</td>
<td>Central</td>
<td>Byzantine / Ayyoubid</td>
<td>D/N</td>
<td>M</td>
<td>4-5</td>
<td>590</td>
<td>Waqf</td>
</tr>
<tr>
<td>Al Joze</td>
<td>12th century</td>
<td>Medium</td>
<td>Central</td>
<td>Byzantine / Ayyoubid</td>
<td>D</td>
<td>M/W</td>
<td>4-5</td>
<td>180</td>
<td>Waqf</td>
</tr>
<tr>
<td>Ammouneh</td>
<td>12-13th century</td>
<td>Medium</td>
<td>Linear</td>
<td>Ayyoubid</td>
<td>D</td>
<td>M/W</td>
<td>2-5</td>
<td>400</td>
<td>Waqf</td>
</tr>
<tr>
<td>Al Omari</td>
<td>12-13th century</td>
<td>Large</td>
<td>Linear</td>
<td>Mamluk</td>
<td>D</td>
<td>M/W</td>
<td>3-5</td>
<td>540</td>
<td>No</td>
</tr>
<tr>
<td>Al Sultan</td>
<td>14th century</td>
<td>Large</td>
<td>Central</td>
<td>Mamluk</td>
<td>D</td>
<td>M/W</td>
<td>4-5</td>
<td>300</td>
<td>Waqf</td>
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<tr>
<td>Al Wared</td>
<td>14th century</td>
<td>Medium</td>
<td>Central</td>
<td>Byzantine / Ayyoubid / Mamluk</td>
<td>D</td>
<td>M/W</td>
<td>5</td>
<td>450</td>
<td>Waqf</td>
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Table 1. 4 Baths built outside the city walls in Al Chaghour Quarter

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<thead>
<tr>
<th>Bath name</th>
<th>Date</th>
<th>Size</th>
<th>Type of plan</th>
<th>Influence</th>
<th>Open / close</th>
<th>M/ W</th>
<th>Entry fees</th>
<th>Rent</th>
<th>Waqf / not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarouji</td>
<td>12th century</td>
<td>Small</td>
<td>Linear</td>
<td>Umayyad</td>
<td>D</td>
<td>M/ W</td>
<td>3-5</td>
<td>225</td>
<td>Waqf</td>
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<tr>
<td>Ezen</td>
<td>14th century</td>
<td>Large</td>
<td>Central</td>
<td>Byzantine / Ayyoubid</td>
<td>D/N</td>
<td>M</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Nasiri</td>
<td>14th century</td>
<td>Medium</td>
<td>Central</td>
<td>Byzantine / Mamluk</td>
<td>D</td>
<td>M/ W</td>
<td>4-5</td>
<td>100</td>
<td>Waqf</td>
</tr>
<tr>
<td>Tayrouzi</td>
<td>14th century</td>
<td>Large</td>
<td>Central</td>
<td>Byzantine / Mamluk</td>
<td>D/N</td>
<td>M</td>
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</table>
Table 1. 5 Baths built outside the City walls in Al Qanawat area

<table>
<thead>
<tr>
<th>Baths name</th>
<th>Date of Construction</th>
<th>Size</th>
<th>Type of Plan</th>
<th>Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Qanatir</td>
<td>12th century</td>
<td>Medium</td>
<td>Central</td>
<td>Byzantine / Ayyoubid</td>
</tr>
</tbody>
</table>

Table 1. 6 Baths built outside the City walls in Al Salhiya quarter

<table>
<thead>
<tr>
<th>Baths name</th>
<th>Date</th>
<th>Size</th>
<th>Type of Plan</th>
<th>Influence</th>
<th>Open / Close</th>
<th>M/W</th>
<th>Entry fees</th>
<th>Rental</th>
<th>Waqf / no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Jisr</td>
<td>14th century</td>
<td>Large</td>
<td>Central</td>
<td>Byzantine / Mamluk</td>
<td>D/N</td>
<td>M/W</td>
<td>3-5</td>
<td>112.5</td>
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Al Jisr Bath
Table 1. 7 Baths built inside the city walls

<table>
<thead>
<tr>
<th>Baths name</th>
<th>Date</th>
<th>Size</th>
<th>Type of Plan</th>
<th>Influence</th>
<th>Open / Close</th>
<th>M/ W</th>
<th>Entry fees</th>
<th>Rental</th>
<th>Waqf / no</th>
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</thead>
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<td>Large</td>
<td>Central</td>
<td>Ayyoubid / Mamluk</td>
<td>D</td>
<td>M/ W</td>
<td>3-5</td>
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<td>Qamarie</td>
<td>14th century</td>
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<td>Linear</td>
<td>Mamluk</td>
<td>D/N</td>
<td>M/ W</td>
<td>3-5</td>
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<td>Al Hajib</td>
<td>14th century</td>
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<td>Central</td>
<td>Byzantine / Mamluk</td>
<td>D</td>
<td>M/ W</td>
<td>2-5</td>
<td>525</td>
<td>Waqf</td>
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</table>

Al Safi bath

Al Qaymariyeh

Al Hajib

Table 1. 8 Bab Al Haddid, Aleppo.

<table>
<thead>
<tr>
<th>Name of the Bath</th>
<th>Date of construction</th>
<th>Location</th>
<th>State</th>
<th>Plan</th>
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<tr>
<td>Al Haddadin Bath</td>
<td>1342AD</td>
<td>Bankoussa area</td>
<td>Waqf for Al Haddadin mosque (from</td>
<td></td>
</tr>
<tr>
<td>Bath Name</td>
<td>Date of construction</td>
<td>Location</td>
<td>State</td>
<td>Plan</td>
</tr>
<tr>
<td>----------------</td>
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<tr>
<td>Al Jadida Bath</td>
<td>1407AD</td>
<td>Bankousa area</td>
<td>Waqf for mosque Khas beik</td>
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<tr>
<td>Bilban Bath</td>
<td>14th century</td>
<td>Moustadam Beik</td>
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<tr>
<td>Al Bayada Bath</td>
<td>1450AD</td>
<td>Al Bayada Area</td>
<td>Waqf for a cemetery of nafisiyat</td>
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<td>Al Maji Bath</td>
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<td>Al Qastal Area</td>
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Table 1. 9 Bab Al Nerab

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<th>Bath Name</th>
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<th>State</th>
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<tr>
<td>Ishtikmar Bath</td>
<td>1347AD</td>
<td>Al Aajam area</td>
<td>Waqf for Ishtikmar bath</td>
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Table 1. 10 Bab Al Naser

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<tbody>
<tr>
<td>Ibn Al Qawas Bath</td>
<td>Before the year 1485AD</td>
<td>Al Akrad area</td>
<td>Waqf for the cemetery of al Atwi</td>
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<td>Al Basatin Bath</td>
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Table 1. 11 Bab al Maqam

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<td>Al Salihiya Bath</td>
<td>Before 1485AD</td>
<td>Bab al Maqam</td>
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Table 1. 12 Inside the City walls

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<tr>
<th>Bath Name</th>
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<tr>
<td>Bath of Mikhan</td>
<td>1418AD</td>
<td>Safhiya Area</td>
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<tr>
<td>Location</td>
<td>Year</td>
<td>quarter</td>
<td>Waqf for</td>
<td></td>
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<td>---------------------</td>
<td>---------</td>
<td>--------------------</td>
<td>-------------------</td>
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<tr>
<td>Yalbugha al Nasiri</td>
<td>1419AD</td>
<td>Ideideh quarter</td>
<td>yalbugha al nasiri mosque</td>
<td></td>
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<tr>
<td>Bab al Ahmar</td>
<td>1480AD</td>
<td>Aghlabek area</td>
<td>aghlabek mosque</td>
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Figures


Figure 5. The plan of Apolaurus bath in Antioch, Syria based on an original excavation drawing in Stillwell 1941). The date of this bath could be attributed to 4th - 5th century AD.

Figure 6. Damascus Map

Figure 7. The old city of Damascus map

Figure 8. Damascus city gates.
Figure 9. Aleppo city map


Figure 11. Linear Type of plan
Figure 12. Central Type of Plan


Figure 22. Al Sourouji bath entrance from Al Chaghour Quarter
Figure 23. Al Sourouji mosque Main entrance


Figure 28. Ez-Zen Bath Main Façade

Figure 29. Ez-Zen Main façade
Figure 30. Afridouniyah Madrassa Known also as al Ajami mosque main entrance


Figure 37. Al Nasiri bath from the street level. Image by Bassam Salam, from this website: [http://ancosh.blogspot.com/2012/06/blog-post.html](http://ancosh.blogspot.com/2012/06/blog-post.html)
Figure 38. Al Nasiri Bath Main entrance


Figure 44. Al Tayrouzi Bath Main facade showing the window and Main entrance.

Figure 45. Al Tayrouzi Bath date of Construction

Figure 46. Al Tayrouzi Bath Main entrance and secondary façade
Figure 47. Al Tayrouzi Mosque Façade

Figure 48. Al Tayrouzi Mosque Main Entrance.
Figure 49. Tankiz Al Nasiri Blazon shown on Al Tankiziya madrassa in Jerusalem


Figure 53. El Silsile bath.


Figure 78. Al Qasab mosque main entrance.

Figure 79. Al Qasab mosque minaret


Figure 86. Al Jisr Bath Ceiling Plan


Figure 100. Tankiz Mosque Main entrance

Figure 101. Al Tankiz Mosque Minaret.
Figure 102. Tankiz Mosque Minaret

Figure 103. The Inscription found on the Minaret

Figure 104. Tankiz Mosque muqarnas Portal
Figure 105. Tankiz Mosque Façade

Figure 106. Tankiz Mosque Façade
Figure 107. Dar Al Hadith Main entrance in Damascus

Figure 108. Mausoleum of Sit Sutaytah In Damascus
عمر الرازق مموض (2013). الحمامات العامة بمدينة حلب منذ بداية العصور البايروي حتى نهاية العصر العثماني. المكتبة العربية للمعارف

Figure 109. Al Haddadin Bath plan.

عمر الرازق مموض (2013). الحمامات العامة بمدينة حلب منذ بداية العصور البايروي حتى نهاية العصر العثماني. المكتبة العربية للمعارف

Figure 110. Al Jadida Bath.
Figure 111. Bilban Bath.  

Figure 112. Al Bayada bath. 

Figure 113. Al Maji Bath. حمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب العربي للمعرفة

Figure 114. Ishtikmar bath. حمامات العامة بمدينة حلب منذ بداية العصر الايوبي حتى نهاية العصر العثماني. المكتب العربي للمعرفة
Figure 115. Al Qawas bath. عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتب العربي للمعارف

Figure 116. Al Basatin Bath. عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتب العربي للمعارف

Figure 117. Bath of Al Mikhan. عبد الرازق معوض. م. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأيوبي حتى نهاية العصر العثماني. المكتب العربي للمعارف
Figure 118. Yalbugha Al Nasiri bath location on map. Archnet

Figure 119. Yalbugha al Nasiri bath. عبد الرازق معون. (2013). الحمامات العامة بمدينة حلب منذ بداية العصر الأموي حتى نهاية العصر العثماني. المكتب العربي للمعرفة
Figure 120. Yalbugha Al Nasiri ceiling plan. archnet.

Figure 121. Yalbugha al Nasiri main elevation. archnet.

Figure 122. Yalbugha Al Nasiri Main Facade. Archnet
Figure 123. Yalbugha Al Nasiri doorway

Figure 124. Yalbugha Al Nasiri. Facade ornamentation.

Figure 125. Yalbugha Al Nasiri Entryway stone benches.
Figure 126. Yalbugha al Nasiri door lintel

Figure 127. Yalbugha Al Nasiri Portal showing the radiating ablaq and lintel.

Figure 128. The Dry zone
Figure 129. Wall inscription in the dry zone

Figure 130. The bath of Yalbugha al Nasiri Caldarium

Figure 131. The dome of the central zone
Figure 132. Citadel of Aleppo palace.

Figure 133. Mamluk Bridge of the Citadel

Figure 134. Citadel of Aleppo. The Tower of the Mamluk period
Figure 135. The Tawashi Palace in the citadel entryway

Figure 136. Al Tawashi Palace Entrance from the courtyard side, Citadel of Aleppo
Figure 137. Bab al Ahmar bath. (Abd al-Rasseq Mousa, 2013) The public baths in the city of Aleppo from the early Islamic period until the end of the Ottoman era. The Arab Institute for Research.

Figure 138. Al Salihya bath. (Abd al-Rasseq Mousa, 2013) The public baths in the city of Aleppo from the early Islamic period until the end of the Ottoman era. The Arab Institute for Research.