The Historical Documentation of the Water Cisterns under the Jazzar Pasha Mosque in Acre

Bartosz Radojewski International Conservation Center
Acre, 2010

Among the cities of the Mediterranean coast, there are few that present such a long and diversified history as Acre. Since the Early Bronze Age, the city has been continuously populated with each culture leaving remnants of its time. Around the fourth century BCE, the city shifted from the ancient tell to the peninsula. Since then, Acre hosted several cultures such as Greek, Armenian, Roman, Byzantine, Persian, Arab, Crusader, Mameluk, Ottoman and Jewish. Each reused remnants of the previous culture. Sometimes the newcomers used existing structures only adapting them to the times, other times the old buildings or places were destroyed in order to built something new, something better or more functional.

The objective of this project is to prepare a full historical documentation of the water reservoirs under The Mosque of Jazzar Pasha.

In order to achieve this objective, I will analyze all available sources and form a hypothesis regarding the historical development of the reservoirs, their origin, their character and how their function has changed throughout time.

Old maps and drawings could indicate physical evidence of the contents of the area in previous periods. Memoirs of visitors to Acre, articles and books written by various researchers contribute towards basic knowledge that we have about the place. Information on previous development work done in the cisterns can also give us additional knowledge about the history of the cisterns.

The last stage of the research will combine and confront accessible data with this research. Measurements of the cisterns, their size, their height in relation to sea level and their orientation will enable to place the reservoirs into the context of the surroundings. Connecting this information to the historical reasoning will enable us to suggest further steps for future studies on this site, as well as potential reuse of the cisterns.

Ahmed Bey, also known as Jazzar (the butcher) Pasha, took over the pashalik of Sidon after he defeated Dahir al-Umar al-Zaydani, a Bedouin who ruled in the area of the Galilee since the middle of the seventeenth century. Having taken power, he also undertook a huge restoration project in the city of Acre, which became his capital. Thereby this former Mamluk from Bosnia became the third great restorer of the city (Dichter 2000: 16). Among others, the most important of all the buildings erected by

new ruler is the White Mosque, also known as the Great Mosque or Mosque of Jazzar Pasha.



Fig. 1: General view of Jazzar Pasha Mosque. (Photo: B. Radojewski)

This edifice is the largest of all the mosques built in Ottoman Palestine and third largest in Israel after Al-Aqsa in Jerusalem and the Cave of the Patriarchs mosque in Hebron. Its structure was meant to immortalize the power of Ahmed al-Jazzar's rule and the importance of Acre (Berri 2004: 154). He not only initiated its erection, but also did the design of the compound, employing an architectural tradition imported from Anatolia, whereby a magnificent mosque surrounded by palm trees is situated in the center of a courtyard enclosed by a wall (Berri 2004: 155). The Arabic inscription carved above the entrance states that the mosque was completed in A.H. 1196 [1781/82 C.E.] (Berri 2004: 155; Dichter 2000: 108). A document dated to A.H. 1219 [1804 C.E.] lists the endowments of the mosque, library and tomb (turba), which include income from shops, warehouses, baths, flour mills, coffee houses and bakeries. Money from these sources was used to provide expenses for personnel as well as the general maintenance and repairs of the mosque (Petersen 2001: 73). All of these made the building economically self-sufficient. The designers, however, did not forget the most important element for a building of this kind – water.

In 1785, al-Jazzar asked the French consul in Akko for France to send expert hydro-engineers to plan the aqueduct from the Kabri springs to Acre (Dichter 2000: 230). This water system, designed by al-Jazzar and later developed by his successor, was sophisticated enough to make Acre decades ahead of Jerusalem with regard to water

supply (Shor 1983: 173-176). Part of this system was the vaulted cisterns under the mosque.

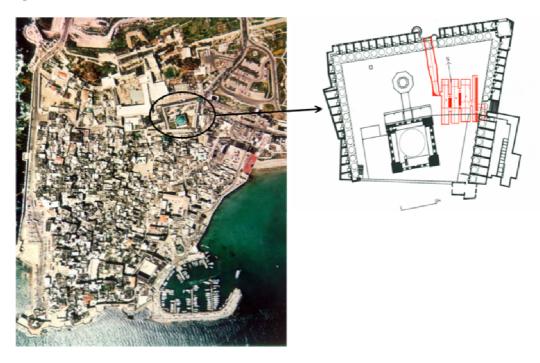


Fig. 2: Compound of the mosque in an aerial photo of Old Acre (left) and approximate location of the cisterns within the compound with the end on the north wall (right).

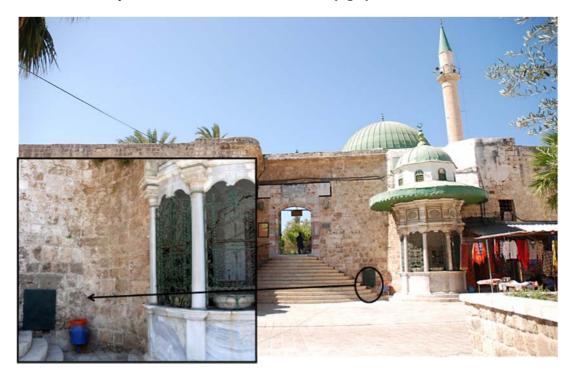


Fig. 3: Main gate to the mosque (north wall) where the grate indicates the end of the cisterns as well as the emergency exit. (Photo: B. Radojewski)

The cisterns were designed to collect water from the aqueduct and rainwater (Schiller 1983: 93-98; Shor 1983: 173-176). Throughout history, rainwater was the principle and constant source. Aqueducts were often destroyed and rebuilt, causing the

brakes in the supply from Kabri. In fact, rain water was still collected after the aqueduct was finally retired in 1949 (Schiller 1983: 222-224).

After the creation of the State of Israel, the cisterns remained neglected and did not arouse interest until 1986, when they were transformed into a tourist attraction. In the central part of the cisterns, around 150 cm above the floor level, a pedestrian walkway was created. A couple of years after that, an emergency exit was attached to the walkway. This project, however, was executed too provisionally to last more than a few years. The walkway structure was made of wood and metal. Due to the high humidity inside the cisterns, the wood quickly rotted, whereas the metal components were consumed by rust. Today the site is in extremely poor condition, and it is very dangerous to use the walkway.

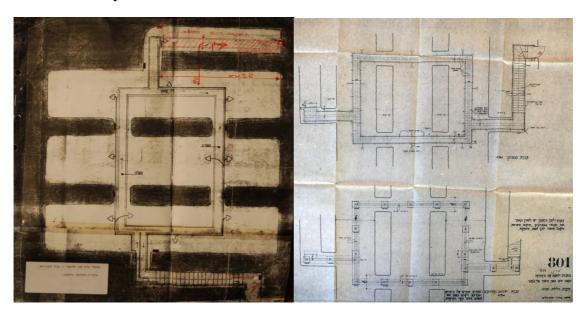


Fig. 3: Plans of the walkway and the emergency exit. (Courtesy of Old Acre Development Company)

When analyzing the cisterns, one has to think about this site as a part of a whole structure. One has to bear in mind that when the mosque was being built, the creators often used remains or elements of old structures and buildings. Thus, it seems necessary to analyze the history of the mosque vicinity in previous periods of time in order to understand the site. Before we will investigate historical maps, memoirs and other sources, let's focus on the previous research of the site.

Most of the researchers who mentioned the cisterns were duplicating the theories suggested by visitors of Acre in historical times. Those were mainly conclusions derived through either logical reasoning or second-hand accounts. The cisterns themselves were never properly researched. The most accurate plan and measurement of the cisterns was published in the book of Z. Goldmann in 1994. Though not entirely accurate, it seems to be the closest to the actual shape of our pools. Apart from presenting the plan of the cisterns, Goldman mentions that the cisterns stored the water of Kabri springs, brought in by the famous aqueduct and that because its halls are completely dark and water-filled, they have yet to be adequately investigated (Goldman

1994: 31). However, when focusing on the mosque itself, Goldman mentioned two main ideas about the origins of the site that the mosque compound occupies. He quotes some of the travelers who visited the city before the dismantling of the vast crusader ruins. Later, he combines the travelers' accounts with the map of Acre made by Venetian statesman and geographer Marino Sanudo and the engraving supposedly drawn by Gravier d' Ortières, who commanded King Luis XIV's reconnaissance mission to Acre during the years 1685 to 1687 (Kedar 1997: 164).

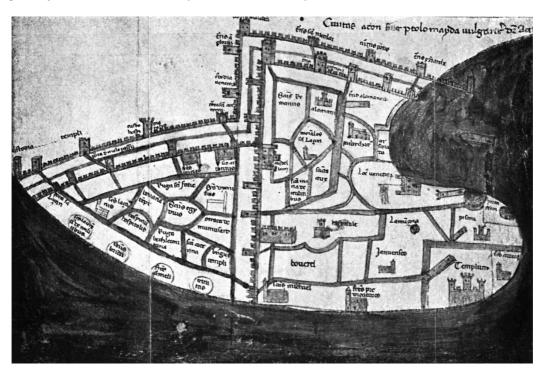


Fig. 5: Plan of Crusader Acre from 1291. (Drawing: Marino Sanudo)



Fig. 6: Part of the Acre with Church of St. John and Citadel. (Drawing: Gravier d' Ortières)

Goldman conjectures that today's Great Mosque is on the site of the main church of the quarter of the Hospitallers (Cathedral Church of the Holy Cross), as well that it was built on top of vast ruins of the Church of St. John. Therefore, he concludes that the mosque was erected on an enormous accumulation of ruined buildings, on a kind of "tell" (Goldmann 1994: 30-31).

The Cathedral Church of the Holy Cross and the Church of St. John are recurring concepts for the origins of the site where the cisterns, and the larger mosque compound are situated. N. Makhouly and C.N. Johns in their book from 1946 mentioned vaults in the cisterns as undoubtedly of Crusader origin, and that the mosque is said to occupy the site of the Crusader Church of St. John (Makhouly and Johns 1946: 75). A. Kesten in his report from 1962, described the site like this:

Below [the mosque] a huge water reservoir is to be found on the Crusader level; it was built by the Turks, in the form of a structure with tall pillars and a vaulted ceiling, which actually supports the mosque courtyard alone. The reservoir borders on the walls upon which the mosque stands, but we were not able to penetrate beneath the mosque or to investigate the structure upon which it is built. (Kesten 1962 In Dichter 1973: 91)

The author leaves readers with open questions and recommends further studies on the site. J. Murphy-O'Connor suggest the cisterns themselves may have been the Church of St. John transformed by al-Jazzar (Murphy-O'Connor 2008: 183).

The latest excavations on the Hospitaller Compound prove however, that most of the Church of St. John was located under the building known as Old Serai or Posta that is situated west of the western wall of the mosque complex (Stern and Abu 'Uqsa 2010: 44-45; Dichter 2000: 216). Therefore, it is only possible that the eastern edge of the Church would be located under the western part of al-Jazzar compound.

The idea that the Church of the Holy Cross is the basis for the Mosque of Jazzar Pasha has more followers (Grabois 1983: 19-22; Schiller 1983: 93-98). Listing special quarters of the north-eastern part of the city, M. Beneventi mentions the Church of the Holy Cross as possibly the present day Great Mosque (Benventi 1970. In Dichter 1973: 106-107). Water cisterns are mentioned in this context as a foundation for the Church of the Holy Cross (Schiller 1983: 93-98) or as a former square around the Cathedral (Kesten 1993: 86). Miss M.E. Rogers, who visited Acre in 1884, described:

The great mosque of Jazzar Pasha, which has been restored again and again (...), occupies the site of the cathedral (Petersen 2001: 73-74).

The latter theory seems even more interesting if we look closer into the history of the Cathedral of the Holy Cross, the biggest of all the churches in Crusader Acre.

It is difficult to name the exact place of the Cathedral. There are two main theories regarding this problem. The map of Sanuto locates this church to the southeast of the Hospitaller Compound, almost exactly east from the Church of St. John. This part of the city is shown as more densely built-up than the others. We do know though that this map may have at least one big mistake considering the location of other important churches from Crusader time, the St. Andrews church (Pringle 2005: 126). The Church of the Holy Cross is mentioned among the buildings included in the north-eastern area of Acre (Dichter 1973: 98). This information is of little help, because we do not know how far east the city stretched and where exactly it ended. All of these pieces of information we are forced thereby to treat in approximation.

What we do know from various sources is that during the Early Islamic Period, the Cathedral of the Holy Cross was the biggest mosque in the city, known as the Friday Mosque. The mosque was turned into the church after the Crusaders conquered Acre in 1104 (Pringle 2009: 83; Berri 2004: 156). Various depictions can be found of this mosque in Arabic sources. Al-Muqaddasi, a geographer from Jerusalem who visited Acre around year 985, described it like this:

The mosque here is very large. In its court is a clump of olive trees, the oil from which suffices for the lamps of the mosque, and yet besides (Schiller 1983: 98; Pringle 2009: 35).

A Persian traveler, Nasir i-Khusrau, after his visit in Acre in 1047 wrote:

The Friday mosque is in the middle of the town and is on the highest spot. It is tallest building in the city and all the columns are made of marble. The courtyard of the mosque is partially paved in stone and partially planted with grass. They said that Adam cultivated that very spot (Abu 'Uqsa 2004: 74; Pringle 2009: 35).

What is worthwhile noticing from Khusrau's notes is that, as a person who saw the mosques of Damascus, Bagdad and Persia, he was very impressed by the magnificence of this building in such provincial town like Acre (Grabois 1983: 20).

However, an important and problematic detail that we can find in some of these accounts relates to the Tomb of Prophet Salih. In fact, different theories regarding its location are main arguments in the discussion about the location of the Cathedral of the Holy Cross.

In the text of another Persian traveler to Acre, al-Harawi, who traveled in 1173, we read:

It is said that the Tomb of Salih is in the south wall of the mosque of Acre; in reality it is where we already signaled it [in Yemen], and some also say that is in Mecca (Pringle 2009: 36).

The location of the tomb is linked to the location of the Friday Mosque, i.e. the Church of the Holy Cross. Opponents of the connection of the Jazzar Pasha Mosque with the Cathedral claim that if the tomb was a part of the Mosque and later Cathedral, it had to be located close to the cemetery of Nabi Salih (Kedar 1997: 171).

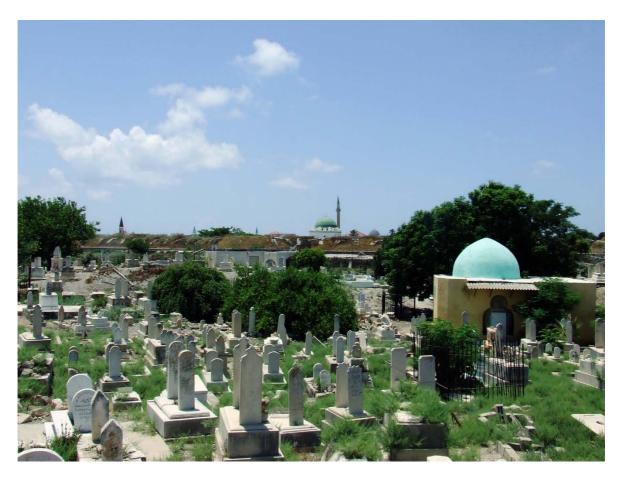


Fig. 7: Muslim cemetery of Nabi Salih. (Photo: B. Radojewski)

Ibn Jubayr, Arab geographer, traveler and poet from al-Andalus, after visiting Acre for two days in 1183, wrote:

Mosques became churches and minarets bell-towers, but God kept undefiled one part of principal mosque, which remained in the hands of the Muslims as a small mosque where strangers could congregate to offer the obligatory prayers. Near its mihrab is the tomb of the prophet Salih (Pringle 2009: 36).

This however, is only a translation of the original source. If we check a different interpretation of the same account, we will find small but crucial differences. An alternative version of the Ibn Jubayr quote mentions a small mosque near the tomb of the prophet, not connecting it to the principal mosque (Abu 'Uqsa 2004: 78-79). As for text by Nasir i-Khusrau, a later interpretation mentions the tomb as being outside the city.

It seems impossible to name the exact location of the Cathedral of the Holy Cross. Arguments on both sides are reasonable and probable and neither can be definitively rejected. However, if one assumes that the memory of the tomb was strong enough to be cultivated for centuries, the same idea should be applied to the concept of the biggest mosque. Even when we read the descriptions of the Friday Mosque above, we can sense some similarities with the Jazzar Pasha Mosque. The question of the location of the Cathedral of the Holy Cross remains open and ready for further investigation. However, Kedar and Pringle's assertion (Pringle 2009: 39; Kedar 1997: 169-171) that the tomb of

prophet Salih is in the Muslim cemetery cannot currently be investigated due to its active use as a burial place. Therefore, the theory that the Cisterns of the Jezzar Pasha Mosque Compound are the foundations of the Cathedral of the Holy Cross cannot be verified without first confirming the location based on textual evidence. This research is intended as a basis for further investigation.

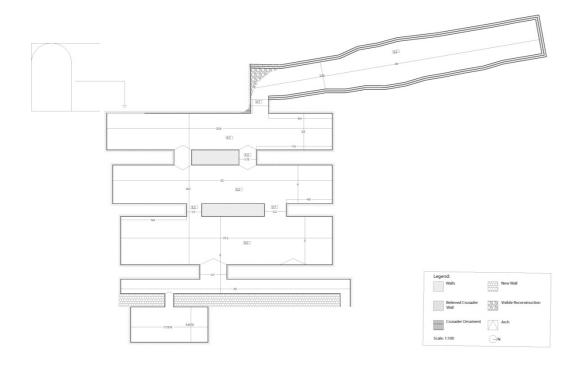


Fig. 8: Plan of the cisterns under the Jazzar Pasha Mosque.

This plan of the cisterns will help to provide a better understanding of the site. Measurements were carried out to allow us to get important pieces of information regarding the site. Before analyzing the content of it, let us focus on other details. Two basic data are its orientation and location on the sea level. The floor of the cisterns is approximately 1.5 to 2 meters above sea level. This tells us that it is on the same level like undercroft of the Church of St. John (information kindly provided by Vardit Shotten-Hallel from Israel Antiquities Authority). Secondly, the site is orientated East to West, typical for churches in the Holy Land. If we are to combine those pieces of information with what we can find on the maps and documents we could form another theory regarding the origins of the cisterns.



Fig. 9: Map of present day Acre with the streets from the Crusader times. Note cistern complex overlaid in red. (Drawing by author, based on map from A. Kesten)

If one connects what we can see on this interpretation of the street system from Marino Sanudo of Acre, and place our site on it, we are able to see that cisterns are approximately on the interesection. Let us follow this idea, and see what Sanudo located on this spot and compare it with another historical interpretation of the crusader Acre.

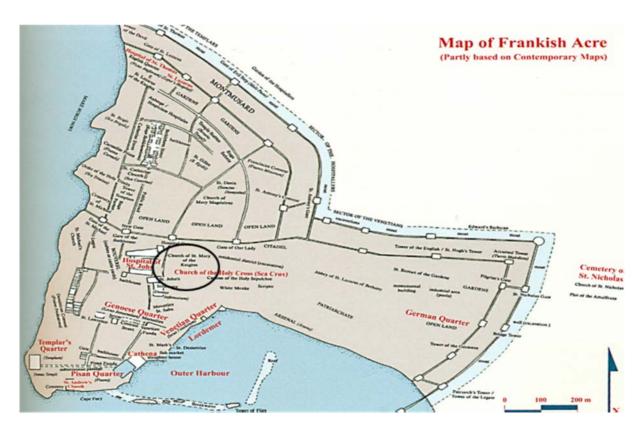


Fig. 10: Map of Crusader Acre. (Drawing: K.M. Barry)

A simple connection of the data from these interpretations of maps with orientation and level of the cisterns can give us the idea of the cisterns as the undercroft of the Church of St. Mary of the Knights. We have some seventy one churches and religious houses documented in Acre from the times of the Crusader Kingdom (Pringle 2005: 111). Knowing that and assuming that northeastern part was densely built-up and had a lot of religious buildings (Map of Sanudo) we cannot eliminate this option.

Naturally, this reasoning is very simple or even superficial and our goal is not to defend it. It is only an intention to encourage further research of the cisterns.

What we can find on the plan from the cisterns also gives us interesting pieces of information. First of all, the site may have not been originally a whole structure. The last chamber on the western side is higher and wider from the rest. It ends on the Crusader street entrance and is the place where this section connects with the middle part. We can spot the disorganized reconstruction of the wall and the crusader ornament (see plan; Fig 8). The ornament is located in the beginning of the wall (Believed Crusader Wall: see plan; Fig 8) that leads to the blocked up arch and the end of the wall. All of that may suggest that this part of the site may have been a different structure. If we focus on the most eastern chamber we also find an intervention that changed the site radically. The eastern chamber is approximately as high as the western chamber, but its top is only a half-arch with the new wall on the very east side (New Wall; see plan Fig. 8). One can assume that if we have a small chamber on the southeastern corner, this entire chamber could have been full arch during the creation of the cisterns by al-Jazzar.

All of those doubts and questions cannot be solved without further research. This project was to initiate more detailed investigation, as well as to show the places in the cisterns that could be analyzed in the first place. Full archeological and architectural research could allow as to uncover another interesting card of the history of this part of the city. In addition, the cisterns themselves could become once again a beautiful tourist site.

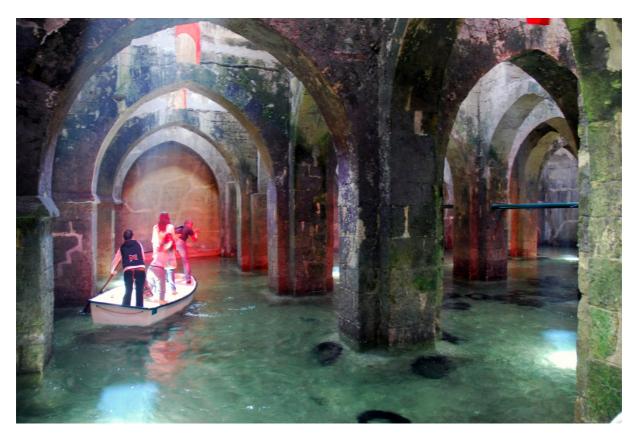


Fig. 11: Water cisterns in Ramla. (Photo. B. Radojewski)

In Ramla, similar water cisterns are made accessible to tourists in a novel way—tourists enter the site on boats. There are many ways to adapt this kind of site. The cisterns under the Jazzar Pasha Mosque, after being fully investigated, could be a unique touristic as well as educational site.

Following the pattern from the Hospitallers Citadel we could apply the same way of presentation of the site. Interpretive placards on the walls describing the history and evaluation of the cisterns in three languages would ideally convey the significance and complexity of this structure. By developing the cisterns for visitors, the Old City of Acre could obtain a "new" historic attraction and generate more interest in the city and its history.

References

- Abu 'Uqsa, H. (2004). A Selection of Arabic Sources on Akko. In A. E. Killebrew (ed.), *Shared Heritage of Akko, Preliminary Draft Report, Vol. I, Recognizing and Preserving the Common Heritage of Israel and the Palestinian National Authority.* Pp. 72-85.
- Berri, R. (2004). Akko in the 18th and 19th Centuries. Based on Notes of Endowment. In A. E. Killebrew (ed.), *Shared Heritage of Akko, Preliminary Draft Report, Vol. I, Recognizing and Preserving the Common Heritage of Israel and the Palestinian National Authority*. Pp. 145-170.
- Boas, A.J. (2009). *Crusader Archeology. The Material Culture of the Latin East* (2nd ed.). London and New York.
- Boas, A.J. (2010). Daily Life in Frankish Acre. In A. E. Killebrew and V. Raz-Romeo (eds.), *One Thousand Nights and Days Akko through the Ages*. University of Haifa. Pp. 48-54.
- Dichter, B. (1973). The maps of Acre. An Historical Cartography. Acre.
- Dichter, B. (2000). *Akko, Sites from the Turkish Period.* (eds.) A. Carmel and Z. Baumwoll. University of Haifa.
- Frankel, R. (1983). Akko's Aqueducts. Qedem 24-25: 218-221 [Hebrew].
- Goldmann, Z. (1994). Akko in the times of the Crusaders. The Convent of the Order of St. John (2^{nd} ed.). Acre.
- Grabois, A. (1983). Akko in the Crusader Period. *Qedem* 24-25: 19-35 [Hebrew].
- Kedar, B.Z. (1997). The Outer Walls of Frankish Acre. 'Atigot 31: 157-180.
- Kesten, A. (1993). *The Old City of Acre: Re-examination report 1993.* Old Acre Development Company.
- Makhouly, N and Johns, C.N. (1946). *Guide to Acre (2nd ed.)*. Jerusalem.
- Maundrell, H. (1836). *A journey from Aleppo to Jerusalem at Easter, A.D. 1697*. Boston.
- Murphy-O'connor, J. (2008). *The Holy Land. An Oxford Archeological Guide from Earliest Times to 1700 (5th ed.).* Jerusalem.
- Petersen, A. (2001). *A gazetteer of buildings in Muslim Palestine (Part 1).* New York.

- Pringle, D. (2005). The Churches of Crusader Acre: Destruction and Detection. In P. Edbury and S. Kalopissi-Verti (eds.), *Archeology and the Crusades*. Athens. Pp. 111-132.
- Pringle, D. (2009). The Churches of the Crusader Kingdom of Jerusalem, A Corpus, Vol. 4, The Cities of Acre and Tyre with Addenda and Corrigenda to Volumes I-III. Cambridge.
- Raz-Romeo, V. (2004). A Selection of Crusader Sources on Akko. In A. E. Killebrew (ed.), *Shared Heritage of Akko, Preliminary Draft Report, Vol. I, Recognizing and Preserving the Common Heritage of Israel and the Palestinian National Authority.* Pp. 85-102.
- Shiller, E. (1983). Suleyman's Aqueduct. *Qedem* 24-25: 222-224 [Hebrew].
- Shiller, E. (1983). The Jazzar Pasha Mosque. *Qedem* 24-25: 93-98 [Hebrew].
- Shor, N. (1983). Jazzar Pasha's Building Projects in Akko. *Qedem* 24-25: 173-176 [Hebrew].
- Stern, E. and Abu 'Uqsa, H. (2010). New Archeological Discoveries from Crusader Period Acre. In A. E. Killebrew and V. Raz-Romeo (eds.), *One Thousand Nights and Days Akko through the Ages*. University of Haifa. Pp. 40-47.
- Tristram, H. B. (1865). Land of Israel. A Journey of Travel in Palestine. London.