Reconsidering the Architecture of Shaikh Safi al-Din Ardabili's Shrine: New Findings in Archeological Excavations at Janat Sara Site

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Abstract
The Khānegāh or the Shrine of Shaikh Safi al-Din in Ardabil, north-west of Iran, listed as the world heritage site (by UNESCO) back in 2011 under the identification no. 1450. This ensemble is located at 38° 14´52/5˝ northern latitude, 48° 17´27/5˝ longitude, and altitude of 1365 above sea level in the center of city of Ardabil.

The ensemble of Shaikh Safi al-Din is a well-developed prototype constituting social, religious, charitable, cultural, and educational functions. With range of versatile spaces, it has met the physical and spiritual needs of residents and pilgrims as such; it includes places to meet needs in fields of education and training, livelihood and healthcare. Relying on the diagram of De Morgan, it seems there are more than 67 spaces and courtyards attached to the Khānegāh, all of which have had a significant role in the training and educational philosophy of Safavid tradition. After decade of Safavid, most part of this magnificent structure damaged.

F. Sarre, a German researcher, conducted one of the earliest studies on the architectural and archaeological history of Ardabil shrine in 1897. Some others such as Dibaj (1948), Ali Akbar Sar-faraz,(1974), Weaver (1974), Morton (1974) and Seyyed Mahmoud Mousawi (1995-6) have also carried out researches on this subject in recent decades. Archaeological works of Cultural Heritage and Tourism Organization of Islamic Republic also conducted a study under the leadership of Hassan Yousefi in 2007. These studies cleared so many unsolved historical questions about the general plan of the holy shrine.

Keywords: Ardabil; Shaikh Safi al-Din Shrine; Archaeological Excavations; Findings.

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Introduction
Ali Akbar Sar-afraz performed the first archeological study of shrine on the eastern side of Chini Khāna and new Chilla Khāna. The excellent evidences were obtained from those researches. These studies result in recognition of cemetery named Shahidgah and architecture of Sadr al-Din Musa's Chilla Khāna. He made a trench on the eastern part of Chini Khāna that resulted in discovery of Chāldiran martyr's graves and some items including saddles and bridles of horses, thrusting and cutting weapons inside the graves. Martyrs corps was wrapped in a layer of cattle or camel furred skin. He could not find any architectural or settlement elements in lower levels of the excavation. He chronology of these graves and ceramic pieces was estimated to 8th to 7th AH centuries (Morton, 1975: 44).

Sar-afraz discovered traces of several graves on the western and southern sides of internal space of new Chilla Khāna. The building was constructed during Shaikh Sadr al-Din.

The oldest ceramic pieces obtained from this part belong 8th and 9th AH / 15th and 14th Centuries AD. Seyyed Mahmoud Mousawii performed the second season of studies and researches, two decades after Sarfaraz works. This lasted for five research seasons with studies performed on the western side of the shrine.

Some old walls from different historical periods appeared with the destruction of the southwestern part of the big yard of Shaikh Safi al-Din shrine complex. This destruction was for dampness reduction, reconstruction and repair of the shrine. More studies revealed that the northern wall of new Chilla Khāna consists of four periods. New Chilla Khāna splits older Chilla Khāna from big yard. The oldest period of this wall is same as New Chilla Khāna and more probably is one of the oldest architectural elements of this ensemble.

Another wall was made over the old one that contains turquoise and lapis lazuli tiles. Its curved shape represents that it has been part of an arcade. "It could be concluded the main entrance or portal to the complex. Shah Abbas II made a portal way from north by Āli Qāpu portal. The new discovered portal was likely made before the two other ways. The main portal of Shaikh Safi al-Din’s shrine was gained this arcade.

Later studies indicate that this wall had been extended to the western side. Some
elements of this wall were cut and destroyed for reshaping it later Qajar era. Excavations of western side of destroyed wall revealed that Sheikh Safi al-Din’s complex was bigger and wider than what today look like. Some of the lands were taken over by people around the complex for making houses and shops during later Qajar period. A study in 1374/1995 on the western side of complex proved these changes (Fig. 1).

Many of glazed and simple ceramic pieces of 10th-13th centuries AH could be found on the surface soil and floor. Most of these pieces were made in Safavid period. Some tallow-burners were found during excavation that likely for lighting inside the building. Some pieces of white-bluish porcelain of Safavid period including big bowls and dishes were also found there. Many items and glass pieces collected were belonged to small and big bowls and pitchers. A big broken ceramic for storage was discovered inside in the trench (Locus 215) placed in central space of vestibule” (Mousawi, 1380: 47-48).

Report on Excavation at West and North of Jannat Sara

The plan of first season of research at the Ardabil shrine started from April 2006 following the finding of structural remains of 8th-11th A.H. These were golden periods for the shrine. These remains were discovered during the renovation of the right wall of the complex. This wall extends to the main gate and the study was focused on the main parts of plan and architecture in north and west of Jannat Sara. This summary report and works could be a new opening to introduce one of the oldest buildings of the shrine and its extension.

Some of shrine buildings, anyway, were destroyed or disappeared. Archaeological
researches however can help draw the complete plan of the complex and its extension in past years.

Since the relation between north and west of Jannat sara mosque is significant and it contains a major part of the shrine, it may play significant role in making a definite chronicle and the archaeology of the Ardabil shrine (Fig. 2).

**Architectural Remains Unearthed during 2007 Excavation**

The most significant architectural and cultural elements were discovered on the right hand side of the yard during the first excavation season in 2007 or places in west and north of the biggest and tallest building of complex named Jannat-Sara. This part originally is a wide area where Poorandokht School was constructed.

The main researched area consists of 10m square trenches each of them is 10×10m and this area is located at a big place of the shrine but the most important architectural elements of this search season are specific for B7, B8, C5, C6, C8, C7 trenches. 37 structures were identified in B 8 workshop. On the basis of historical documents, these structures were eliminated from main body of the shrine after the fall of Safavid. The shrine was limited to a small area during Pahlavi and was made several quarters and school over these ruins.
The discovered structures in B8 trench contain two piers, wall, macadamized floor, remains of two ovens, wells and sewage, clay water canals.

Fig 2 The Key Plan of SKSEA
pool, bench, a wall decorated with tiles and brick-made floor. We can say that structures of B8 trench are parts of a significant building complex but its excavation could not be completed due to limitations in progression or trench.

Foundation of these structures is made of cut stones. Walls are made of bricks and lime mortar. Internal surfaces were covered by lime decorated with tiles. Cultural remains found in B8 trench include ceramics, tiles and coins (Figs. 3-4).

Figs 3-4. Remains of Historical Āsh Khānā (Kitchen) Structure.

70% of found ceramic pieces are glazed and rests of them are simple items. The glazed ceramics consist of multicolored surface paintings, mono colored or white-blue. The tiles include seven-colored, reticulated and comfits. Most of these tiles are hexagonal and golden, bluish, black, green and multicolored with trefoil palmate figures.

Coin is the third type of items found there. 5 coins were discovered that are made of copper or copper alloy. Because of severe oxidation, most of these coins are not identifiable but we can easily suggest that these belong to Safavid or pre-Safavid times.
B7
This trench is located in east of B8 trench and western part of Pur Sina school. Research in this area was started after the removal of walls and mosaics of corridor’s and class floors (Fig. 5).

Approximately 21 structures sand elements found there. Most of them were architectural remains such as pier, gipsy floors, kandu or Tapoo (hive), remains of three ovens, brick-made floor, wall, clay water canal and stony mortar. The most significant of these findings is a thick pier (pillar) (2×2m) that was made of cut stone, brick and gypsum mortar. Height of this pier was 85 cm and was inserted drainage canals inside it. This is a remarkable architectural work. These canals crossed each other in center of structure and it worked as vent and decanter. It seems that southern side of this structure was external part. Because there are no traces of drain in this part, it’s believed that there may be some other piers under the school and it may be proved after more researches.

More than 80% of discovered ceramic items in B7 were glazed tiles. Some measuring cups were also found there. Most of stony items in first season were weights with different scales such as: 250, 200, 150, 125, 100, 50 and 25grm that are made of volcanic stones, alluvial, lime and brick (Fig. 6).
**Primary New Results**

Shaikh Safi al-Din shrine in Ardabil is recognized as one of the most important holy shrines in Iran. There are services for pilgrims. This situation continued from 8th A.H to later Safavid period. Many of political, cultural and commercial figures from Germany, France and Britain have written enormously about this shrine. These documents are so reliable to confirm the reconstruction of destroyed buildings. The reports of Tavernier, Jenkinson are of much significance. The third factor for better detection and our knowledge about the Ardabil shrine and its historical changes is field works on archaeological sites.

The third factor is the important way to confirm early reports. We have tried to compare the field work findings with historical facts and then analyzed them to get the best results. Since there are fine works on architecture and archaeology of shrine by Sarre in 1935, but it not complete hence, many items of the shrine remain unknown.

One of the most precious items found in this research was stone placed in arcade of Shaikh Safi al-Dins kitchen. The framed item was discovered in the garden yard on the sewage well in A8 trench. It seems that it was transferred from its main place to another place for covering the well after Safavid (Figs. 7-8).

This stone is made of andesite. There is an inscription on this stone written in Arabic and *thulth script*. This writing describes feeding of poor people and orphans and captives. One of the significant features of this item is the date written at the end of the inscription as 1001 A.H. This inscription describes that we feed poor and orphans for the sake of God and nothing more (Fig. 9).

On the basis of reliable historical resources, Shah Abbas paid special attention to Shiite holy cities especially Ardabil that was his grandfather’s hometown. Historical evidences show many of his trips to Ardabil. He obliged himself to visit Ardabil once in a year especially, when Iran was fighting with Ottoman Empire in Azerbaijan and Armenia and Georgia. He was praying in his grandfather shrine and asked for blessing to overcome his enemies.
"Monajem Yazdi, in his book describes that Shah Abbas I traveled to Ardabil for the first time in 6th year of his reign in 1001 A.H. and prayed in the Shaiikh Safi shrine. Shaikh Bahaii accompanied him during this trip. Sarih al-Mulk also describes about kitchen and bath of the complex" (Yazdi, 1361: 150). Abdi Beyg mentions kitchen as Āsh-khāna and Matbakh, is a building equipped with rice and wheat pots while other chambers and Ayyāq-khāna in the northern side.

Sarih al-Mulk also describes about bath and kitchens located on the western side of Shahidgah. This place contains a way from the yard to Jannat Sara and kitchen and ended to Shahidgah. The bath was placed in the eastern corner, Havij Khāna and houses Jannat Sara was separated from yard in one side. Thus kitchen was somewhere behind the bath" (Shirazi, 1551: 20-22).

Many European travelers such as Tavernier who visited the complex in 11th A.H. have described the kitchen and its location. The account completely matches with Sarih al-Mulk description that bates and stores were located in the second yard and a water canal run through it.

There was a silver coated small door in at the end of the left side of the aforementioned courtyard. This door was placed in front of kitchen where royal charities were dispensed to poor people everyday. Tavernier also tells about this kitchen and its works. "There are 25 to 30
big stoves, a big pot placed on each of stoves to cook rice and meat and then dispensed among poor or given to workers and mosque servicemen.

There was a supervisor for food distribution. He was sitting on silver seat and supervised the daily process and took care of mixing the rice with water for cooking and chopping meat. All the activities were performed economically "(Tavernier, 1336: 76 3).

Cornelius, a Dutch artist, is another European traveler who visited Ardabil in 1115 A.H. He also writes about the shrine kitchen: stoves were placed on walls. Stove or Dig-khāna described by Sarih al-Mulk also tells of two wells in kitchen" (Morton, 1974: 53).

Pieter Delavalle, an Italian traveler, describes pots for rice cooking placed on 35 big stoves and there is a public bath on the one side. There is a small door in front of the kitchen in the left end side of the courtyard. Many charities are dispensed everyday" (Delavalle , 1348: 72).

We can prove this fact that some parts of unearthed structures in the north and the west side of Jannat Sara have relations to health and cooking. Conventionally, the official and general Khangah was equipped with kitchen, bath, Sharabt khāna and other spaces, food and clothing were provided to residents and traveler.

Although training of murids (disciples) was concealed during Safavid, but feeding the poor in the Ardabil shrine continued (Zahidi: 1964: 111). Kitchen and bath were necessary places in official Khanghas. In other words, making baths specifically for Sufis and Ārefs (mystic) is a great performance of Khanghah. These baths were free for Sufis and Mashāyèkh (elders). Murids (disciples) made this place warm. One of the Khanghah services was to make warm waters ready (Figs. 9-11).

Thus, it’s clear that Chilla Khāna of Sheikh Safi al-Din in 8th century A.H. was equipped with bath, kitchen and other facilities. The buildings of the Ardabil shrine greatly improved and extended by Safavid especially Shah Abbas I. The discovered space during the first season in B7 workshop includes baths, likely door of a bath in the eastern part of kitchen (28th structure) internal clay canals (17th structure).

The other structures include small pool (28th structure) well (22nd structure) part of hot chamber decorated with tiles (12th structure), three spaces for Tamer-khāna (25-37-34th structure), water canal, heating
system and water conduction system with clay canals and discharge system for water.

**Figs 9-10** The Basin of Historical Bath and Excavated Tile-work during Reconstruction of Eastern Wall of Garden

**Fig 11** Key Plan of Parts of Remaining Ensemble Bath
Fig 12: samples of Islamic era pottery of Janat Sara Site-2007
Fig 13: samples of Islamic era pottery of Janat Sara Site
Fig 14: samples of Islamic era pottery of Janat Sara Site
Fig 15: samples of Islamic era pottery of Janat Sara Site -2007
Table 1. Catalogue of Potteries

<table>
<thead>
<tr>
<th>Design</th>
<th>Item</th>
<th>Workshop</th>
<th>Historical Period</th>
<th>Design of Item</th>
<th>Drawings</th>
<th>Color &amp; Internal Cover</th>
<th>Color &amp; External Cover</th>
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<td>Light yellow</td>
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باپذیرنی ساختار معماری بقعه شیخ صفی الدین اردبیلی به تحلول به نتیجه

جدید کاوش های باستان شناسی در شمال جنوب سرا

حسن بوسفی، محمد علیزاده سولا، محمود طاووسی

تاریخ دریافت: 9/0/1010
تاریخ پذیرش: 9/0/1322

مجمع خانه‌ها و آرامگاهی شیخ صفی الدین اردبیلی که با شماره ۱۴۵۰ در سال ۱۳۳۷ در فهرست آثار
جهانی قرار گرفته با ارتفاع حدود ۱۳۶۵ متر از سطح آب های آزاد در عرصه چارفرایابی ۵۵۴ و
۵.۵ ۱۷ ۴۸ از طول چارفرایابی در مرکز شهر اردبیل قرار دارد.
ابن مجموعه خانه‌ها در واقع نمونه طراحی معماری بیشترین از شکل اجتماعی، مذهبی، فرهنگی با
کاریستی است. این مجموعه نمونه نیاز برای تغییر و اکتشافی روی و جمعیت برای یادگیری و
خدماتی و آزمایش. به طوری ترددو نمودار تمیزی برای گزارش و نشانه‌هایی که نقش جویی
الملک این مجموعه از ۷۱ نا و حیات‌های پیشنهادی به جای بخش برخوردار بود. این پیشنهاد نقش اساسی در
آزمایش و فلسفه‌ی طراحی صورت یافته به‌طور عجیب دیده و
زرین خاک مهیج گردید. قربانی زاره محقق اسمایلی از جمله پژوهشگرانی است که در سال ۱۹۹۳ میلادی
قدیمی ترین کار تحقیقاتی را دربارهٔ تاریخ معماری باستان شناسی بقعه اردبیل به انجام رساند. بعد از
ایشان پژوهشگران چنین اساسی دیگری (در سال ۱۹۸۲) و علی اکبر سرفرزاد کارگر (در سال ۱۹۷۴) و دکتر
ویور (در سال ۱۹۷۴) و دکتر مروی (در سال ۱۹۷۴) و محمد محمودی (در سال های ۱۹۷۴-۱۹۷۶) تحقیقات باستان‌شناسی جالب توجهی در خصوص تاریخ معماری باستان شناسی مجموعه مذهبی اردبیل
انجام دادند. در سال ۲۰۰۷ میلادی مطالعات باستان شناسی در این محوطه تاریخی تحت سرپرستی حسن
بوسفنی تحقیقات دهه های مورد نظر را کامل کرد. مطالعات اخیر صرفاً به کشف به‌خوبی از نقشه کلی
مجمعه و جواب به سوالات متعدد در خصوص تاریخ معماری و باستان‌شناسی مجموعه شده است.
واژگان کلیدی: اردبیل، بقعه شیخ صفی الدین اردبیلی، کاوش های باستان شناسی، پایه‌های معماری

1. سرفرست کاوش های باستان شناسی بقعه شیخ صفی الدین اردبیلی و دانشجوی دکتری باستان‌شناسی دوره اسلامی، دانشگاه تربیت مدرس.
2. عضو هیات کاوش بقعه شیخ صفی الدین اردبیلی، دانشگاه جامع علمی کاربردی و افتاد باستان‌شناسی اردبیل.
3. استاد دانشگاه هنر و معماری دانشگاه تربیت مدرس.