THE FOUNTAINS OF ISTANBUL IN THE 18th CENTURY AND THE SHADIRVAN OF SAINT SOPHIA

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Various studies have been made until now about the fountains (cesme, sadirvan, and sebil) which occupy a special place in the history of the architecture of Istanbul. But as a general rule those studies do not present a critical survey of the plastic and decorative style. The aim in classifying the structure of the fountains and sebils in a group consists in compiling a work which may serve as a source of documents and material. It is true that, especially in the restoration of those buildings, studies have been made on a wider scope, but those studies are more remarkable for the plans, and sectional and frontal elevations which they contain than for a strict interpretation and explanation from the point of view of the history of art. It is possible to consider those studies as a presentation rather than as an exhaustive examination. However articles and notes published in magazines and books relative to Turkish art can by no means be deemed unimportant. It is to be hoped that in the future will be developed new and valuable studies bringing forth light on those buildings.



Some of the fountains built in Istanbul in the 18th century possess an independent architectural character which makes them worthy to be treated separately. They may be considered of first value to follow the development of architecture, and especially of the style of decoration.

The architecture of fountains and sebils, from the 18th century onwards, tends to assume the quality of monuments. They are no longer architectural accessories. It may be said that the water supply becomes of secondary importance. They begin to perform the part of a plastic synthesis of surface and volume, adorning an area, a corner, or the surface of a wall. It is to be rejoiced that to-day those monuments are being restored and brought to life and light.

It is evident that the production of those monuments in the 18th century is related to a trend towards European influence. We may connect this new trend with the dawn of a naturalistic interest in art and thought, of a feeling for nature. It may also be expressed as the awakening of a new taste for volume in the feeling for plastic, without losing much of its character in regard to surface.

Before expressing our thoughts on the Shadirvan of Saint Sophia I think it would be useful to attempt a general survey of the characteristics of the important fountains built in Istanbul in the first half of the 18th century, and to research their common particularities in style.



One of the most important of those buildings is the Fountain of Tophane, in the square adjoining the Mosque of Kılıç Ali Paşa, the last work of the architect Sinan. Among the independent fountains this is a masterpiece of the massive cubic model. With the order of the geometrical and floral decorations repeated on its four façades, it is a perfect expression of a striking surface plastic. The decorative arrangement on the façades is balanced in a geometrical frame. Its strongest plastic feature are the projecting stalactites repeated in the four corners, completing the shell-work decorations there. The narrow corner faces between the large façades reach as far as the stalactites, which atenuates the rigid geometrical massiveness of that cubic structure.

In the Fountain of Tophane the corner stalactites are bound together by a broad band with ornaments in bas relief. Beneath that band a projecting molding seems to separate two stories, between which the corner stalactites become a symbolic supporting union. Our purpose in explaining this two stories system is to observe that the surface arrangement of the Fountain of Tophane, essentially a heavy, massive building, gives it a light and elegant aspect. The Fountain of Tophane is essentially a heavy geometrical form on a large scale, a massive cube crowned with a wide-eaved roof and a dome.

The geometrical frame arrangement in the Fountain of Topkapı is a perfect adjustment of weight and support between two stories. The vertical frames below are the support elements of the decorative surface, the horizontal bands above are the elements of weight. There is no doubt that the strongest element of support appears in the small, vertical corner faces reaching up to the stalactites.

It should be noticed that the impression of depth in the façade is more apparent, and quite transparent, in the lower panels arranged vertically. There, the central niche surmounted by a pointed arch, and the lateral niches adorned with symmetrical stalactites, with their deep recess, give a distinct effect of chiaroscuro.

The decorations designed in a geometrical frame reveal the soul of the Turkish art of surface. No plain surface is left in the arrangement of the surface, but it is interesting to note that the arrangement gives an impression of repose. The arrangement of the ornamentation is saved from schaos solely by a definite aim at geometry. That aim has been attained by adding strict logic to sensibility in the arrangement of the various conventional motives. The co-ordination of the features of the surface plays a distinct part in the realisation of this taste in ornamentation. The distinct adjustment in the balance of the horizontal and vertical frames is stressed by the symmetry between the projecting stalactites in the corners and he stalactites in the recesses of the niches.

The real meaning of the geometrical union of surface and volume, which we observe in the Fountain of Tophane, may be described shortly as aiming to soften and enliven a gross mass and produce hence a true plastic masterwork. The artistic discernment shown in the decoration of a mass is manifested by sculpturing the mass and enriching it with depth and form. It also indicates the contemporaneous need and taste trending to essential geometrical elements in plastic.

If we study this adjustment of surface and mass it will reveal the essential characteristics of the monumental fountains of Sultan Ahmed and Azabkapu at Istanbul, and of the fountains of Usküdar. In monuments such as the Fountains of Sultan Ahmed and Azabkapu the presence of sebils with gratings seems to alleviate them by their voids, but it is evident that they represent a plastic surface alleviated and developed by the arrangement of the ornamentation. In the cubic fountain of Sultan Ahmed, with four façades, the sebils projecting from the four corners reflect not so much the architectural characteristic of space buildings as a trend towards corner features alleviating a heavy mass. Here that feature is not a symbol of support, it is a rythmic union between rounded sebil surfaces and flat façade surfaces. Those mutual adjustments give the building an aspect of a heavy mass together with lightness and fragility.

This means that in those buildings we see a characteristic tension, a stress and strain resulting from the adjustment of mass and surface. It is perhaps this tension which raises a dynamic feeling in the contemplation of the static arrangement of repeated ornamental frame surfaces.

the fountain in the square of Azabkapu we may see a similar adjustment between the sebil projecting in the middle and the ornamental lateral faces. This symmetrical arrangement does not differ greatly from a building with four façades. It even attains the impression produced by such a building. This arrangement is completed by the massive reservoir behind, which appears as the continuation of the ornamental façade. When the Fountain of Azabkapu was erected it had to be adjusted to the shape of the square at that time. But it was skilfully arranged so as to retain the aspect of a monument.

We can also see the adjustment of volume and surface in the Fountain of Usküdar. We get the same impression from the projecting console ornamentations surmounting the corners of the heavy cubic structure. In the small faces in the corners high faucets with small basins give a special value of surface to this system of breaking the mass, while the symmetrical niches repeated in two opposite façades, with their corner consoles, are reminiscent of the Fountain of Topkapu.

In this brief explanation we face the problem of difference and connection between the form of a cubic fountain and real architecture. It should be noticed that it reveals a surprising influence of the sense of architecture. The sense of architecture appears again in the height added to those cubic buildings by cupolas which

do not perform the function of covering a house. This characteristic may be described as a sense of decoration aiming at architecture.

As a general rule all those forms of fountains, including ornaments placed at random on the surface of walls, and those which fill voids in corners and spaces, is often treated in the form of a vault structure, which is a perfect architectural element, or in the fashion in which that element is used. This distinct connection with real functional architecture emphasizes the trend to imitation.

When it is necessary to treat fountain architecture as a distinct group it might not be wrong to suggest that this grouping forms a pseudo-architecture connected with many ornamental surface values, and symbolic architectural elements and characteristics, or a sort of ornamental architecture.

In studying the connection of surface and volume with a feeling for architecture it is possible to remember other elements and patterns. The pseudo-arch and the pseudo-column become essential plastic elements. Some fountains are in the form of a column. We may believe that even the marble ornaments designed for jet fountains or for a similar purpose result from the connection between plastic volume forms and a sense of architecture. I am convinced that this problem which arises from a survey of the structure of fountains may be chosen as a starting point for a general study of surface plastic in Turkish art.

Another reason for this brief explanation will appear below in the study of the Shadırvan of St. Sophia, in which we shall reach conclusions related to the conclusions we arrived at here. In the Shadırvan of St. Sophia we shall no longer see cubic plastic imitating architecture, nor shall we see a functional architectural adjustment, i.e. an adjustment of weight and support, but quite the contrary, we shall see cubic plastic subordinated to a sense of ornamentation adapted to

the interior and exterior characteristics of architecture, and trending to an organic union.

It is remarkable that not only in the Shadirvan of St. Sophia, but as a general rule in Ottoman architecture of the late period, functional elements trend to ornamental elegance. When considering the chief trends of that period it is impossible to refrain from proposing that in a serious study of that period in architecture this problem should be chosen as a starting point.



The shadirvan in the court of St. Sophia is remarkable for having a more or less independent character, like the fountains we mentioned above. In applying the model of the monumental fountains of Tophane, Sultan Ahmed, Azabkapu, and Usküdar to a monumental shadırvan no place could be more suitable than the courtyard of St. Sophia. At a time when fragments from the Atrium of St. Sophia still existed the slender colonnade framing the basin of the shadırvan in the vicinity of the Byzantine colonnade gave the courtyard a varied yet harmoniouns aspect. No remnants from the Atrium are to be seen to-day. But the wooden colonnade in front of the sebil and ablution faucets, made at the same time as the shadirvan, form a harmonious background. The ancient background had been replaced beforehand.

The shadirvan with colonnade in a courtyard with colonnade was an element appreciated of old by Turkish architects, and many examples are seen in mosque yards. In the colonnade in the courtyard of St. Sophia the stereotyped arrangement has been modified. The architectural group which imposed a strict uniformity in style, material, and technique, and even in color, could not be found in the various buildings and elements in the interior and surroundings of St. Sophia. Here we are not in presence of an architectural group build and achieved in one time. In the annexes built at intervals in

a determined period in history their various styles enriched the original group with a free and picturesque aspect. The characteristics of the buildings which form the architectural group of St. Sophia reveal an artistic tolerance which liberates the group from a stereotyped aspect. It may be compared to the great tolerance which adapted the Turkish spirit to a Byzantine church by appropriating it with the addition of minor elements.

This explanation proves that the independent character of the monumental shadirvan in the courtyard of St. Sophia is limited. The shadirvan as a perfectly independent monument could not very well have been erected in another place in the city. It could not be unrelated to a mosque but, because of the independence in style, its presence in the courtyard of St. Sophia gives it the character of an independent monument.

When we explained that the shadirvan was related to the architectural background of a colonnade, and that its relation to the columns supporting the roof above the sebil and faucets was not by chance, we gave a proof of the limitations of its architectural independence. The difference in style of the primary school situated immediately west of the shadırvan forms a background which stresses the independence. A two-storied building of massive aspect built in the technique of an early period, with alternate courses of bricks and stones, and with a single dome, forms a background which emphasizes the independent aspect of the shadırvan with its wide arches and slender columns. In the south, the clock-room, the Director's Office, and other buildings, are also remarkable for the varied style in surface and mass, and help to emphasize the original character of the shadiryan.

We have thus attempted to explain the relation of the shadirvan of St. Sophia to the surrounding buildings.

The architectural and ornamental character of the shadirvan of St. Sophia is an extremely typical example of the

change in style. We can say that it gives on a more advanced scale than some important architectural monuments a perfect idea of the change from the classic style to the rossco style. For example the mosque of Nuri Osmaniye, which was built at about the same time as the shadirvan, is from one point of view a pretentious monument which gives an exaggerated idea of the rococo style, whereas in the shadırvan we can see a moderate surface example of the rococo style, approaching nearly the classic sityle. In the Nuri Osmaniye the rococo style might be formally interpreted as an attempt to enliven and alleviate the massy by exaggeratedly rounded surfaces and, in various places, by protuberances and deep recesses. The mass has been ornamented in an attempt to produce an effect of chiaroscuro. Still we cannot affirm that the building does not give a perfect impression of rococo.

In the shadirvan the rococo effect has been attained by the balance of the wide interspaces of the pointed arches with the flat surfaces surmounting them. The deepeaved roof resting upon slender columns seems to float in space without a support.

In principle à shadırvan cinsists in a basin surrounded by faucets, and generally surmounted by gratings and a colonnade supporting a dome. In some shadirvans those two fundamental elements are united, the columns spring from the border of the basin which they encircle, and they are surmounted by a dome. The whole aspect is reminiscent of a mausoleum. The interspaces of the columns are closed by metal gratings. The shadırvans in the courtyard of the Mosques of Sultan Ahmed and Yeni Cami are in this form. There exist various types of shadırvans. The shadirvan in the courtyard of the Süleymaniye Mosque is a four-cornered cubic marble building. Although it is covered by a flat roof it retains the character of a covered basin, but it is not related to the classic order of the colonnade in the courtyard. It is remarkable that Sinan, in the courtyard of the Selimiye Mosque at Edirne, built a simple shadırvan with an uncovered basin, of polygonal form, nearly circular, and a jet in the middle. Shadırvans with a colonnade supporting a circular or polygonal roof, when placed in the middle of a courtyard, assure an easy rythmic relation to the order of domes and colonnades in the courtyard. Among various types of shadırvans in the courtyards of mosques some have dimensions out of proportion with those of the mosque, some are of so large dimensions that they narrow the courtyard, and some appear too small in a large courtyard.

To what architectural origin can be traced the shadirvans of various types which we see in the courtyards? There in no doubt that they are primarily related to the principle of filling a void. Need and function are inseparable from that principle. In some large Seljuk hans the mesjid in the courtyard was used to enrich an empty space. An empty and uncovered area with definite boundaries is enriched by varied elements such as monuments and basins.

In the shadirvans with a colonnade supporting a dome we can see an open building connected with ancient religious architectural forms. This is an indirect adjustment. It may suffice to remark that in reality the model of shadirvan with deep-eaved roof and a dome is the result of conditions imposed by need and adapted to the principal trends in architecture. Shadirvans serve to perform ablutions imposed by an important religious rule. They assume the character of a monument erected in honor of the sanctity of water.

Considering that the Shadırvan of St. Sophia differs from early models we have made it plain that it is remarkable as representing a new period in style. It is a product of the spontaneuos and natural development of Turkish style in Istanbul. When compared with earlier models the characteristics of the development appear clearly in the Shadırvan of St. Sophia. The aspect of a mass resting heavily on

the ground is superseded by the evident elegance, elasticity, and tension of an organism which seems to spring on high.

The deep-eaved roof surmounted by a dome, and supported by columns with stalactite capitals retains the weight of a mass even when spread out in a flat surface. That the weight is divided according to a well-known principle, and easily supported by very slender columns reveals a matchless skill in balance. The columns supporting the roof are perfectly vertical while the arched marole structure above the sapitals rises with a slight inclination, which makes us think that this building presents a new solution to the problem of static. We may suggest that in order to understand this solution a strictly technical study is necessary. Turkish architects have always known how to assure the most perfect relations beween the upper parts of a building and systems of support. The earliest architectural models with domes have been developed with the greatest safety and stability in technique. We may be sure that from the point of view of the system of constructive support the Shadirvan of St. Sophia, which at first sight seems simply to support a wooden roof, presents no important difference in principle with the most complicated systems of support and balance in large domed buildings. In the solution of this constructive problem a technical concern and an advanced and developed esthetic concern play an equal part. When considering the problem from this angle we realize that the matchless elegance of the Shadirvan of St. Sophia has the same meaning as the technical balance between the deepeaved and domed roof and the slender supports. Technical studies will reveal that esthetic elegance is reflected in this building in which the sense of ornamentation has been developed and refined unlimitedly.

There is a definite void between the colonnade and the basin of the shadırvan. The polygonal form of the basin is repeated in the metal gratings above. The upper

band of the gratings is formed by the gilt frames of the inscriptions surmounted by pediments with crescents. Similar crescents are seen above the pseudo-columns at the junctions of the panels of the grating. A metad drum forms an interior dome above the basin. The drum is covered with a network of wire which helps to keep the water in the basin pure.

The dome covering of the shadirvan has interiorly the same dimensions as the basin. The dome rests upon a wooden drum, and is covered with timbers. The deep-eaved wooden roof rests upon the columns supporting the octagonal marble building. The interior of the dome is painted light blue, and the central medallion with gilt star motives is brightened by the gilt grooves between the timbers of the dome. The whole surface of the roof of the shadirvan is decorated and colored with ornamental friezes according to a definite principle. The upper part of the octagonal marble structure is decorated inside and outside with various inscribed friezes.

An attractive feature in the ornamentation of the shadırvan is the variety of the similar motives and ornaments in the interior and exterior of the building. A variety in similar ornamentation cannot be accidental. From the point of view of the architectural aspect and conception it is conform to the relation between the interior and the We must stress that this relation differs from a sense of a closed house, and that a closed house cannot be mentioned when speaking of a shadirvan. But this particularity does not imply departing from an architectural character. It is evident that in the shadirvan the structure of roof and colonnade is a system of support and balance. Still this system on the whole has not lost the character of an ornamental plastic system. In this particular form the relation between the interior and exterior may be likened to the natural relation in an organism, such as the back and the palm of a hand, the face and the back of a leaf.

A leaden tracery frieze encircles the base of the dome rising above the drum, and it is repeated around the edge of the octagonal roof. The surface of the roof is encircled outside with three bands of a decorative frieze, continued inside by large blue spaces divided into square coffers, and separated at the corners, so as to from so many rectangles, by triangular surfaces decorated in gilt bas relief. The triangles are broken at the base in a form reminiscent of a lozenge motif. Those large surfaces, with square coffers and corner triangles, are followed by a triple decorative frieze running round the interior of the eaves. Those two groups of triple friezes are symmetrically arranged in relation to the central frieze in each group and to the large blue space between the groups. The material used in the decoration of the friezes is a plaster mixture applied on wood and ornamented with conventional scrolls in bas relief. That relief accentuated with gold gilding has been given the character of a geometrical frieze, but has a clear naturalistic effect imitating the rococo style. Especially in the middle friezes the scrolls develop and interlace, alternately narrowing and extending. The presence of nodules at the point of junction of the scrolls gives a peculiar aspect to that style of decoration. The symmetrical border friezes consist in a single row of scrolls curving inwards and outwords. In this ornamentation conventional floral motives joined together reveal a sense of unity. Although this is a static decoration it gives an impression of movement. Resilient branches, stretching and developing into scrolls and coils close together, produce a sprightly rhythm of narrowing and widening.

Here arises a new problem from the point of view of the development of ornamental surface plastic. This problem appears in the evident conflict of the ornamentation of the rococo period with surface. In the classic period the ornaments placed on the surface belonged to the surface proper, and could be described as an element of the order which created the surface. In the rococo period the develop-

ment of scrolls united with nodules, although they cannot be broken off the mass, do not appear as an element which created the surface. We may say that in that period the ornamentation accepted the surface merely as a background, thus tending to deny it. In the late ornamentations the adventure of agitaded ornamental motives and orders tending to break off from the surface expresses in short an aim at the impossible, an inclination to deny the surface.

In the ornamentation of the Shadir-van of St. Sophia the surface has not yet witnessed that agitation. Here perhaps the ornamentation does not belong to the surface, but although it is a naturalistic pattern obliged to be applied on it, it is in a balanced agreement with it. When asked according to what principle the decorative pattern has been convertionalized it might even be possible to answer that it is a concession to the essential character of the surface, and to its retaining and vivifying quality.

The background of the relief friezes mentioned above is decorated with perfectly natural flowers and leaves finely painted in their original colors. The naturalistic impression given by the surface of the roof of the shadırvan is entirely due to that painted decoration. The entablature uniting the roof to the marble structure is ornamented with bunches of flowers and leaves on a pink background. In the entablature, wich forms a wide frieze, gilt scrolls play a minor part because they are not vividly brilliant. In the narrow friezes the gilt reliefs form the main decoration, while the painted flowers give the minor impression. It is seen that here are two degrees of ornamentation order.

Immediately below the painted frieze formed by the entablature begins the surface of the arched marble structure. At the top is a narrow relief band, followed by an inscribed frieze in several frames. Among the most remarkable elements in the marble surface are the projecting rosettes decorating the keystones of the large pointed arches.

The principle of variation in similar decorative forms in the interior and exterior of the structure, as described above. has a definite signification which appears even in the rosettes in the interior surface of the keystones. Outside is a motive resembling a conventional rose. Inside it is in the form of a protuberance consisting of petals closed together. As an equivalent to the inscribed frieze outside, we see inside an inscribed frieze in a different style. An ornamental frieze runs around the frieze above and below, giving it the same height as the outside frieze. The upper marble relief frieze ouside has no equivalent inside, unless we find an equivalent in the two identical circular friezes in the point of junction of the interior roof ornaments with the circle of the dome. One of those friezes appears in the roof as a last transition band, and the other is repeated in the lower part of the interior of the dome, as if indicating a new beginning. The pattern used in those two similar friezes resembles closely the relief pattern in the marble band outside, which makes us think that this similarity cannot be merely accidental.

Those interesting differences make us ask if the inscribed friezes are somewhat connested together not only by the calligraphic form, but also in measure and perhaps even in meaning. The outside inscription is from the *Qasidai Burda*, which was composed in the time of the Prophet. The interior inscription is a qasida by the Poet Emin, beginning with the distich,

Mihr-u sipihri majd-u shān, Sultān Mahmūdi zamān Her qavl-u fi'li hemān nāmi gibi mahmūddir.

This showz that such a supposition would be an exageration.

The interior and exterior inscriptions, with the gleam of their gold gilding on a blue ground, are a very strong ornamental feature in the building.

When we look at the intorior decoration of the roof we realize immediately

its connection with the order in the entablature. In the surface of the roof comprized between the upper interior border of the marble structure and the lower circle of the dome are symmetrical friezes and frames exactly as in the entablature. But the decorative motives and order which are in the same spirit as those in the entablature are skilfully modified. somewhat free naturalistic order in the scrolls of the relief friezes is presented to us in a renovated composition. The patterns in the entablature are not essentially changed, but only modified. The same can be said of the painted flower decorations and the order of the reliefs in the gilded triangles in the corners. The first, like the rosettes, present flowers in full bloom, while the relief flowers are folded and closed. In the large rectangular surfaces between the triple friezes in the interior and exterior the pale blue color is superseded by a purple color, and the network of square coffers superseded by a floral coffer pattern. That pattern is idenrical to the closed conventional scroll patterns in the metal gratings of the sebil in the courtyard of St. Sophia. The rounded surfaces decorated with painting in the entablature between the roof and the marble structure are superseded here by new transition forms. The transition to the circle of the dome is obtained here by encircling the roof with new triangles again decorated with painting. In this way the octagonal structure is united to the circle, and the decorative grouping is completed by the similar circular double frieze mentioned above. That grouping can also be described as the completion of constructive pieces.

The modification in similarity in the interior and exterior is not a haphazard change, it has been effected according to a principle. We must repeat this in order to draw attention to this very important characteristic of the structure. We may say that here it is not a simple sense of form that plays a part, but a sub-conscious comprehension o fthe unity of the decorative members of one monument. The aim

is in short to assure unity in an organic form.

Another element which induces us to enter into a chort explanation of the decorative details is the basin of the shadirvan. The metal network composition is formed by repeating a conventional acanthus scroll. Above is a gilt inscription, another poem by the poet Emin, beginning with the distich,

Shehinshāhı zamān, Sultān Mahmūdi jalil - sh - shān Revān mīzābi kilkinden 'uyūni re'fet-u ihsān.

The shadirvan basin, with its 16 slightly convex faces, gives the impression of a covered plastic form adjusted in the middle of the octagonal cover structure. The connection which first appears between two principal elements such as the basin and the cover structure, may be expressed as above. The marble faces of the basin are decorated with a composition representing small columns with capitals in the form of a vase, bound together by floral motives springing from the vases, and developing like the decoration of an arch. The pattern is repeated on each face. The faces, and the pilasters between, are bound together by a fairly wide relief frieze at the top of the marble struture. That frieze also is decorated with a floral pattern.

There is a close unity from the decorative point of view between the marble part of the polygonal basin and the panelled gratings rising above in the same form.

In the shadirvan basin, elements such as the pseudo-columns, the decorations of the circles, the uncovered dome with metal drum, seem to us a new example of ornamental surface plastic imitating architecture, which we attempted to explain at first. The basin has been given the aspect of ornamental architecture. The basin seems to attempt adjusting to architecture, while the constructive cover structure tends to a feeling for ornamentation. We see those two trends combined in the whole structure in an interesting fashion.

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