The Polyvalent Forms of the Galata Bridge

INTRODUCTION

“Without the bridge, you cannot know the city. The bridge is, in fact, a city, though one must not take that too literally; the bridge is not the city and the city is not the country, nor by a long shot. The bridge is, above all, itself, and we shall leave it at that” (Mak, 2009, p. 8).

Aydan Büyükaş’s series of creatively warped photos of Istanbul are a re-reading of the current dense urban fabric of Istanbul (Büyükaş, 2018). In his photos, we see a dense accumulation of buildings, roads, and transportation that overlap each other. These photos include a second hand car bazaar, a gecekondu area, a mosque, an infrastructure, a terminal station, and infrastructural spaces, such as the Galata Bridge, where people gather. Thus, his photos extensively become more crowded.

Another well-portrayed projection of Istanbul as an over-dense city and its catastrophic effects is Esra Akcan’s heterotopian book (Land)Fill Istanbul: Twelve Scenarios for a Global City, in which she renders the relationship between its waterfront and how it acts in different roles, such as the unifier, as well as a separator in different periods of Istanbul’s waterfront history (Akcan, 2004). These two heterotopian projections of Istanbul’s waterfront emphasize the unplanned infrastructure, in which they cannot function properly due to the rapid growth of population and migration. Thus, the metropolitan city of Istanbul can no longer carry the over-requests and traffic of the dwellers and pedestrians of the city.

Istanbul is a poly-centric city, with overlapping multi-centered polyvalent forms of content and meaning, as well as a city with different “dimensions in motion” in Deleuze and Guattari’s terminology. It is a city unlike trees and their roots, as there is no singular root (Deleuze & Guattari, 1987, p. 21). In this city, different kinds of pedestrian movements and activities exist at the same time. Therefore, the city is rhizomatic by its nature, and in every different part of the city, different ways of living exist. By virtue of Istanbul’s indeterminable expanding urban nature, identifying a specific or planned pattern of urbanization in Istanbul is not easy.

The Galata Bridge is the second largest bridge in the world, with its 80-meter width, and is first place in the world with its bascules that can lift 1800 tons at a time (Tanyeli & Kahya, 1993, p. 359). However, it is not this physical and technical feature of the bridge that is important. In the heterogeneous urban fabric of Istanbul, the Galata Bridge has a special role in the unification and separation of different cultures. This density is experienced differently on the shores of the Bosphorus. The Galata Bridge is an in-between space and infrastructure connecting...
Karaköy and Eminönü, two traditional trade centers and two different worlds of the Eastern and the Western. The bridge was a space of hybridization of these two worlds and engaged them into a heterogeneous topography. Today, this separation has diminished, since the city has fused all of the sharp separations into one entity. Moreover, apart from this separation, the bridge has become a rare urban space in Istanbul, where the user experience can emerge spontaneously in a crowded urban setting, differentiating in the context of the hybrid marriage as it enters with other spaces, buildings, urban spaces and users. The bridge reveals “the potential of water as an active medium—an alternative public space” (Özdamar and Filiz, 2014, p. 2). This article is concerned with reading the space in many aspects, formed by stratifying the various types of activities on the water. Thus, the bridge is an example of the form and content interaction in its tectonic setting.

The bridge was rebuilt five times between 1845 and 1994 due to its wooden structure and being damaged by fires. Furthermore, there was a need to increase the strength of the structure and to enlarge it due to the city’s growth and increasing traffic. From all of these bridges, the 1912-constructed bridge, also named the “Old Bridge”, which was later demolished due to a fire, created a special memory in the minds’ of its passersby, with its polyclanet architecture, tectonic setting and urban confrontation in a modernizing city. The following bridges also continued this heritage and spatial potential but to a lesser degree. However, in this article, the Galata Bridge is evaluated through all of these different constructions during its history.

The methodology used to record the stratification of the various types of activities that are expressed in the Galata Bridge, consists in a historical review of several reconstruction milestones, identifying the functions that link the bridge within an urban scale. Second, the intention is to analyze the microscale fabric of daily activities that characterize the bridge as urban space, reinforcing its timeliness and strengthening the idea of polyvalence. Therefore, the Galata Bridge can be a useful tool in reinterpreting these self-organizing associations that are needed in today’s structures, where the crowd strengthens the meaning of space and interacts with it. As also mentioned by Zeynep Çelik, “the bridge is important because it is a further representation of the general goal of defining a larger metropolitan area by unifying Istanbul and Galata” (Çelik, 1993, p. 88-90). Thus, the bridge becomes a “breathing and alive landmark” of Istanbul, unifying the European and Turkish parts of the city and integrating the trade centers located in the Eminönü-Sırkeci region and Karaköy (Kuban, 2000, p. 358-359). The Galata Bridge differs from other bridges existing in the Bosphorus in the context of the relations established with the user and the sea. This is also due to the fact that it is the closest bridge to the sea.

THE EVOLUTION OF THE GALATA BRIDGE IN THE HISTORY OF ISTANBUL

In the 16th century, during the reign of Sultan Beyazıt, Leonardo da Vinci was invited to Istanbul for the construction of a bridge to provide the connection between Eminönü and Karaköy. Leonardo, who decided to come to Istanbul to make a bridge, was abandoned by the administration of the time at the Port of Venice1 (Deniz Hizmetleri, 2018). This shore of the city had already derived a cultural and architectural heritage developed by the Genoese and later, Venetian trade colonies, at the beginning of the 10th century. Further, it eventually developed into the most important harbor and trade area in Istanbul after the 17th century (Pomay, 2000, p. 15).

By the late 1800s, “boats left from the Istanbul side of the Galata Bridge; Eminönü was the major mode mixer, the terminal point for the trains, boats, and trams. In Galata, Karaköy, at the northern end of the bridge, acted similarly: at this key point, the main tramway stop and the lower terminus of the subway were located. Today, these two locations still provide the main transportation connections” (Çelik, 1993, p. 102). Before the first Galata Bridge was constructed in 1845, sea “transportation between Galata and Tophane was carried out by boat at the historical peninsula. Over time, ferry services to the bridges and Bosphorus villages connecting the two sides of the Golden Horn played an important role in the expansion and development of the area of influence of the region” (Akn, 2002, p.139).

In the nineteenth century, Karaköy, at the root of the Galata side, was already an international trade and business center with Venetian bankers. The coastline heading to Tophane and Kabataş area nearby, where Istanbul harbor is located, was a continuous axis into the city (Çelik, 1993, p. 80). In the mid-19th century, with the increase of commercial relations, “the use of other palaces as well as the Topkapı Palace by the sultan” (Evren, 1994, p. 63), and the moving of the palace from the Historical Peninsula to Beşiktaş, led the inner city transportation to shift to the Eminönü-Karaköy axis. Besides this shift, horse-drawn passenger cars imported from Europe became widespread, causing the need of a second bridge in the Bosphorus between the two sides of the Golden Horn to serve new transportation vehicles. This bridge was later named as the Cisr-i Cedid (Tanyeli & Kahya, 1993, p. 357). Due to the increasing population and becoming a trade center after 1938, Galata needed a fast transportation network between Karaköy and Eminönü (Çelik, 1998, p. 73). The bridge connected these two sides of Istanbul and “provided ease of access and the squares have become the most active place of the city. At the beginning of the century, the most elegant shops were located in the Eminönü plaza…” (Evren, 1994, p. 100).

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1 Leonardo’s work in this regard is evident from the correspondence in the Topkapı Museum today, from a letter he wrote to the Sultan. Leonardo’s bridge project to the Golden Horn was later constructed in 2001 as a pedestrian bridge in Norway.
The first Galata Bridge (1845-1863), located between Old Istanbul and Galata, was a 500-meter timber and pontoon bridge constructed in 1845 by “the mother of Sultan Abdülmejid and used for 18 years. The bridge was named as the Cisr-i Cedid (New Bridge, Big Bridge, Valide Beidge and Yeni Cami Bridge) to distinguish it from the earlier bridge, named as Cisr-i Atik (Mahmudiye or Old Bridge” (Evren, 1994, p. 63).

In 1863, the first bridge was replaced by a larger and sturdier timber bridge (1845-1875). In the same year, an exhibition was held at the Hippodrome and many important foreign statesmen, including Napoleon III, were invited. However, it was forbidden to smoke on the bridge due to a possible risk of a fire and the bridge itself was closed to traffic at night (Çelik, 1993, p. 88). Later, in 1872, the government agreed that the structure should be transported to the site of the old Unkapanı Bridge (Çelik, 1993, p. 88). It was also known that a bridge was built in a third location on the Golden Horn in 1863 between Ayvansaray and Piripaga. However, it was later “torn down by angry rowboat owners who had provided transportation between the two banks and whose livelihood it destroyed” (Çelik, 1993, p. 90).

The third bridge was constructed between 1875-1877. Despite the ferry boats on one side and the bridge on the other side, the indispensable means of transportation were lost and the place where the sea was at the center of the bridge contained sea baths, or sea hamams (Evren, 1994, p. 96). Thus, the bridge has always been a place where Istanbul was the official gateway for human mosaics (Evren, 1994, p. 97). In this period, the ones passing by the bridge were caravans, camels, horses, and donkeys (Evren, 1994, p. 98). Due to the fact that the first two bridges were constructed with wood and became unusable, iron was chosen as the next material. The bridge was constructed in 1875 and opened in 1877 due to the removal of Sultan Abdülaziz from the throne, along with the emergence of the Russo-Turkish War in 1877 (Evren, 1994, p. 106). It was also an interaction and confrontation of the dwellers with the sea, since there were also paid bathroom cabins with iron grills laid at the bottom part, slightly over the human neck, to avoid people from getting lost and drowning while facing the Golden Horn (Evren, 1994, p. 111). The bridge, which was supported by twenty-four pontoons, was “480 meters long and 14 meters wide, the width consisting of two 2.15-meter sidewalks and a 9.70-meter vehicular strip” and allowed the passage of sea traffic. Shops, restaurants and cafes were built on both sides of the bridge (Çelik, 1993, p. 88).

A fourth bridge was proposed in 1902. The design for an elaborate iron-frame structure that incorporated a number of eclectic architectural features was ordered from Paris. “The sections near the Karaköy and Eminönü quay were lined with shops on the main level. Two sets of stairs on each side connected the shop level to the platform on the water level, which acted as a landing quay as well as a promenade”. Çelik mentions that “a touch of Venice was added by the architecture of these shops and the form of the stairs. Abdülhamit II scuddled this project, not for practical or aesthetic reasons, but for security reasons” (Çelik, 1993, p. 89). “Another project for the reconstruction of the Galata Bridge was prepared as part of a larger face-lifting scheme by Joseph Antoine Bouvard in 1902. Its birthplace was again Paris; this time, the projected image was totally European” (Çelik, 1993, p. 89). In his scheme for the new Galata Bridge, Bouvard was directly influenced by the Pont Alexandre III, erected in Paris for the 1900 exposition (Çelik, 1993, p. 119).

Brendan and John Freely mention, “The Galata bridge has always been the best place for watching the parade of Istanbul life” (Freely & Freely, 2016, p. 24). The existing bridge that connected the two sides of the Golden Horn was one of the busiest spots in the city. However, it was De Amicis who described the scene on the bridge a few years before Bouvard proposed his scheme: “Standing there, you can see all Constantinople pass by in the course of an hour… The crowd surges by in great waves of color, each group of persons representing a different nationality” (Çelik, 1993, p. 122).

In 1909, an English-flagged ship arrived at the Golden Horn near the bridge, caused an accident and following this, the “bookstore, hops, a gunsmith, calpuc seller, greengrocer, grocer, and tobacco shops” located on the right and left side of the bridge were all buried in water, with no loss of life (Sezen & Apaydın, 2012, p. 113).

The fourth steel pontoon bridge was constructed in 1912, with a 25-meter width due to the tram that gained a certain weight in urban transportation, while the Karaköy bridge, which has been used for nearly 20 years, was now worn out (Tanyeli & Kahya, 1993, p. 358). A bridge project prepared by the French was rejected only because of the troubles that could have arisen in various rebellion incidents by the sultan due to the balconies of the sea (Evren, 1994, p. 130). Instead, a project was signed

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2 John Freely writes this: “The arcades on the Galata Bridge have to pass through the traffic booths to sell their goods, as well as the trafficiers shouting at the screaming screams of the marine engines pushing the whistle whistles. Looks like most of the amateur fishermen do not have any other food after the day…” (Freely, 2010, p. 12).

3 De Amicis also gives a list of passersby: Turkish porters, an Armenian lady in a sedan chair, Bedouins, Greeks, a dervish in a conical hat and camel’s-hair mantle, a European ambassador with his attendants, a Persian regiment in towering caps of black astrakhan, a Jew in a long yellow garment open at the sides, a gypsy with a baby on her back, a Catholic priest, ladies of a harem wearing green and violet in a carriage decorated with flowers, a sister of Charity from a Pera hospital, an African slave carrying a monkey, and finally, a storyteller in the garb of a necromancer. He summed up: “It is an ever-changing mosaic, a kaleidoscopic view of race, costume, and religion, which forms and dissolves with a rapidity the eye and brain can with difficulty follow”” (Çelik, 1993, p. 122).
with the German MAN (Augsburg-Nürenberg maschinenfaorik) company in 1907 (Tanyeli & Kahya, 1993, p. 358) and shops on the bridge were proposed (Evren, 1994, p. 135).

The biggest change to the bridge was the transformation of the interior and exterior divisions of the waiting rooms and the shops on the lower level (Tanyeli & Kahya, 1993, p. 358). The staircase linked between the two levels and the railings underwent several changes over time. Further, the tram links of the two sides were lifted as well as the clubs at the head of the bridge, which lost its function due to the withdrawal of money (Tanyeli & Kahya, 1993, p. 358). In the construction phase of the bridge, in 1914, electricity replaced horse-drawn trams (Evren, 1994, p. 168). Moreover, the water level was so close that it did not feature as a “distinctive” prominent structure on the water (Evren, 1994, p. 166). “The bridge was repaired in 1927, once in 1972 and then in 1992, due to a fire. After the repair of the old bridge was installed between Ayvansaray and Hasköy and it was announced that it would serve in that region after two days, the part of the bridge on the Eminönü side was buried” (Evren, 1994, p. 176) (Figure 1).

The fifth bridge was built between 1987-1992 and construction of the fifth bridge started in 1982 (Evren, 1994, p. 178). The bridge was based on a bridge system with double pressure against the pontoon system of the old Galata bridge and because it was outside the system, it was the most suitable infrastructure for the rapid transit system or light metro (Evren, 1994, p. 180). In 1992, due to a fire, the bridge became unusable and some parts were buried in the water (Tanyeli & Kahya, 1993, p. 359) (Figure 2).

The bridge is full of stories that have attracted many writers, as well as poets who interpreted the change in the history of Istanbul. One, is Peyami Safa’s novel, Fatih-Harbiye (1931), in which the Galata Bridge is displayed as having a special role as an in-between space for two different worlds of the east and west. The novel narrates the visible effects of the Westernization movements on Turkish society and cultural life and the struggles and psychological and cultural conflicts of a Turkish woman named Neriman, who grows up in a traditional setting in a conventional district, Fatih, meets and then falls in love with a man from the Harbiye, near Pera (Galata), a symbol of the Western world. She has to make a decision between leaving her existing

lover from her neighborhood and this new man from the other world. Everyday Neriman passes through the Old Galata Bridge, not only to meet with this new man, who just entertains her heart, but also, to experience a new world of going to balls and the cinema. Under the spell of Western life and her desire to live a Western life, she begins to break away from her family, traditions and neighborhood. She later has to make a decision between these two men from two different worlds (Safa, 1995)\(^4\). As an invisible urban element, the bridge increases this separateness and the contradictions she lives through (Figures 3, 4, 5).

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\(^4\) Another novel that speaks indirectly about the bridge and its environment is Jules Verne’s humorous novel, Keraban the Inflexible (1883, Kéraban-le-Têtu), which is about Keraban, an Ottoman tobacco trader who refuses to pay the increased tax for passing from the shores of the bridge. Although the Galata Bridge existed at the time the novel settled in 1880, instead, he, along with his foreign guest, a Dutch tobacco merchant and his servant, travel all along the Black Sea from land, refusing to use sea transportation as much as possible and innovations, such as the railway. The journey is narrated by the Dutch merchant (Verne, 1973). It is also known that this book is a criticism of a revolt against the administrative, military, and fiscal reforms made during the reign of II. Mahmud in the Ottoman Empire.

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THE GALATA BRIDGE AS A POLYVALENT SPACE IN ISTANBUL

“The bridge is a location. As such a thing, it allows a space into which earth and heaven, divinities and mortals are admitted. The space allowed by the bridge contains many places variously near or far from the bridge” (Heidegger, 1971, p. 153).

As Heidegger mentions, a bridge serves as a reflective space, an in-between space between “ease and power” (Heidegger, 1971, p. 150). There is a primary function for the bridge’s
existence; however, it “gathers the earth as landscape around the stream” (Heidegger, 1971, p. 150). Further, the bridge is defined by its “localities”. “The bridge is a thing; it gathers the fourfold, but in such a way that it allows a site for the fourfold. By this site are determined the localities and ways by which a space is provided for” (Heidegger, 1971, p. 152-153).

Since the first construction in 1845, the Galata Bridge has become a space for the gathering urban crowd. The bridge can be evaluated as an example of such a “polyvalent” relationship. First, it has historical importance and a heritage that has witnessed developing and modernizing a city, bridging both culturally and socially the two distinct sides of the Golden Horn. Secondly, the bridge is important in the daily life of Istanbul dwellers. The upper level is for traffic and pedestrian use, serving also as a vantage point for viewing the Istanbul cityscape. On the lower level, which is just above the water level, there are fish restaurants, shops, meeting places and art exhibitions (Şumnu, 2002, p. 60). It is this fishing activity that mixes these typical uses. The bridge is lined with fishermen on both the upper and lower levels. These activities are not planned beforehand, but have developed in a self-organized way over time. Fishermen, craftsmen (metal workers in Karaköy) and other forms of traditional workers still exist in some regions of the waterfront (Özdamar & Filiz, 2014, p. 7).

Fishing, gazing, swimming, catching the vaporetto (ferry) and working on both traditional and contemporary crafts are some of the facilities that, unplanned, came together on different levels of the bridge. To give an example, crafts such as ironmongery occupied both the interior space and a small part of the public space and pavement designated for activities. At the same time, there are fish shops, restaurants, art galleries and contemporary performance activities that take place in the urban space in Karaköy (Özdamar & Filiz, 2014, p. 2). These activities form a “polyvalent” relationship—“a form that can be put to different uses without having to undergo changes itself, so that a minimal flexibility can still produce an optimal solution” (Hertzberger, 2009, p. 147). Indeed, superimposition of these activities change the perception of the level from a two floor-bridge to a space of hybrid sections, partly due to the interruption of the bridge in order to allow sea transport. As such, this interruption of both the shops close to the sea fragmentize the bridge experience. Thus, the bridge no longer becomes a linear axis to pass, and walk over, but transforms pedestrian activity into a function like a blood circulating in the body (FIGURE 6).

As Hertzberger mentions, function and content are inseparable specificities called a “polyvalence.” “These self-organizing activities on the waterfront are intrinsic to Istanbul (Özdamar & Filiz, 2014, p. 2). The concept of polyvalence makes the function-space and program in architecture intertwined and related. “Polyvalence is premised on deliberately charging everything we make with points of leverage as opportunities for application and, accordingly, for interpretation. We describe a form or space as ‘polyvalent’ when it is equipped with what we can call concealed availability, to be discovered by users when they appropriate it. A polyvalent form can be added to, and therefore given another content, without undergoing essential change, the difference in interpretation illustrating its suitability for multiple ends. Unlike the pre-programmed possibilities of appliances, polyvalent forms reveal their qualities with use, the way an instrument’s output depends on the input of the player. Polyvalence is a broadening of the necessary minimum that in each situation can contribute to the quality of life and experience by targeting what can be regarded as universal, if usually unconscious human motives such as are expressed in ever-new guises” (Hertzberger, 2014, p. 112).

Polynvalent has been regarded as a multi-purpose hall or salle polyvalente, which exists in “every
French village or provincial town, which is used for weddings and parties and for musical, theatrical and film performances”. However, there is a difference; the activities in a salle polyvalente take place consecutively, and not simultaneously.

“Polyvalence in the context of housing relates primarily to the interchangeability of activities between different rooms” (Leupen, 2006, 23-24). Therefore, Hertzberger criticised flexibility. Although it is adaptable, flexibility cannot be the best solution to any problem. “Flexibility, therefore, represents the set of all unsuitable solutions of a problem” (Hertzberger, 2014, p. 146). In contrast, polyvalence means “that the building can be used in different ways without structural interventions”. Thus, he juxtaposed polyvalence against flexibility (Leupen, 2006, p. 23-24) and as such, the idea of polyvalence has been applied in Diagoon houses in Delft (1967-71).

In the Galata Bridge, polyvalence occurs in the fisherman’s way of functional use of the balustrades of the bridge, their forming a temporary space by waiting, sitting, eating, chatting with each other, observing the passer-by, people hurrying and crossing people, street vendors selling cigarette with small loop plays, mussel sellers, and Turkish pubs with overflowing people in the lower level. Some of these activities were fixed, but it is even easier to observe that they are unstructured and incomplete.

The relationship of the fisherman emphasizes Massumi’s “content” and “expression”. This is the relationship between subject and object; rather than the relationship between “substance” and “form” in traditional philosophy, this coincides with “content” and “expression,” which are power relations and interrelated among them. There is a power relation between content and expression; without one, the other cannot exist. For example, nothing related to wood, wood worker (body) and the relationship between the instrument is not neutral. The markings are not passive but less active than the tool. Therefore, relations between wood users and wood are transformed into renewed values (Massumi, 1992, p. 12). In this context, interpersonal concepts enable a formless network of relationships that can be understood by an imageless theory. In the same way, the bridge unfolds these relations. “The Galata Bridge is a hybrid, both Eminönü and Karaköy, but not both. Hybridity is a new thing / situation that occurs when at least two things / situations are encountered. Although this new situation carries the characteristics of the factors in the encounter, they are not the same, they are new...” (Ertaş, 2014, p. 86).

Aydınlı addresses the Old Galata Bridge as a “cultural being”, which is “differentiated by its morphological structure” and experienced in its “dynamic unfolding”. She evaluates the bridge in terms of an enmeshed experience; “Enmeshed experience of the bridge would help to understand the architecture of the city as in-between reality, having both the visible and invisible dimensions that can be connected with the cultural codes reflecting the lifestyles”. This enmeshed experience “opens the doors to connotations within the context of spatial voids, while fragmented and incomplete images emerged from a series of overlapping urban layers and constitute memory as a spatiotemporal entity” (Aydınlı, 2012, p. 141-151).

CONCLUSION

As Simmel explains, path building, as a “specifically human achievement”, freezes movement into a solid structure that commences from it and in which it terminates” (Simmel, 1994, p. 6). This human achievement in the Galata Bridge derives from the idea of polyvalence, which can be defined as a tool in re-reading space that is gradually moving away from the superimposition of content and form. The various functions at urban scale that the Galata Bridge has sustained, have changed over time, granting historical density to its space, in a scale of multiple scopes, convening daily activities and new undertakings by the communities that bring up-to-date its polyfunctional being.

This article focuses on the interaction between the urban crowd and the space rather than learning from it by instrumentalizing the Galata Bridge. Therefore, this article evaluates the Galata Bridge as a transitional and super-impositionary coincidence, rather than as a functional infrastructure or stratification in relation with the shore, which may damage the superimposition of fluid relations. The function of the bridge is not only the transition from one place to another, but it has an open structure that allows for a dynamic space that allows for transition and stability together (Özdamar, 2011, 61-62). In Istanbul’s interaction with the sea, experiences such as swimming and coastal fishing are gradually diminishing. However, the Galata Bridge enables an interaction with activities such as walking, fishing, and socializing for urban crowds. This kind of hybrid relation that a city complex gives rise to can lead to the start of new species relations. Thus, the bridge exists in the form of a symbiotic relationship, similar to the spatial repercussions of a self-organization process.

REFERENCES


