

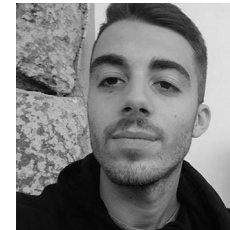
Drawing, design, and new images of the ephemeral architecture in Paris in 1739

Since the most recent European provisions on the enhancement of Cultural Heritage, much emphasis is being placed on the preservation of the identity values of places, the recovery of local traditions, the virtualization of contexts and their inclusive use. Within this panorama, the work presented here is situated within the study of ephemeral architectures that took place in the city of Paris during the 18th century: a theme of immaterial connotation, whose ideas and testimonies are preserved exclusively through written texts, iconographic apparatuses, and archival drawings. Specifically, the majestic eighteenth-century event held in Paris under the rule of Louis XV and described in the volume entitled *Festes données par la ville de Paris A L'occasion du Mariage de Madame Louise Elisabeth de France [...] (1739)* is examined here. Through the discipline of Drawing, as a medium of cognitive investigation as well as narrative and technical representation,

this study analyzes the ways in which the project images attached to the text are graphically represented and, through the use of digital modeling, proposes to give form to ephemeral architectures (otherwise described only in orthogonal and perspective projection) and to place them virtually in coeval urban environments. The goal is to return 'unseen images' geared toward a renewed and more inclusive enjoyment of Cultural Heritage, whose sources are intangible.



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Keywords:
Intangible heritage; Heritage graphical studies;
Images; Drawing; Heritage interpretation.

INTRODUCTION AND RESEARCH METHODOLOGY

Since the most recent European provisions on the enhancement of Cultural Heritage, much emphasis is being placed on the preservation of the identity values of places, the recovery of local traditions, the virtualization of contexts and their inclusive use. Within this panorama, the work presented here is situated within the study of ephemeral architectures that took place in the city of Paris during the 18th century: a theme of immaterial connotation, whose ideas and testimonies are preserved exclusively through written texts, iconographic apparatuses, and archival drawings.

The conception of ephemeral apparatuses saw widespread use in the main European capitals during the 18th century, with the creation of architecture by considerable design value. In fact, this great cultural season was the scene of a lively technical-artistic experimentation that came to life thanks to a plurality of expertise, from the design and technical skills of architects and engineers to the figurative and entertainment skills of painters, set designers and musicians. At the same time, such synergy highlighted well the taste of the time for spectacularity, grandeur and sumptuousness: all characteristics capable to stimulate feelings of wonder and surprise in the public that would perceive and enjoy such apparatuses. This was a purpose that not even the macabre pomp of funeral ceremonies renounced, which, with the mournful sets of catafalques and the music of acclaimed chapel masters, managed to transform even such unhappy occasions into a refined form of spectacle (Mancini, 1979-1980, p. 302).

In this period, all states worked to organize large urban celebrations with the introduction of a substantial revolution: to be intended for the widest possible audience, especially for the popular and bourgeois public, generally excluded from the private and elitist celebrations of the aristocracy. This condition found reason mainly in the understanding of the 'public celebration' as an instrument of nonverbal political communication of the royal families (Papagna, 2015; Lardellier, 2003), where the latter took on a representative function of grandiosity of the monarchy with the aim of con-

solidating its popularity and reputation as well as directing the cities more and more to the conquest of the status of great European capitals. To achieve all this there was need to a large audience, active participation of the people and all social classes who would attend the celebrations, thus giving the impression of a cohesive atmosphere between the people and the royal family. Therefore, the theme of the festivities abandoned the previous torneistic and/or equestrian representation and aimed to develop a broader representational identity inherent in the royal family using dances, theater shows, banquets, music, fairs, illuminations, and allegorical floats (Figs. 1-5).

Thanks to such frenetic alternation of events, the myth of 'fun-loving' cities soon became part of the character components ascribed to the people and consolidated until it became one of the common-places that, even today, obscure a more complex social and economic reality.

In Naples, for example, it was Charles of Bourbon, king of the city from 1734 to 1759, who introduced this important reform within the city's ceremonials. From 1738, in fact, all public celebrations, civil and/or religious, would revolve around the figure of the monarchs and their descendants. At that time, Paris also equalized this reform and, therefore, events such as births, weddings, baptisms and funerals of royals would always be celebrated in those decades. It is no coincidence that it was precisely in 1739 that the great feast was staged on the banks of the Seine on the arranged marriage between Princess Louise Elizabeth (1727-1759), daughter of Louis XV with the infante Don Philippe of Spain (1720-1765) (*Festes données par la ville de Paris* [...], 1739), here subject of study. On this occasion, Paris became an urban 'stage' and as such was set up with temporary architectures made of wood and papier-mâché. The latter, went 'momentarily' to modify the urban system with their opulent encumbrances, characterized by the fusion of architectural and scenic elements (Cowart, 2008), where the real and the 'false', the provisional and the permanent blurred. Finally, it should also be considered that this occasion provided the architects with an effective testing ground to test the validity of design

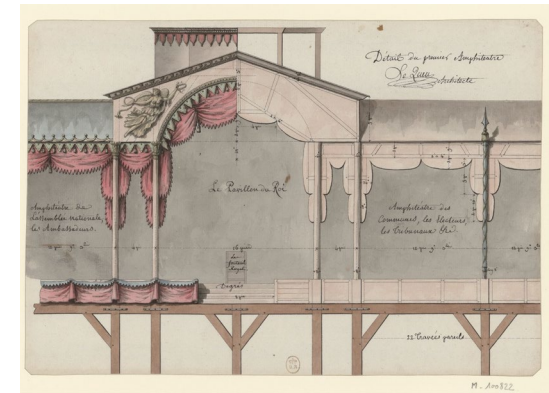


Fig. 1 - Lequeu, Jean-Jacques (1757-1826). *Détail du premier amphithéâtre. Le Queu architecte*, 1791 (detail of ephemeral amphitheater). Source: Bibliothèque nationale de France <gallica.bnf.fr/>



Fig. 2 - *Vue de la décoration et illumination faite sur le terrain de la Bastille pour le jour de la fête de la Confédération française le 14 juillet 1790* (View of the decoration and lighting made on the grounds of the Bastille for the French Confederation Day on July 14, 1790). Source: Bibliothèque nationale de France <gallica.bnf.fr/>

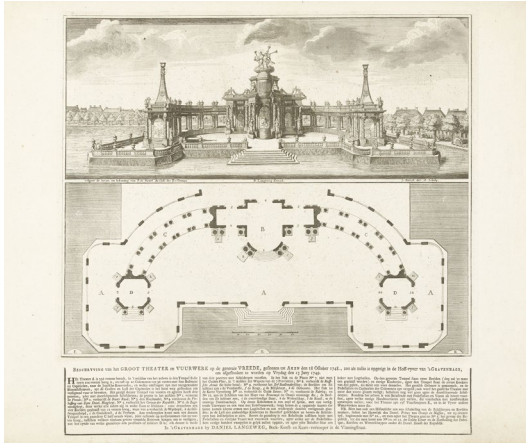


Fig. 3 - Jan Caspar Philips, 1749, *Vuurwerk te Den Haag voor de Vrede van Aken, 1749 Afbeelding van 't vuurwerk, afgestookten in 's Gravenhage, den 13 juny 1749, ter occasie van den Aakensche Vreede* (Fireworks for the Peace of Aachen, 1749, June 13, 1749, on the occasion of the Aakensche Vreede) Source: <<https://www.rijksmuseum.nl/en/collection/RP-P-OB-60.037>>

Fig. 4 - *Theater te Den Haag voor het vuurwerk voor de Vrede van Aken, 1749, Iven Besoet, naar Pieter de Swart, 1749* (Theater for the Aachen Peace Fireworks, 1749, Iven Besoet, by Pieter de Swart, 1749). Source <<http://creativecommons.org/publicdomain/mark/1.0/>>

Fig. 5 - Van Vianen Jan, 1702, *Afbeelding van het vûurwerk Theater en Ornamenten oppgereggt door Ordre van haar Edele Groot Mogende de Heerenstaten van Hollandt en West Vrieslandt inde Vyver binnen s' Gravenhage Afgestoken den 13 december 1702* (depiction of the Vûurwerk theater and ornaments erected by Ordre of his noble Groot Mogende). Source: Bibliothèque de l'Institut National d'Histoire de l'Art, collections Jacques Doucet.



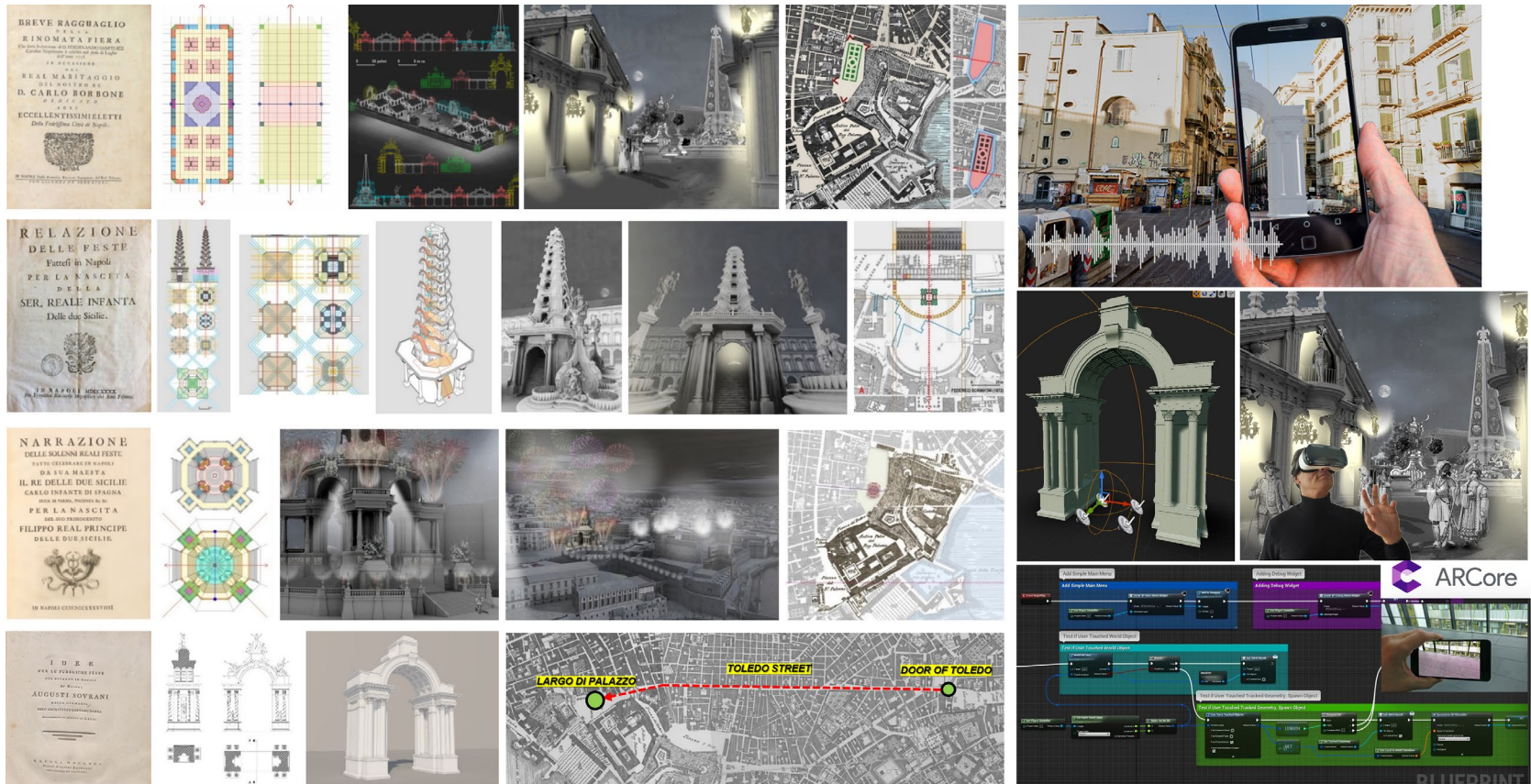
intuitions to be translated into permanent works. This work, therefore, expands research methodologies that fall within the tradition of the discipline of representation and, considering the already established computational explosion oriented on the one hand to analysis and on the other to the creation of 'new images' for/of Cultural Heritage, constitutes a renewed opportunity to study the history and culture of ephemeral architecture. In this context, a peculiar aspect peculiar to the civilization of the 18th century is analyzed, that of the temporary apparatuses (Palestini, 2020; Rak, 2012; Mancini, 1979-1980) prepared for the great celebrations organized for the occasion of significant events that marked the life of the main European cities in those years, destined briefly to disappear and of which only evidence remains in archival documents and in volumes that contain a small number of representations and descriptions that are not entirely exhaustive and that only partially restore the complexity and richness of such apparatuses. Documentary evidence which, after being investigated and studied for the large collection of drawings and designs of eighteenth-century celebrations in Naples by Vincenzo Cirillo (Cirillo, 2021) (Fig. 6), with numerous examples of great design value, is here extended to other eighteenth-century European capitals such as Paris.



There are several points of view in which to include this research: historical, in that the analysis of these works allows for a better understanding of the treatment of events that characterized the eighteenth century (Charon, 2010); documentary, due to the rich presence of archival documents (Palestini, 2022); and critical and re-reading of archival records, by virtue of graphic reconstructions (Farroni et al., 2022) here made of some feast machines on which considerations are presented, useful for a broadening of the knowledge of studies on the subject.

The work, therefore, aims to focus on the role of drawing according to the very fundamentals of the discipline, as a tool for reading and critical investigation capable to go beyond reality and to bring back to vision moments of the life of the eighteenth century in Paris through a multiscale approach that brings together data of different natures (cartographic, textual and graphic) proposing a restitution based on the study of documentary sources.

The methodology of investigation can be found in the approach to a case study, which makes it possible to be able to capture in the graphic outcomes the complex spatial articulation of urban scenography, returning on the level of representation the values that connote them and the contextualization in the urban environments that received them, with



the aim of giving rise to an operation of ‘cultured survey’ that through a conscious and mature management of the graphic medium, can succeed in going beyond the accuracy of the data.

EPHEMERAL ARCHITECTURE. A ‘DIMINISHED’ AND ‘INCREASED’ HERITAGE OF IMAGES

Between the 16th and 18th centuries the conception of ephemeral apparatuses represents one of the most significant moments of Cultural Heritage and

results in a considerable production of images. High quantities when compared, for example, to the few ‘powerful’ images (about forty) with which a man of the Middle Ages came in contact throughout his life (Bino, 2014). This considerable production of images represented for the architects of the time a desire to experiment design solutions to be later converted ‘in stone’ and, for the sovereigns, a ‘vehicle’ of visual representativeness of political power. This dual necessity flowed into the production of ‘intelligent’ images, set up through the aid of various geometric methods (De Rosa et al.,

Fig. 6 - Vincenzo Cirillo, 2021, Eighteenth-century celebrations in Naples (1738, 1740, 1747, 1791). Drawings and designs for ephemeral architecture.

2001), for fairs, catafalques, etc., and their related urban contexts, with the aim of narrating their spatial qualities through the progressive elimination of redundancy, to reduce as much as possible the amount of visual information, as well as the amplification of viewpoints by the representers, to 'exaggerate' their visual power through as many geometric devices. The result was the realization of 'visual products', the outcome of complex functional mediations and encodings: a process that, starting from a mental image (already a reduction of what was captured by sight), arrived at the drawn image as a "further development of synthesis" (Pascolini, 2006, p. 138).

We are thus in the presence of images that aim toward a 'diminution' (synthesis) and, that is, toward a discretization of perceived reality in order to exhibit a clearer and simpler picture of what is being observed since perception is a phenomenon that merges all the constituent elements of reality into a single representation.

The shaping of the festive images, however, also stems from the desire to arouse feelings of wonder in the viewer, the same felt by eventgoers. This cause, combined with the reduced temporariness of celebrations, generated the desire to pass on to subsequent viewers the display of the festivities through the editing of specific volumes and images of this heritage. This phenomenon, though very traditional, already represents an early desire to enhance the value and enjoyment of those architectures, which were only exhibited for a few days. Moreover, albeit unconsciously, they conveyed the concepts that today theoretically define augmented reality—that is, a tool that enriches human sensory perception through the inclusion of additional information, which 'augments' the reality already normally perceived (Giordano et al., 2021).

Therefore, the images of the celebrations contain within themselves both the concept of 'diminished' and 'augmented' (Cirillo, 2021, p. 165) and are articulated in such a way as to be a clear fruition of the event albeit with a methodology that transports the reader from the physical experience of the three-dimensional and unlimited perception of space, to that mediated by the representation through images reproduced graphically in a plane

(Zerlenga, 2016, pp. 87-96) or in mental images if deduced from the reading of a written text (Luigini et al., 2017). An imagination, therefore, that grows uncontrolled through the reading of the text and that, thanks to the presence of images and drawings (information) that describe in a two-dimensional way the spatial configuration of the places and architectures created, 'augments' the information. In this sense, the images in this volume augment the textual information and manipulate the reader's imagination by transporting it to a reality close to that of the actual celebration.

EPHEMERAL ARCHITECTURE AS A VEHICLE FOR LINGUISTIC AND SHAPE EXPERIMENTATION

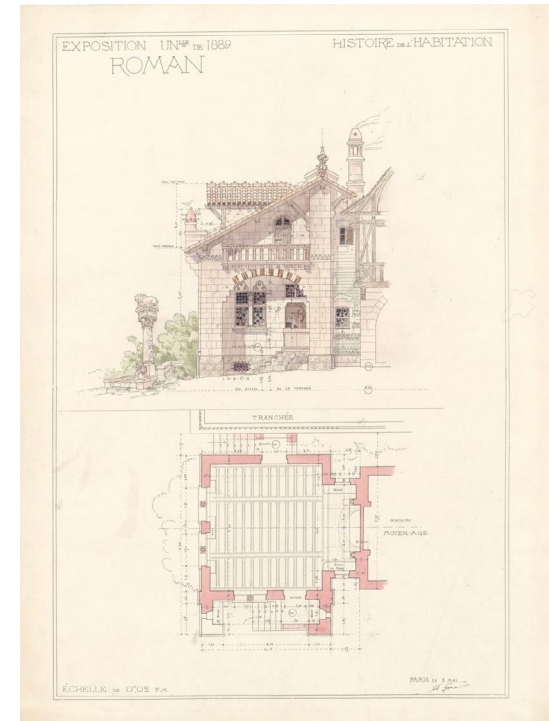
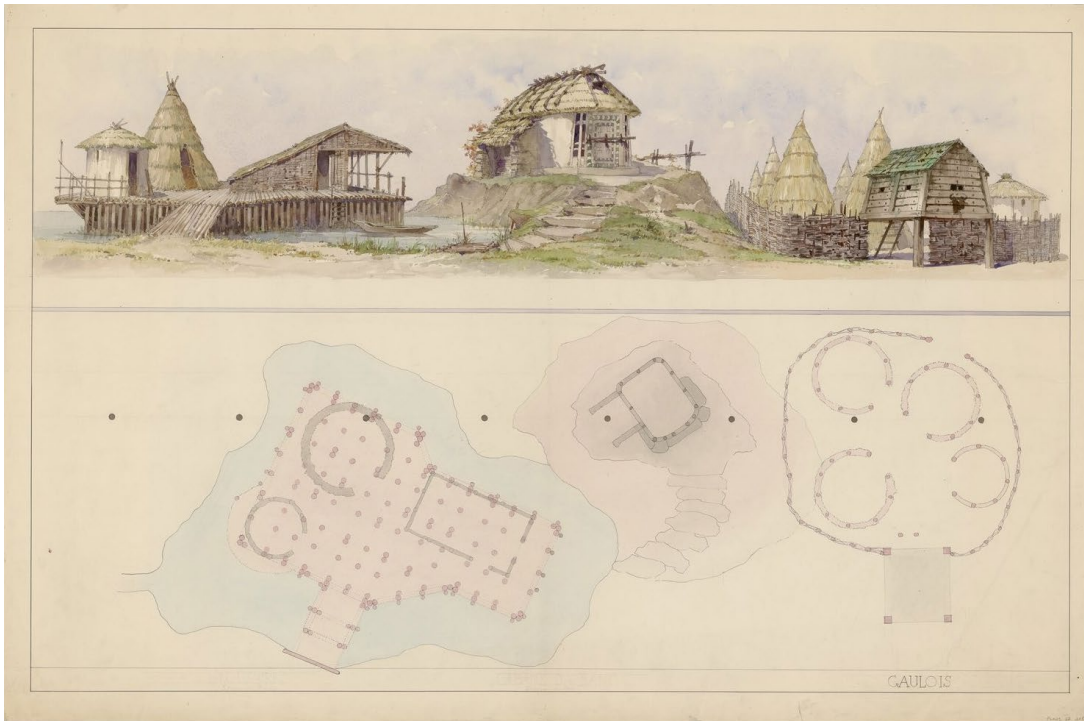
The spectacular staging by Gian Lorenzo Bernini in Rome in the second half of the 17th century to celebrate the birth of the Dauphin of France, son of Louis XIV and Maria Teresa of Spain, is illustrated in an image in which the *Place d'Espagne*, still devoid of the grand staircase of the *Trinité-des-Monts* of the eighteenth century but where you could already admire the magnificent Bernini Fountain, it has been literally redesigned by an imposing ephemeral installation. A real landscape that contains all the symbols to which the event can be extended, including mechanisms that were animated thanks to ingenious winches, pulleys, water devices, typical of theatrical sets. On the day of the celebrations, in the utmost noise, a solemn collapse destroyed three months of work under the roar of fireworks at the end of the event (Gigli, 1997). It is therefore within this assumption, that starting from the Baroque period but especially during the eighteenth century, that the concept of 'ephemeral' will be understood as a category of design thought, urban intervention strategy and will interpret the concept of 'temporary'.

This process was born during the Renaissance period when in Italy the specific sector of scenographic decoration developed simultaneously with the theatrical scenography, the purpose of which was to celebrate the events of court life and the triumph of Catholicism through the artificial splendor of ephemeral works, including tournament

theaters, floats, pyrotechnic machines, etc. In fact, during the seventeenth century, the ephemeral installations found particularly fertile ground with the profusion of Baroque poetry, of which the spectacular effect became the main component. The ingenious mechanisms conceived by Leonardo in Milan, by Palladio and other figures in Venice, by Buontalenti in Florence were just some of the extravagant interventions staged in Italy, among which the 'capricious' machines of Gian Lorenzo Bernini stand out. With the help, among others, of Domenico and Carlo Fontana, Andrea Pozzo, Pietro da Cortona, made Rome one of the capitals of the Baroque party. In this sense, even more than the theater, the urban festival allowed a large audience to be exhibited and in which the architect, with his art of staging, played the role of mediator. In these creations all means of expression, including music and poetry, and the renewal of taste was often facilitated by the randomness allowed by their temporary nature. The power of the ephemeral thus proves to be a vehicle of linguistic and formal experimentation essential to the process of building urban space and in particular the birth of the extraordinary invention of the square, a public space par excellence.

In the European context, during the 17th and 18th centuries, it was mainly France that participated in this great architectural ferment with the design of temporary buildings. Here, architecture, which for centuries had been the art of building 'solid,' 'fixed' structures of undoubted beauty, began to turn toward ephemeral achievements, probably a reflection and outcome of a socio-political situation that would lead to the French Revolution in the second half of the century.

It was Paris that boasted of considerable stage apparatuses, including fireworks displays (Frezier, 1747) on city streets. One thinks, in general, of the triumphal arches erected in return to the sovereigns' military campaigns, the temporary theaters to host plays and operas during religious festivals, the bridges crossing the Seine to connect different parts of the city and facilitate the passage of carriages and participants in celebrations, and, in particular, to the urban theater set up on the occasion of the marriage of Louis Ferdinand of Bour-



bon-France (1729-1765), the eldest male child of Louis XV of France, to Marie-Thérèse Raphael of Spain (1726-1746), the written and graphic record of which is preserved within the volume *Fêtes publiques données par la Ville de Paris* [...] (1745). Such events inaugurated a cultural architectural season so fruitful that they made Paris in the late nineteenth century (along with London) one of Europe's most attractive capitals, where the politics of the ephemeral (ended the ancien régime) advanced as a promoter of aspects of society related to the arts, education, commerce, and international relations, through the staging of the *Expositions universelles*. These temporary urban theaters exhibited a fusion of different (even historical) archi-

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tectural 'styles' and languages that went hand in hand with technological experimentation with new building materials (Figs. 7-9). Here, the most successful stagings -the Eiffel Tower- became symbols and new cultural heritages that avoided the 'destructive' power of the decay of the temporary.

DRAWING, DESIGN, AND NEW IMAGES OF THE 1739 CELEBRATION IN PARIS

On February 22, 1739, after lengthy negotiations, the marriage of Princess Louise Elizabeth (1727-1759), daughter of Louis XV and Maria Lezczinska, to the infante Don Philip of Spain (1720-1765) was arranged. The marriage took place by correspond-

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Fig. 7 - Garnier, Charles (1825-1898), Exposition universelle de 1889 (Histoire de l'habitation, Gaulois), 1880. Source: Bibliothèque nationale de France <<https://gallica.bnf.fr/ark:/12148/btv1b530912863.r=Exposition%20universelle%20de%201889?rk=622320;4#>>

Fig. 8 - Garnier, Charles (1825-1898), Exposition universelle de 1889 (Histoire de l'habitation, Roman), 1880. Source: Bibliothèque nationale de France <<https://gallica.bnf.fr/ark:/12148/btv1b531199221.r=Exposition%20universelle%20de%201889?rk=2317608;0#>>

ence on the morning of August 26 of that year in the chapel of the Palace of Versailles.

On this occasion and with the King's approval, the Provost of the Merchants and Rulers of the City of Paris organized public celebrations. Robert-Jacques Turgot (1727-1781), a French economist and politician, entrusted the architect Giovanni Niccolò Servandoni (1695-1766) with the direction of the celebration to be held along the Seine.

The celebration was held on the night of August 29-30, 1739. It was one of the most extraordinary and magnificent festivals held in Paris up to that time. At that event, the wonder of the spectators was such that it deserved to be imprinted in the memory and imagination of posterity. To this end, Jacques François Blondel was commissioned to play the role of 'eternalizing' the entire event by engraving 'images' (drawings and illustrations). These images are contained in the color volume *Festes données par la ville de Paris, A l'occasion du Mariage de Madame Louise-Elisabeth de France, & de Dom Philippe, Infant & Grand Amiral d'Espagne, les vingt-neuvième & trentième Août mil sept cent trent-neuf* (1739) and in the one published the year after, in 1740 (Figs. 10-11).

The analysis of the places of the event's unfolding was an indispensable operation to well contextualize the ephemeral architectures in the coeval urban layout (Fig. 12). In this regard *Plan de Turgot* (1739), a bird's-eye view was used as support for the analysis, which, thanks to its considerable detail, both in terms of graphic representation and toponymy, allowed the recognition of the *Neuf* and *Royal* bridges bordering the urban portion designated for the festivities. The *Plan de Verniquet* (1790) was also used to support *Turgot's* view. The reason lies in the fact that, unlike the *Plan de Turgot* (which can be interpreted as an isometric axonometry), the *Plan de Verniquet* is configured in double orthogonal projection; moreover, by presenting a clearer demarcation of the city's banks on the Seine, it made it possible to arrive at a more precise planimetric location of the ephemeral architectures.

Of fundamental relevance to understanding the contexts were also the pictorial works of Nicolas Jean-Baptiste Raguenet that illuminate in detail

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the portion of the Seine used for the festivities with viewpoints towards both *Pont Neuf* and *Pont Royal* (Fig. 13). Regarding, however, the study of the ephemeral architectures that were designed in this urban space, the references related to Jacques-François Blondel's *Architecture Francoise* [...] (1752, vol. 2) and Neufforge's *Recueil elementaire d'Architecture* [...] (1757), which contain in some parts of the volume, architectural and technological details used in the construction of the ephemeral installations (as well as numerous stylistic citations used), were fundamental. The celebrations opened with a speech by the king delivered from the royal throne (Fig. 14), an architectural wooden element leaning against the

Fig. 9 - Panorama de l'Exposition universelle de 1889. Source: Bibliothèque nationale de France <<https://gallica.bnf.fr/ark:/12148/btv1b84395027?rk=622320;4#>>

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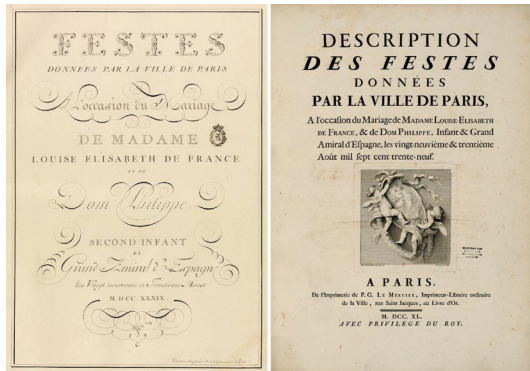


Fig. 10 - On the left, 1739, *Description des festes données par la ville de Paris, A l'occasion du Mariage de Madame Louise-Elisabeth de France, & de Dom Philippe, Infant & Grand Amiral d'Espagne [...]* (Frontispiece), Source: Biblioteca Digital Hispánica - BNE; On the right, 1740, *Description des festes données par la ville de Paris [...]* (Frontispiece). Source: Bibliothèque nationale de France <gallica.bnf.fr/>

facade of the Louvre's western building, at the terraces (Fig. 11b, c). In front of these and the royal throne, along the banks of the Seine bordered by the *Pont Neuf* and *Pont Royal*, was a row of boxes covered with curtains, from which the nobles could watch the unfolding of events (Fig. 11d). At first glance, their attention was caught by the presence of boats variously decorated by wooden structures, to which were leaned both lanterns for night lighting and structures intended for the explosion of fireworks in the water (Fig. 11e). Nearing the throne and in the Seine River was the *Salon Octagonal* (salon of music), the element around which all the acts of the river show gravitated and which in this volume is illustrated in plan and elevation (geometric method of double orthogonal projection) (Fig. 11f). Servandoni supported the floating hall on two boats concealed by fake rocks superimposed on them. The interior of the octagonal hall was intended for music and featured a series of steps, arranged along the sides of the octagon and between the columns, on which one hundred and eighty musicians sat. Here a comparison of the 1739 and 1740 volumes (Fig. 15) shows that, in the 1739 volume, the salon

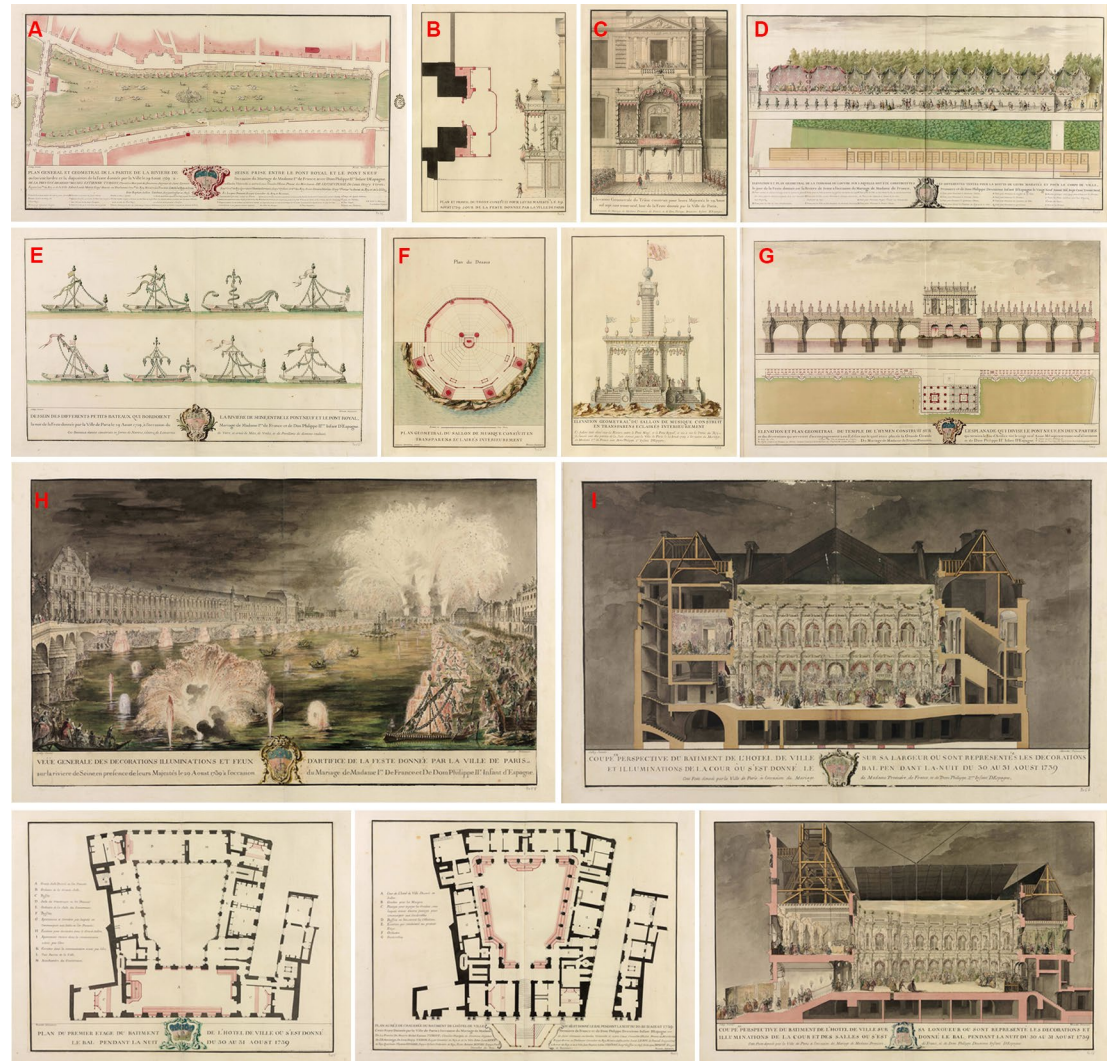


Fig. 11 - Historical images contained in the volume *Festes données par la ville de Paris, A l'occasion du Mariage de Madame Louise-Elisabeth de France [...]* (1739). A, general map of the urban place designated for the ephemeral events; B-C, King's Throne; D, boxes on the banks of the Seine; E, boats; F, octagonal salon; G, Temple of the God Hymen; H, perspective view of the festivities; I, plans and perspective exploded views of the Hotel de Ville. Source: Bibliothèque nationale de France <gallica.bnf.fr/>

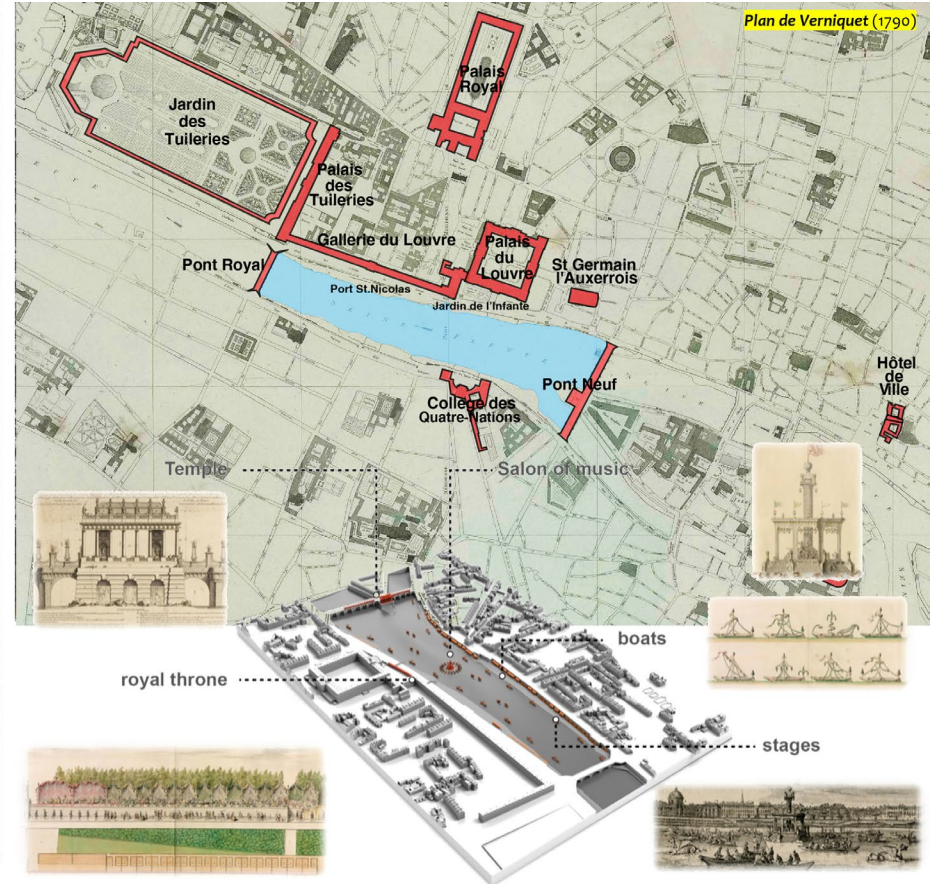
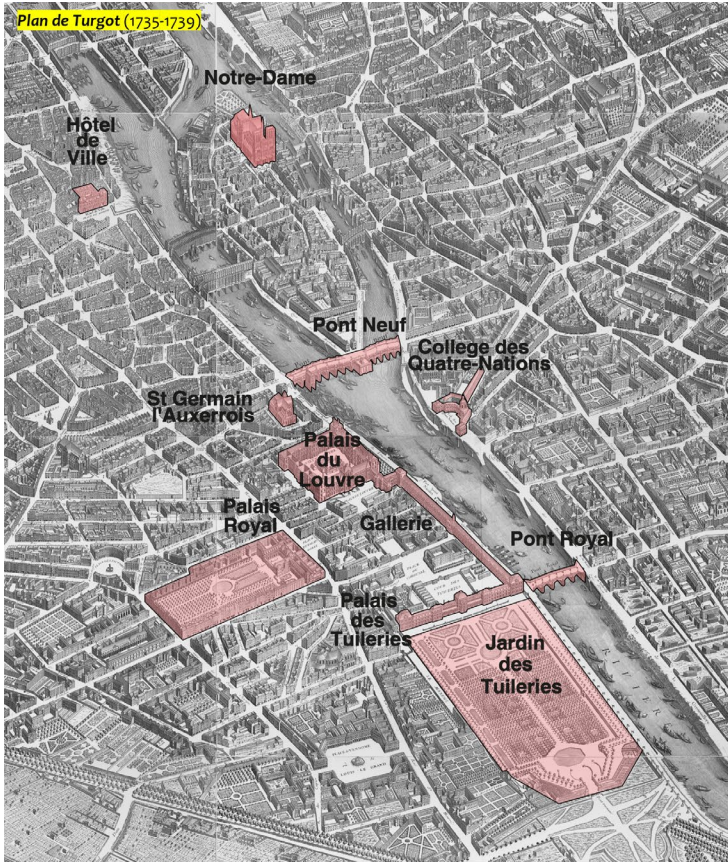
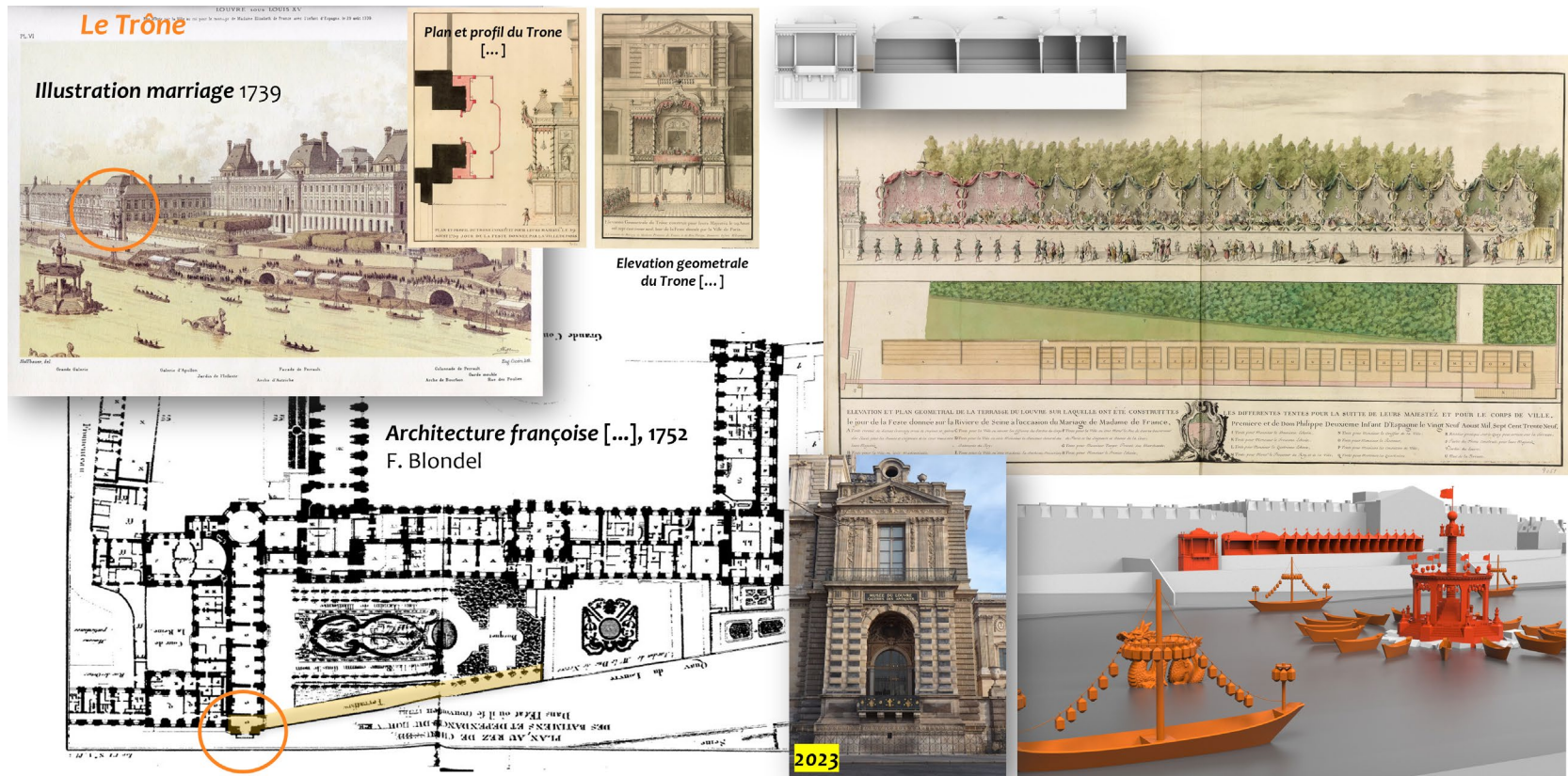


Fig. 12 - On top, Recognition of the places of the celebrations on *Plan de Turgot* (1739) and *Plan de Verniquet* (1790) (scientific coordination by Vincenzo Cirillo and Ornella Zerlenga; drawings by Carlo di Rienzo; graphic composition by Vincenzo Cirillo).

Fig. 13 - On the left, Nicolas Jean-Baptiste Raguenet, XVIII century, *A View of Paris from the Pont Neuf*; Nicolas Jean-Baptiste Raguenet, 1775, *Pont-Neuf et le Collège des Quatre-Nations*.



is represented by Blondel in two different engravings, one devoted to depicting the floor plan (divided into two parts to represent plan sections at different elevations) and an elevation. In opposition, the music hall is entirely represented within a single engraving in the Paris volume of 1740. Here the image of the ephemeral heritage becomes smart in the synthesis of representation even if it loses the dimension of color. Moreover, the Paris version of 1740 also leaves room for more narrative representations configured according to the geometric method of perspective representation. Another feature of this solemn celebratory appa-

ratus was the Temple dedicated to the God Hymen (Fig. 16), built on the widening of the *Pont Neuf* where the Equestrian Statue of Henry IV stood and represented in the volume by means of a single image containing plan and elevation (Fig. 11g). From reading the text and analyzing the floor plan (which presents two views, downward and upward), it can be deduced that the temple is an open building with a rectangular plan, bordered by a peristyle consisting of 32 columns of Doric order (4x8), whose diameter measures four and a half feet and height, thirty-two feet. The columns of the Temple support a ceiling characterized by a regu-

Fig. 14 - Recognition of the places, analysis and 3D reconstruction of the royal throne structure (scientific coordination by Vincenzo Cirillo and Ornella Zerlenga; drawings by Carlo di Rienzo; graphic composition by Vincenzo Cirillo).

Sallon de Musique

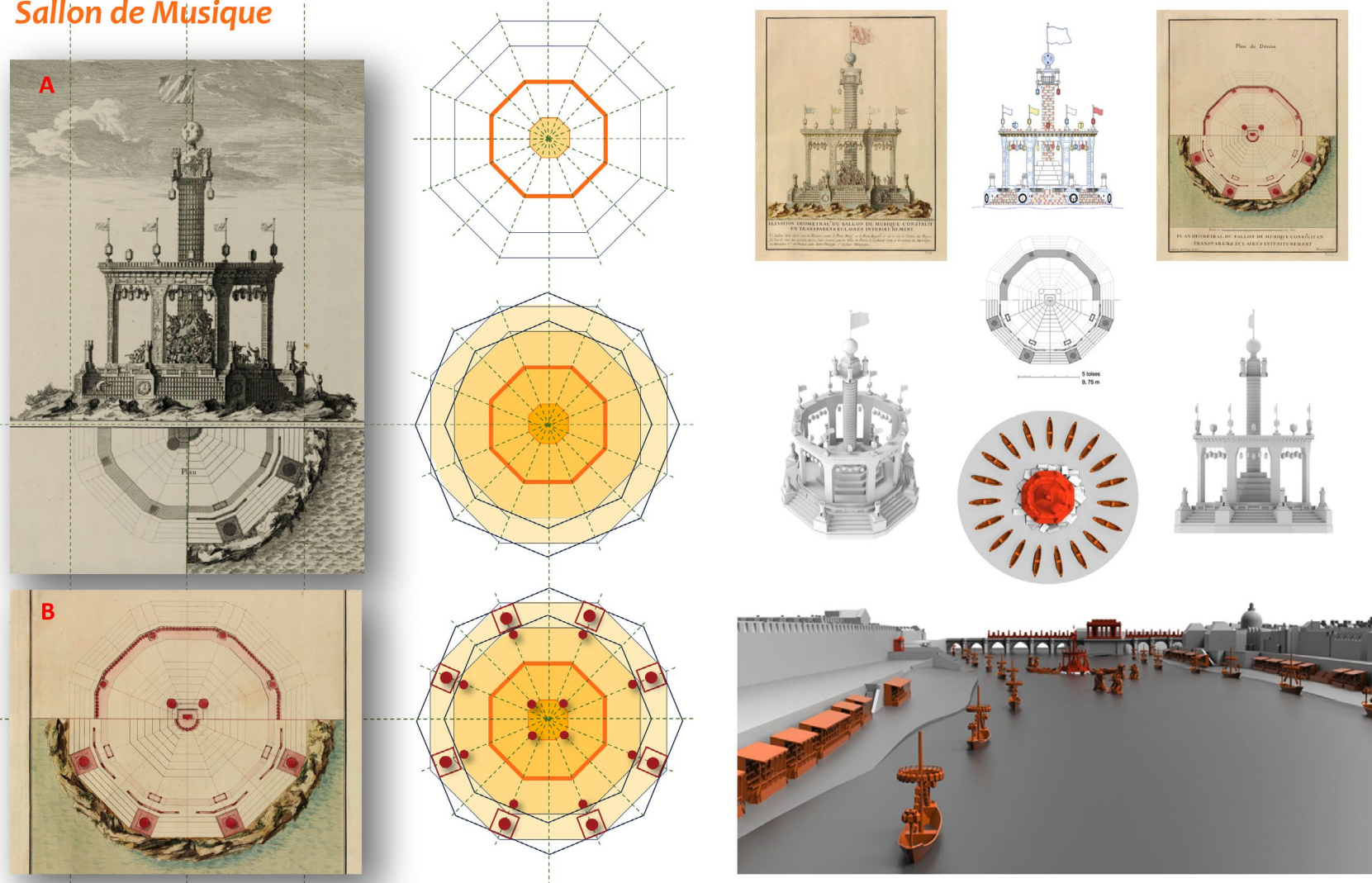
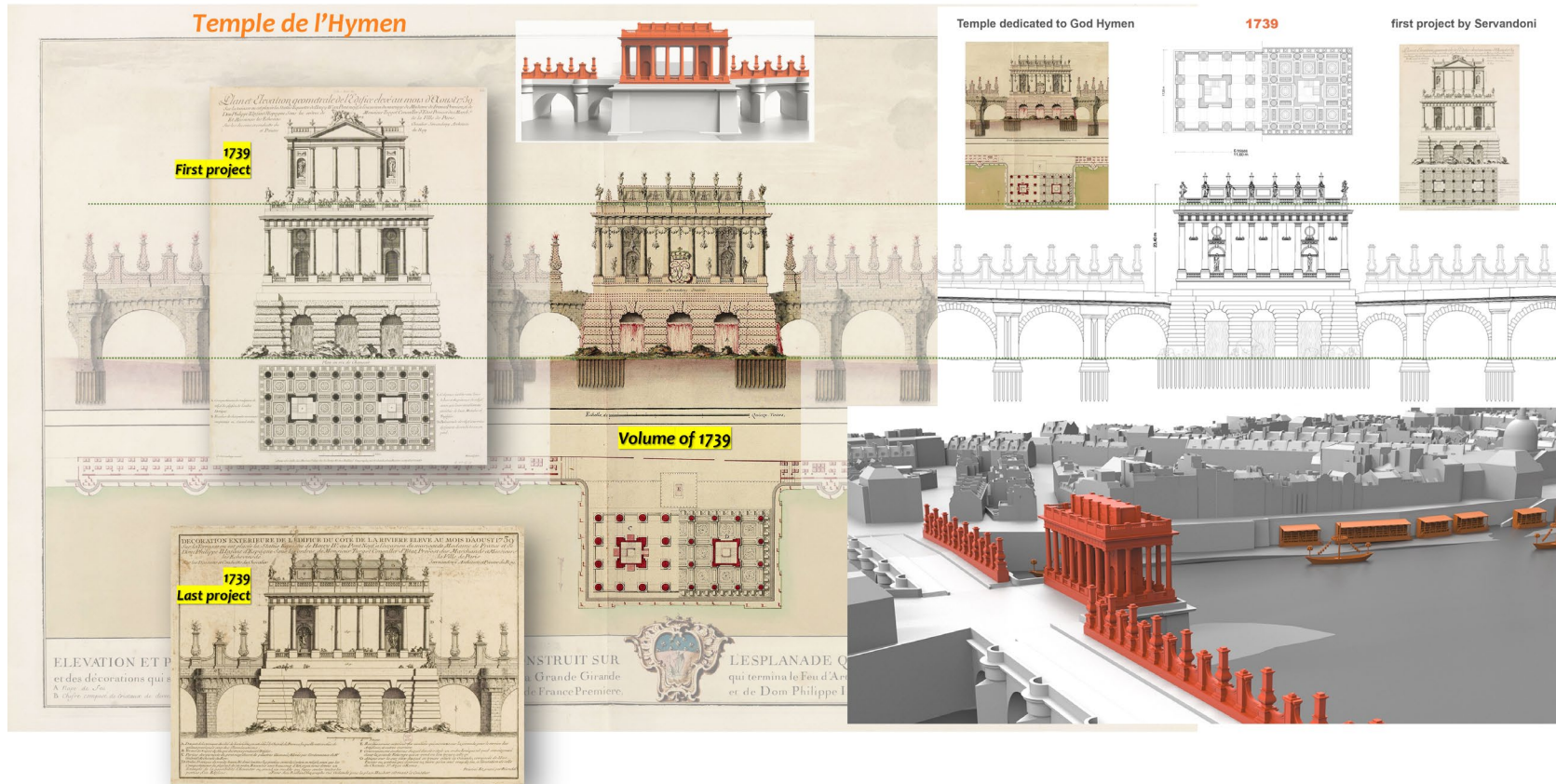


Fig. 15 - A, 1740, *Elevation geometrale du Sallon de Musique construit en transparens e clairés intérieurement* [...] Executé sur less dessein du Chevalier Servandony, Dessine etgravé par J. F. Blondel; B, 1739, *Plan general du Sallon de Musique construit en transparens e clairés intérieurement* [...] Chevaliev Servandony Invenit Blondel delineavit. On the right: recognition of the places, analysis and 3D reconstruction of the Salon de Musique (octagonal) (scientific coordination by Vincenzo Cirillo and Ornella Zerlenga; drawings by Carlo di Rienzo; graphic composition by Vincenzo Cirillo).



lar compartment of square boxes, which contain large, sculpted roses, cut by beds adorned with arabesque in the ancient style to form the underside of the lintel soffits. Here the analysis of the temple was not only limited to that depicted within the 1740 volume but also to other iconographic documents by Servandoni, such as an early design of his that included an additional level and was probably not realized due to lack of time. In addition, the final design, which is the same as that of the 1739 volume, but without the inclusion of the wooden poles that,

stacked in the riverbed, would have supported the temporary wooden surface that was to cover the base with three round arches at the impost points of which waterfalls were planned to gush out the same water drawn from the river by means of specific technological devices. It is interesting to note then that in the 1740 version the representation of the temple appears to mirror that of 1739, the reason for which certainly lies in the act of copying the engraving from the original volume and reversing it at the time it was to be placed on the drawing sheet. On the day of the fireworks explosion (August 29),

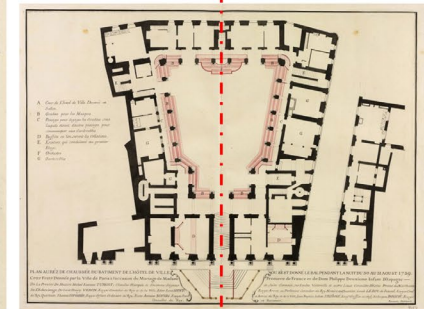
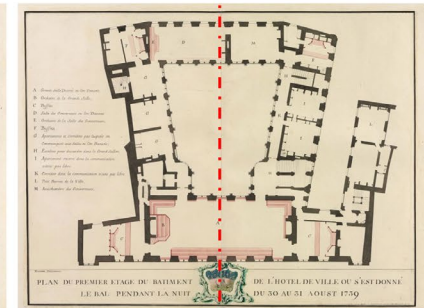
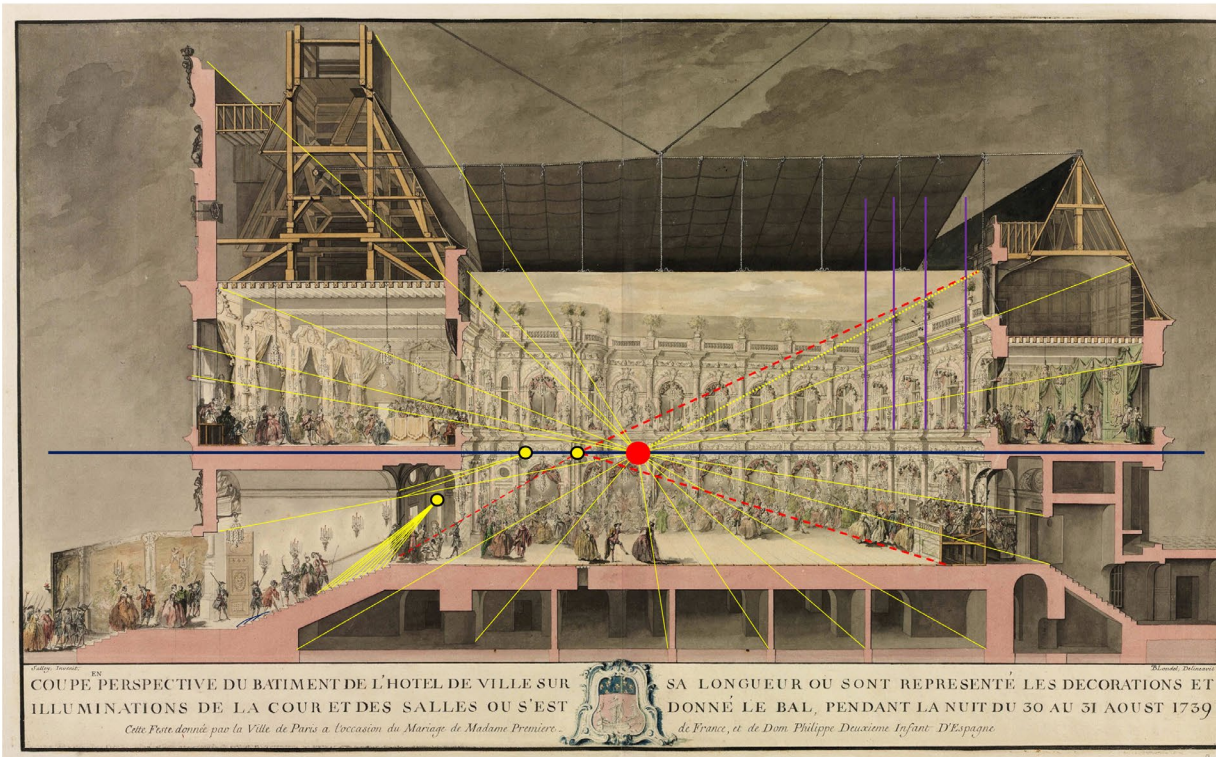
Fig. 16 - Recognition of the places, analysis of the images in the volumes of 1739 and 1740, analysis of the different projects by Servandoni, and 3D reconstruction of the Tempe dedicated to God Hymen (scientific coordination by Vincenzo Cirillo and Ornella Zerlenga; drawings by Carlo di Rienzo; graphic composition by Vincenzo Cirillo).

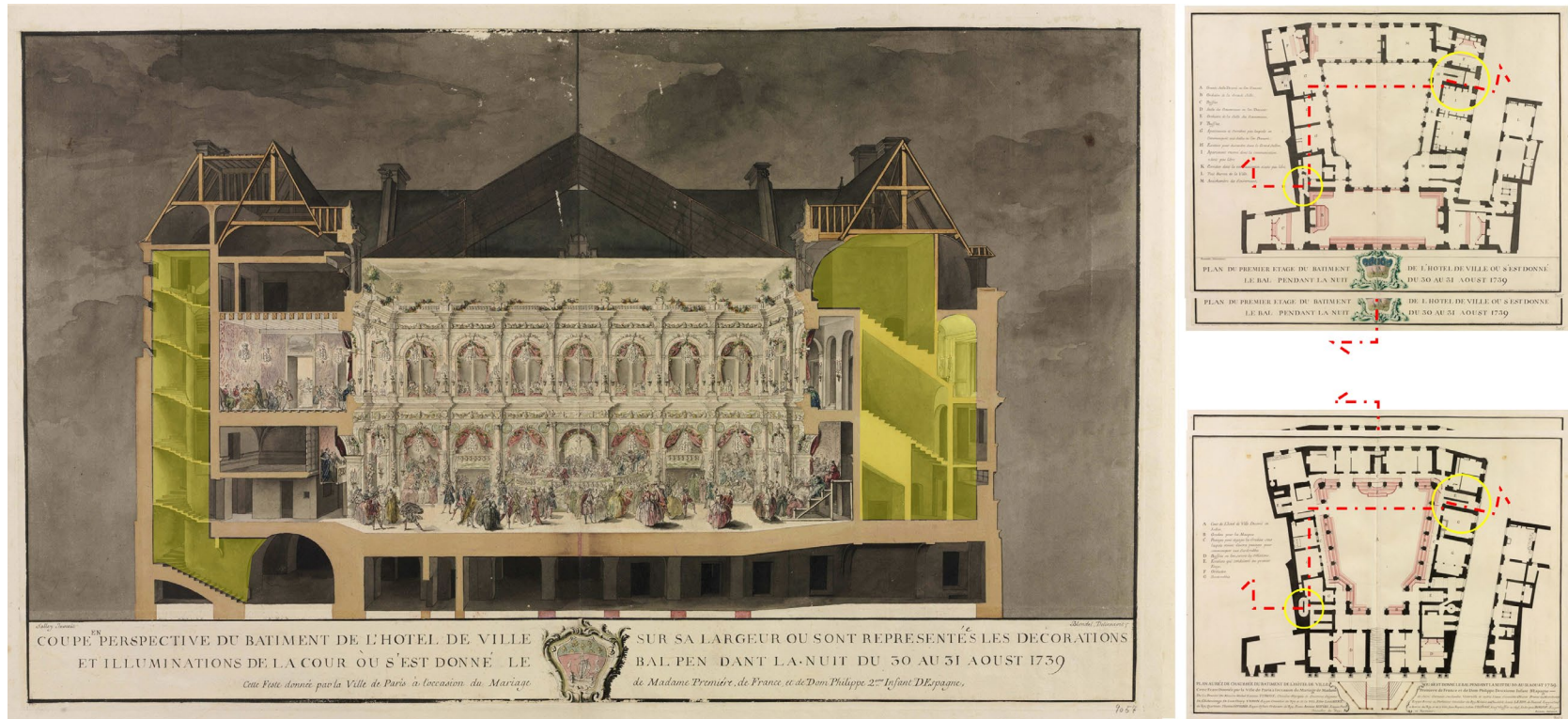
Drawing, design, and new images of the ephemeral architecture in Paris in 1739



Fig. 17 - A, 1740, *Veue generale des decorations illuminations et feux d'artifice [...]*; B, Unknown, *A View of the Fire-Workes and Illuminations at his Grace the Duke of Richmond's at White-Hall and on the River Thames, on Monday 15 May, 1749*. Source: British Museum Digital Collection.

Fig. 18 - 1740, *Coupe de perspective du batiment de l'Hotel de Ville [...]* and perspective geometric analysis by Vincenzo Cirillo.





the entire perimeter of the Temple building was adorned with festoons of golden laurels and chandeliers placed on all the columns. During the celebrations, the main parts of the Temple's architecture, as well as the partitions of the massif that served as the base, were highlighted by lights while pyramids of lanterns interspersed with statues were placed on the upper balustrade, crowning the entire building; in addition, chandeliers of eighty lights each were lit between the Temple's columns. At the same time, the pedestals that bordered the parapet of the *Pont Neuf* were transformed into dazzling and colorful pyramids that, loaded with lanterns, terminated in large vases whose flames were distinguished by their singular size. As distinguishable in the

perspective view of the "decorations, illuminations and fireworks" (Fig. 11h), along with all the salient architectural elements of the celebration, it is possible to find that from the short sides of the Temple departed the fireworks while at the central point of the Temple (which coincides with the perspective vanishing point) a large wooden pinwheel was arranged to support the fires. Using a viewpoint placed high up and off-center, the perspective representation allows for the detailing of the layout of the festivity and gives greater dynamism to the image (Fig. 17a).

Various types of fireworks such as pinwheels, water fires, and waterfalls were planned for the occasion, echoing the taste of festivities that, in addition to the Italian cities of Rome, Naples,

Fig. 19 - A, 1740, *Coupe de perspective du bâtiment de l'Hotel de Ville* [...] and analysis of the cross-section adopted for the image restitution by Vincenzo Cirillo.

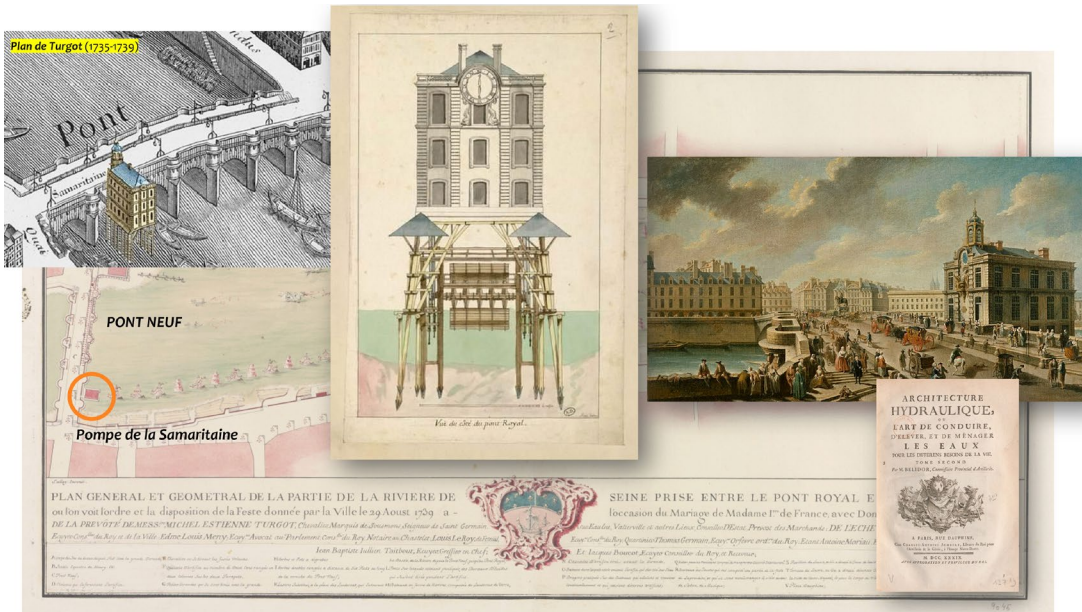


Fig. 20 - Nicolas Jean-Baptiste Raguenet, 1750-75, *Le Pont-Neuf et la Pompe de la Samaritaine* (Musée Carnavalet) and recognition on the image of the 1739 volume; Charles-Antoine Jombert (1712-1784), *Architecture Hydraulique*, 1739 (Frontespiece).

Palermo, and Parma, are also used in other European examples such as London and are sometimes even summarized in their peculiarities of form and movement as in an image from 1749 (Fig. 17b) (Zerlenga et al. 2021).

Finally, the volume concludes with a representation of the rooms of the *Hotel de Ville*, the designated location for banquets and royal balls at the conclusion of the cycle of festivities (Figure 11i). The images, made in double orthogonal projection for the representation of the floor plans and with perspective cutaways for both longitudinal and cross elevations, present a strongly narrative character and illustrate the route of the guests to the party, from the entrance on the street to the interior rooms.

Here it is interesting to note the perspective construction presents some geometric exceptions found, for example, in the vanishing lines of steps on the left side (which deliberately converge in a

vanishing point different from the central one) and how, the depths of the rightmost part of the court of the *Hotel de Ville* (covered by a marquee for shelter from rain) also converge in another vanishing point, in the engraver's desire to widen and lengthen the perceived space (Fig. 18).

In the cross-section, on the other hand, it can be seen how the more static representation of the center of the *Hotel de Ville's* courtyard has had stairwells added to the right and left (by means of a bayonet section operation) to provide more dynamism to the representation as well as to always dictate the paths of access to the rooms (Fig. 19).

CONCLUSIONS AND FUTURE DEVELOPMENTS

Through reading the text and examination of what and how represented in the images contained in the 1739 volume, new images were returned

aimed at offering a renewed visualization of the ephemeral event. This operation arose firstly from the analysis of the aforementioned images and, subsequently, from the conversion into meters of the dimensions indicated in Toises.

The aim was to carry out both a comparison with the detailed eighteenth-century description and an urban-scale modeling to visualize the architectural elements and places of the celebrations where the historical iconographies present a lexicon too technical for a non-specialist audience and in the opinion shared by the authors that the drawing discipline with respect to the reading and use of images of Cultural-historical Heritage, enables both the understanding of existing images and the education for understanding through the elaboration of new images in order to better govern the narrative (visualization) of an intangible heritage (Bruner, 2003), restoring a renewed and more inclusive fruition through the skillful use of constructing visual images (Ippoliti, 2017).

Reading the history of the event through the eloquence of iconographic sources has thus meant unraveling the content of thought, cultural and scientific, underlying the Paris ephemeral architecture project in order to communicate it according to different purposes to users other than specialists.

In conclusion, the present research [1] undertakes to delve into the technological aspects of the coeval *Pompe de la Samaritaine*, a building on the *Pont Neuf* (now disappeared), the study of whose wooden pylons housed in the river, will provide an understanding of how the ephemeral structures exhibited above were built. For such aspects, one of the most relevant references in which the *Pompe de la Samaritaine* is referred to as a best practise will be the treatise volume *l'Architecture Hydraulique* by Charles-Antoine Jombert (1712-1784) of 1739 (Fig. 20).

NOTES

[1] Chapter Introduction and research methodology was written by Ornella Zerlenga. Chapters Ephemeral architecture. A 'diminished' and 'increased' heritage of images; Ephemeral architecture as a vehicle for linguistic and shape experimentation and Conclusions and future developments were written by Vincenzo Cirillo. Chapter Drawing, design, and new images of the 1739 celebration in Paris was written by Carlo di Rienzo.

REFERENCES

Bino, C. (2014). Immagine e visione performativa nel Medioevo. *Dramaturgia*, 11(1), 335-346.

Blondel, J.F. (1752). *L'architecture française*. Paris: Rue Dauphine, vol. 2.

Bruner, J. S. (2003). *La mente a più dimensioni*. Bari: Laterza 1993.

Charon, A. (2010). Les livres de fête en France (XVII-XVIII siècles) In: *Chroniques de l'éphémère : Le livre de fête dans la collection Jacques Doucet*. Paris: Publications de l'Institut national d'histoire de l'art. DOI: <https://doi.org/10.4000/books.inha.2818>.

Cirillo, V. (2021). *Feste settecentesche a Napoli. Disegni e progetti per l'architettura effimera l'Eighteenth-century celebrations in Naples. Drawings and designs for ephemeral architecture*. Napoli: La scuola di Pitagora.

Cowart, G. (2008). *The Triumph of Pleasure: Louis XIV and the Politics of Spectacle*. Chicago: The University of Chicago Press.

de Neufforge, J.F. (1757). *Recueil élémentaire d'Architecture*. Paris: l'auteur.

De Rosa, A., Sgrosso, A., Giordano, A. (2001). *La geometria nell'immagine. Storia dei metodi di rappresentazione*. Vol. 2: Rinascimento e Barocco. Torino: UTET.

Farroni, L., Faienza, M., Mancini, M.F. (2022). New perspectives for the drawings of the Italian architecture archives: reflections and experiments. In: *disegno*, n. 10, pp. 39-50, Jun. 2022.

Frazier, A. (1747). *Traité des feux d'artifice pour le spectacle. Nouvelle édition. Toute changée & con-*

sidérablement augmentée. Paris: Quay Augustins.

Gigli, E. (1997). Piazza di Spagna: apparati tra Francia e Spagna. In: Fagiolo dell'Arco, Maurizio (Eds.). *La festa a Roma dal Rinascimento al 1870*. Torino: Allemandi.

Giordano, A., Russo, M., Spallone, R. (Eds.). (2021). *Representation Challenges. Augmented Reality and Artificial Intelligence in Cultural Heritage and Innovative Design Domain*. Milano: FrancoAngeli.

Ippoliti, E. (2017). Renewing Glances. Design and its Practice: Representing, Communicating, Narrating. Rinnovare lo sguardo. Il disegno e le sue pratiche: rappresentare, comunicare, narrare. In: *disegno*, 1/2017, pp. 143-154.

Jombert, C.A. (1739). *Architecture Hydraulique*. Paris: Rue Dauphine.

Lardellier, P. (2003). *Les miroirs du paon. Rites et rhétoriques politiques dans la France de l'Ancien Régime*. Paris: Honoré Champion.

Luigini, A. et al. (2017). (Eds.). *Proceedings, Volume 1, IMMAGINI? Conference 2017*. Basel: MDPI.

Mancini, F. (1979-1980). Il 'trucco' urbano: apparati e scenografie tra finzione e realtà. In: Spinosa N. (Ed.). *Civiltà del '700 a Napoli 1734-1799*. Firenze: Centro Di.

Palestini, C. (2020). Ephemeral Graphics. Illusionism and Representation in Baroque Machines. In Cicalò E. (Ed.), *Proceedings of the 2nd International and Interdisciplinary Conference on Image and Imagination IMG 2019*, pp. 715-725. Cham: Springer.

Palestini, C. (2022). Research and Archives of Architecture. The Roles and Disseminations of Drawing. In: *disegno*, 10, pp. 7-17, Jun. 2022.

Papagna, E. (2015). *Feste di piazza e cerimonie di palazzo nella Napoli borbonica: le celebrazioni per la nascita della real prole. Mélanges de l'École française de Rome - Italie et Méditerranée modernes et contemporaines*. <<http://journals.openedition.org/mefrim/2194>>.

Pascolini, A. (2006). Immagini e comunicazione scientifica: dalla descrizione all'evocazione. In Pitrelli, & N., Sturloni, G. (Eds.), *Governare la scienza nella società del rischio. Atti del 4. convegno nazionale sulla comunicazione della scienza*, pp. 137-145. Monza: Polimetrica, International scientific publisher.

Rak, M. (1987). A dismisura d'uomo. Feste e spettacolo del barocco napoletano. In: Fagiolo M. (Ed.), *Gian Lorenzo Bernini e le arti visive*, pp. 259-363. Roma: Istituto della Enciclopedia Italiana.

Zerlenga, O. (2016). Disegnare la città in "veduta". Il manoscritto illustrato di Konrad Grünenberg. In Capano F., Pascariello M.L., Visoni M. (Eds.). *Delli Aspetti De Paesi. Vecchi e nuovi media per l'immagine del paesaggio. Rappresentazione, memoria, conservazione*. Napoli: Edizioni Cirice, vol. 2, pp. 87-96.

Zerlenga, O., laderosa, R., Cirillo, V. (2021). Once upon a time there were fireworks. The new nocturnal drones light shows. *img journal*, 4, 402-425.

(1739). *Festes données par la ville de Paris A L'occasion du Mariage de Madame Louise Elisabeth de France et de Dom Philippe Second Infant et Grand Amiral d'Espagne les Vingt neuvieme et Trentieme Aoust MDCCXXXIX*.

(1740). *Description des festes données par la ville de Paris A L'occasion du Mariage de Madame Louise Elisabeth de France et de Dom*

Philippe Second Infant et Grand Amiral d'Espagne.

(1745). *Fêtes publiques données par la Ville de Paris à l'occasion du mariage de Monseigneur le Dauphin, les 23 et 26 février M.DCCC*. XLV.