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Edoardo Scarpanti

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Ilari Anderlini, Art Director
www.graphiceye.it

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Summary

A special poetic of iron and stone: reflections about the design of the Montemartini Museum in Rome

Giorgio Verdiani
Florence University

Pelin Arslan
Ozyegin University

Abstract
Architects are used to being in relationships with museums and are accustomed to planning them and learning how to organise their specific structures. Inspiration can be found in museums, and sometimes the ideas of other architects can be emulated. The rules and solutions usually adopted for museums are based on well-established procedures, with the design contribution guiding and organising the theoretical, pedagogical and scenographic aspects of the space. An architecture is created which is specific and pervasive, and ideas should be balanced between the meaning of this architecture and the valourisation of what we want to bring onto the scene. In this paper, the resonance and vision of the Montemartini Museum in Rome will be analysed as a reference to interpret how the special poetry of this building is generated and how certain parallels can be both a choice and an opportunity in terms of the design of future museums.

Keywords: Centrale Montemartini, museography, industrial architecture, industrial archaeology, adaptive design, re-adaptive use.

Introduction

Real museums are places where time is transformed into space
(Orhan Pamuk, The Museum of Innocence)

Historical cities are places of great stratigraphy in the urban tissue: their evolution may occur with overlaying levels (the

new integrating and covering the old), juxtaposition (the new growing alongside the old), gemmation, or following saturation of the unstructured spaces between older and newer settlements, this urban theory about the town development brings as consequence that when the town or city is ancient, these phenomena may all appear together, mixing ages in small amounts of space.[1]

> In a country where up to fifty years ago baroque or neoclassical buildings were […] considered "minor", the affirmation of industrial archaeology seems a miracle. Even more in Rome, so rich in monuments from all the ages, where the old Montemartini electric power plant, built in 1911, has been scrupulously restored. On the first floor of the beautiful Art Nouveau structure, it is possible to admire two "mammoth" diesel engines […] identical to those installed on the Rex, […]. In these "modern times" style spaces, some of the major sculptures from the Capitoline Museums (Palazzo dei Conservatori, Museo Nuovo, Braccio Nuovo) seem fully at ease. Classical masterpieces […] dialogue with pistons, manometers, tubes and cranks, in a harmonious contrast of great suggestion. (Bertoletti, Cima and Talamo 2006)

Bertoletti, Cima and Talamo, in 2006, write about three great aspects of the Montemartini Facility Museum: the courage to move towards reintegrating architecture from the industrial past and assigning it new functions; the will to face and solve the challenge of an extreme contrast between ancient artworks and heavy industrial remains; the potential of a doubly evocative space, recalling both the ancient Roman Age and "modern" industrial times. With this architectural work, which has partially been achieved by chance, a rare series of fortunate events led to the production of a suggestive

1. This urban theory about the town development is well expressed in Benevolo 1973 and in Aymonino 1993.

and fascinating location, rich in artworks and artefacts from very different times, but capable of driving a unique perception of archaeological findings and industrial elements.

History of the facility

The Montemartini thermoelectric centre was inaugurated on June 30th 1912, while Ernesto Nathan was Major of the city, and was the first public system to produce electricity for the Azienda Elettrica Municipale (Municipal Electricity Company), now named ACEA (Battilossi 1997). They named it after Giovanni Montemartini (1867-1913), an Italian economist and theorist,[2] who was a strong supporter of the movement for the municipalisation of public service companies (Ariganello 1988). The construction of the plant had its courtyard in a lot of about 20,000 square metres between *Via Ostiense* and the Tiber's bend. The realisation was entrusted to a construction company from Milan, directed by the engineer H. Bollinger, which was specialised in reinforced concrete structures. The main asset of the settlement was classic: a front building, which was the "public face" of the architecture, with a high cure and level of detail. Then was the system of halls and pavilions, each one hosting specific functions and populating the lot of essential and well-defined industrial architectures.[3] The entrance

2. About the profile of Giovanni Montemartini: Enciclopedia Treccani Online at http://www.treccani.it/enciclopedia/giovanni-montemartini/ (Italian version).

3. Over time the lot was populated by various structures, minor buildings and temporary elements, but the updates to the equipment and the recent restoration have preserved and valorised the main building, giving it a proper relevance.

building was, in a certain way, a mediator between the city and the industrial area (Figure 1), standing between the public space and the reserved area. However, the machines were just behind its walls, filtered by the large windows, but impendent with their mass, lighting and sounds. This representative, and at the same time practical, architecture was designed by Corrado Puccioni, M. Carocci and M. Degli Abati (Fiore 2006), using a combination of eclecticism, mostly in the neo-classic and/or neo-renaissance style with some elements from *Art Nouveau* and some formal references (such as colour choices aligned to preferences from Piedmont) to the "new" political asset of the Italian Unity. The need to have a public, clean, pleasant and trustable aspect was met by balancing a certain monumental proportion with the accuracy of the details. The industry was the muse: figures from an abstract and modern mythology started to emerge from decorations, floating on columns, friezes and panels, but the continuity with the historical past was still in place as this "monument" was giving access to the world of technology.

Out of this complex network of quotes and formal references, it is likely that the monumental aspect of the building was also due to a desire to show the pride of the municipality in being able to offer services to its citizens. It also represents a political and social choice: the one to celebrate the victory in the 1909 *referendum* on the municipalisation of all services (such as the production of electricity). It is still possible to notice how functional needs and aesthetic values are combined in both the external and internal structures; the details of the entrance building are clearly eclectic and well

referred to as incorporating elements of *Art Nouveau*.[4] The relationship between arts and technology is seen as a result of some secondary elements: the metal bases of the external lighting system present a series of female figures dancing with electrical flames (Figure 2), symbolically represented by small arrows between their hairs, which is a sign of style and elegance[5] (Fiore 2006). Inside, the building is divided into two levels. The entrance atrium, with common proportions, gives access to the large upper machine room. In it, the long side walls are punctuated by pillars the bases of the trusses that support the coverage. The latter is interrupted along the main axis to reach a higher altitude and form a skylight with ribbon windows. The roof terrace is formed by a double slab, which allows for better thermal insulation. The work spaces are connected by a two-metres high strip, which is painted in warm colours to resemble some sort of stone, defined in most of the literature about this architecture as "lapis ligneus" (wood-like stone). This culminates in a narrow, dark frieze with an essential finish that runs along the entire perimeter, former surmounted by a series of panels with festoons. The interesting architectural design tends to pass in the background in front of the massive presence of the machines along with their connections and accessories made

4. It is worth to remember that this architectural language, in Italy took the name of "Liberty", about this particularity see: Enciclopedia Treccani Online at http://www.treccani.it/enciclopedia/liberty/ (Italian version).
5. A work of art realized by Duilio Cambellotti and placed back in the public spaces of the plant during the restoration. About this author see: Dizionario Bibliografico Treccani Online (Italian version) at http://www.treccani.it/enciclopedia/duilio-cambellotti_%28Dizionario-Biografico%29/

of staircases, lamps, balustrades, columns, cranks and levers. Most of these elements have an accurate design that almost fades the massive bodies of the machines into the open space of the main hall.

On 30th June 1912, the facility was opened and began its energy production, although it was still far from being completed, having various service buildings still under construction. At that time the system of energy production was based on a combination of diesel and steam engines; these machines were realised by an industrialist in the northern part of Italy: "Franco Tosi" from Legnano. In 1933, Benito Mussolini inaugurated the new two gigantic 7,500 Hp diesel engines, a new realisation by "Franco Tosi". They were both 23 meters in length and were located inside the engine room (Istituto Luce 1933). A new mosaic floor drawn in multi-coloured frames was realised around these machines, which is still helpful today to underline the original structure. Throughout the fascist period, the power plant was further strengthened with the aim of supporting the energy consumption expected for the great Universal Exposition to be held in 1942. However, this event never took place because of the war. During the bombings that struck Rome between 1944-45, the buildings suffered some minor damage.

The "Centrale Montemartini" took care of the energy supply for the entire city during the period of the Liberation (1943-1945). It was further strengthened after the end of the Second World War, until, in 1963, the production of electricity was interrupted due to the total obsolescence of the plant, for which it was no longer convenient to invest further resources. From this date any industrial activities were inter-

rupted and some of the machines were removed, thus even if in state of abandon, a large part of the structure remained in place (Santacroce, Pirone and Graziani 2018).

From the industrial building to the present museum

The recovery of the former *Centrale Montemartini* took place after a period of about 20 years in which the plant remained abandoned, until the ACEA company decided to recover the structure with the aim of creating a multipurpose building (Cardani 1991).

Based on the design of the engineer Paolo Nervi, the project involved both the machine room and the new boiler room. The work, which started in 1989, was undertaken with respect for the original forms of the main halls. Care was taken to recover parts of the original decorations and machinery, including the large steam turbine from 1917. The whole intervention took eight years to be completed. At the end of this courtyard, the Museum of the "Centrale Montemartini" was ready to be assigned new functions, which at the beginning of the nineties were seen as quite generic and defined simply as "cultural" (Cardani 1991). However, they were fully compliant with the possibility of making the "Montemartini" a part of the exhibition centre of the Capitoline Museums in Rome.

According to some past reflections on the interventions in the nineties, it is difficult to trace a univocal criterion in the result of this restoration, while no pre-established principles seem to fit the intervention choices. It is very likely that the recovery was planned without a preliminary detailed historical analysis as the foundation of the project. At the same

time, there was a common interest from the designers in retaining as much as possible of the original plant which was the starting point of this company's history (Fiore 2006).
In 1997, the Capitoline Museums started a significant restructuring and the courtyard was extended across most of the Capitoline complex. It was aimed to create space in the Museum of the "Palazzo dei Conservatori", the "Museo Nuovo" and the "Braccio Nuovo". To keep the works of art accessible to the public, an exhibition was created in the restructured rooms of the former electricity plant (Meier 2002). A hundred sculptures were temporarily transferred inside the "Montemartini" and set up in the exhibition "Le Macchine e gli Dei" (the Machines and the Gods), presenting to the public, for the first time, a dialogue between classical and industrial archaeology (Cristofano and Palazzetti 2011). This was a noteworthy event, as these two "archaeological" topics rarely meet in such close relationship, despite sharing the same name. At the time of this first exhibition, access to the former industrial area was limited, with the possibility of entering the building restricted to guided groups of about thirty people.

> In an atmospheric game of contrasts, the old machinery for electricity production became the backdrop for masterpieces of ancient sculptures and precious artefacts found in the excavations of the late nineteenth century and until the 1930s. (Bertoletti, Cima and Talamo 2002)

The display reconstructs some of the lost monumental complexes and illustrates the development of the ancient city from the Republican Era (509-27 B.C.) to the late Imperial Age (IIIrd-IVth centuries A.D.).

The museum space was initially conceived as a temporary solution, with the prevision to end this kind of activity on the return of the sculptures to their previous museum. However, at the end of the renovation works in 2005, the Montemartini Museum had been confirmed as the permanent space for the most recent collections of the Capitoline Museums. Currently, in the spaces of the "new" Montemartini, according to the Museum website: "the work of experimentation of new exhibition solutions continues, connected to the scientific research on the finds". In time, various events and secondary exhibitions have tried to bring innovative experiences to the public with varying success. Therefore, the particular suggestion of the place seems to operate a certain attraction on experimental forms, while the juxtaposition of works from the same context, even if it tries to restore a link between the elements presented in the museum and the ancient urban fabric, is often not that clear and demands a certain abstraction and knowledge from the visitor.

In its present configuration (Figure 3), the museum hosts findings from the excavations carried out mostly after, but also immediately prior to, the Unification of Italy (1861) in the second half of the XIXth century and up to the first half of the XXth century: in particular, excavations related to the ancient horti romani (the so-called Roman Gardens) and various domus and villas discovered over time beneath Rome's ever changing urban area. The exhibition system highlights the area where the findings were made and is divided into three main sections. The atrium should be considered as a fourth sector, but its position and organisation made it more of a "prologue" to the visit to the other two connected parts.

The first section is dedicated to Republican Rome. In the "Sala Colonne" (Columns Hall), the collection is developed in an attempt to present a clear and complete set of the main aspects from both religious and funeral celebrations and traditions, the enjoyment of private luxury and the art of portraiture; thus, even if connected and enriched by interesting industrial elements, it keeps a more traditional and static aspect through which the visitor can move between sculptures and parts of machines that interact with each other only partially.
The second sector is characterised by the presence of large machines and overwhelming industrial structures and exhibits items from the centre of Monumental Rome (area of the *Flaminio Circus*, Temple of *Apollo Sosiano*, *Campidoglio*, sacred area of *largo Argentina* and Pompeo's theatre). It is named the "Machines Room" (Figure 4) with the great, now "sleeping", diesel engines playing an important role in the perception of the room, which is enriched by a large number of well refined technical elements, such as the mosaic of the floor, showing evidence of the former working areas.
The third sector houses elements from the so-called *Horti* (Gardens), the imperial residences and the *domus* (*horti* of the Esquiline, *Horti Sallustiani*, *Horti Spei Veteris* in *Porta Maggiore* and mosaic of St. Bibiana), which are exhibited in the "Sala Caldaie" (Boilers Hall).
The design of the new elements created to host the sculptures, mosaics and various findings are optimised to follow the aspects of the industrial space. The entire museum consists of different rooms in terms of functions and previous use. Those rooms are defined by the different colours on their walls. While the main engine hall has a pale-yellow colour on

the walls, the other rooms have sky blue, green and partially ivory white (Figures 5, 6). The room where the large mosaic is displayed shines out (especially when directly entered by the sunlight) with shades of green. Since the elements, pieces and statues on exhibit come from different eras and have different functions, the use of colours, -especially when the building's industrial value is taken into account- might be found confusing and slightly detached from the purpose of pure and unsophisticated museum and exhibition principles (Schwarz 2015). To some extent, this condition could be said to reflect the words of Eilean Hooper-Greenhill about the common approach to museum collections:

> The construction of material things as "objects" of a particular character is not perceived as problematic. Things are what they are. There is little idea that material things can be understood in a multitude of different ways, that many meanings can be read from things, and that this meaning can be manipulated as required. (Hooper Greenhill 1992)

There are two main solutions used for the new exhibition elements: structures that support lighting and technical elements, division of the architectural space and creation of supports for descriptive panels and for the artwork itself; then there are structures recreating real "frames", or that are "completion elements", which allow the repositioning of fragments and unmounted architectural apparatus. These include the front of the Temple of Apollo Sosiano in the Engine Hall, from which parts were found near the Theatre of Marcellus. Built in 431 B.C., the temple was probably restored under the Augustus governance using copies of and/or original Greek sculptures from the fifth century B.C., depicting a battle between Greek and Amazonian men (Dyson and Trimble 2000).

The exhibition is generally characterised by the intertwining of images of both classical and industrial archaeology (Figure 7), alongside the power station machinery that acts as the backdrop to the sculptures or vice versa, and according to the observation points inside the hall or to where the eye first focuses on (Figure 8). If the Atrium creates a premise to these impressions, then it is the engine hall, which is the first large room and the core of the museum, with the strong presence of the two gigantic diesel engines, that imposes the perception of this contrast and unity between the symbols of a century that saw the advent both of most major technologies of the contemporary age and the artworks and artefacts from the Roman age. The collection consists largely of fragmented statues, artefacts and artwork damaged in accidents or through aging, recovered and brought into the epoch using the appropriate archaeological and restoration techniques. Some of them were transformed or altered even before getting lost:

> Sculpted images could also be effectively cancelled and transformed through recarving. Portraits of condemned emperors were routinely recut to represent victorious successors or esteemed predecessors. […] Marble portrait sculptures were expensive commissions and recutting […] is an efficient and cost-effective form of artistic recycling. Furthermore, sculptural reuse has ideological implications as a kind of visual cannibalism in which the likeness of a successful ruler displaces that of his defeated predecessor. (Varner 2004)

The museum itself is part of a larger redevelopment project in the *Ostiense Marconi* area, which involves its conversion into a cultural hub of the oldest industrialised area of the city of Rome (Emiliani and Geraci 1989). The area, at present, is suf-

fering isolation from the general urban tissue, which appears to be obvious for an industrial area developed in terms of logical paths and connections of the limited interaction with and necessary creation of "off-limits" sectors. The ongoing development project (in 2018) includes, in addition to the Montemartini power plant: the *Mattatoio* (Slaughterhouse),[6] the Gazometro (Gasometer),[7] port facilities,[8] the former *Mira Lanza*[9] (an industry for the production of various chemical, cleaning and fertilizer products) and the former General Markets.[10] The whole intervention has the opportunity to contribute to the recovery and enhancement of the general urban quality of the area. The main plan for restructuring the area includes the set-up of the University of "Roma Tre" (the third university in Rome) and the construction of the so-called "Città della Scienza" (City of Science), a plan intended with specific architectural intervention and, hopefully, with the reorganisation of the urban asset, giving the appropriate attention to the urban quality, which may produce an interesting recovery of this part of the city (Palazzo 2017).

6. About the "Mattatoio" it is useful to check the specific website at https://www.mattatoioroma.it/ (accessed August 2018).

7. About the "Gazometro" a quite complete set of references and images can be found at http://www.archidiap.com/opera/gazometro/ (Italian text only, accessed August 2018).

8. The port facilities were mostly used to dock and move by boats and barges products from and to the industrial area along the Tiber River.

9. About the "Mira Lanza" a quite complete set of references and images can be found at https://www.lostitaly.it/site/la-mira-lanza-di-roma/ (Italian text only, accessed August 2018).

10. About the General Market a quite complete set of references and images can be found at https://www.lostitaly.it/site/i-mercati-generali-di-via-ostiense-a-roma/ (Italian text only, accessed August 2018).

Unusual conditions

Industrial Culture is a term often narrowed down to the physical remains of former industrial sites and their preservation or re-utilisation, often as sites for cultural events, education or other purposes. This interpretation of Industrial Culture is best represented through the German expression *'Industriekultur'*, which focuses mostly on the tangible remains of industry, for example, buildings, infrastructures and landscapes. Across Europe, there are numerous experiences and interventions that have based their strategies on former industrial buildings and/or districts, which has led to them contributing to new fruitions and integration in the urban asset (Box 1997; Byrne 2002; Harfst et alii 2016). The characteristics of industrial architecture, space and element, can derive from materials, proportions, shapes and composition. Even smells, sounds and colours can contribute to creating the perception of an industrial environment, although certain aspects enter into common culture via movies and their powerful images: the pictures of numerous high chimneys and large machines in scenes from Charlie Chaplin's "Modern Times" (1936), or even earlier in Fritz Lang's "Metropolis" (1927), have become iconic and are something which people can watch and recall not only for single elements, but also in the sense of a place and of an age. In the context of deriving from industrial function, industrial conservation or the industrial value of buildings, the list of recently recovered buildings is extensive. There are two examples of this: one in Berlin, Germany, and the other in Paris, France, which can be selected as parallel cases regarding the Montemartini Museum. Both were transformed into museums, but they

are not similar to the Roman example. It is certain that they offer rather different experiences to their visitors, but specific analogies and certain differences make them useful in better understanding the particularities of the Montemartini. In both cases they are not strictly industrial facilities, but railway stations. As follows, some notes are provided on these examples in order to better define their contexts.

Hamburger Bahnhof in Berlin (Figure 9), as it can be foreseen from the kept name of the museum "Hamburger Bahnhof", was a railway station from the middle of the XIXth century on the line between Berlin and Hamburg. It was first opened in December 1846, but although the station has been renovated several times, it soon turned out to be unsubstantial for the increasing railway traffic. It was then closed in 1884. It was restructured as a museum of transportation and construction at the beginning of the XXth century. The building was designed in a neoclassical style by the architect Friedrich Neuhaus. During the Second World War, in 1943, the building sustained severe damage. As a result of the division of Germany, it was abandoned for decades. Its condition during that period has been described as follow: "located as it was in the no-man's land between East and West Berlin" (Szeemann 1988). Following its reconstruction and restoration by architect Josef Paul Kleihues, the Hamburger Bahnhof was reopened in 1996 as the Museum for Contemporary Art. The architecture of this station, with its neoclassical façade, accompanied by two towers, the grand industrial hall of the entrance area and the wings of the *cours d'honneur* flanking the garden of the inner courtyard, was made impressively attractive for visitors and local citizens.

Moreover, the station building still has a significant importance being the only German railway station remaining from that period (Schuster 2004).
For the Gare d'Orsay (Figure 10), Paris, the name of the original function has also been preserved. In fact, the museum is installed in a train station of the early XXth century, the Gare d'Orsay, which is a masterpiece of industrial architecture that was built on the occasion of the universal exhibition in Paris in 1900 according to a project from the architects Victor Laloux, Lucien Magne and Émile Bénard (Jenger 1987). However, it was dedicated to this use for only three decades, while, as also happened in the case of the Hamburger Bahnhof, it soon became unsuitable for the growing needs of the railroads (even if it was the very first electrified urban rail terminal). Saved from demolition by the French Government, plans were made for it to become a museum in 1977, which was then opened in 1986. Chief architect for the restoration and adaptation from station to museum was the Italian Gae Aulenti (Plum 2007). The museum is situated on the left bank of the Seine, almost opposite to the Louvre. What was a station, closed in the thirties, was transformed, during the eighties, into a museum that housed a rich collection of modern art from 1848 and onwards. This appears as an architecture of extreme beauty, rich in detail and with some interesting original pieces, such a gigantic clock in the art nouveau style. The setup of the exhibition is designed to keep the main pavilion as the central attraction, exploiting its length to position all the artwork and create a fascinating *promenade* through the exhibition, while a series of side rooms present any artwork which needs specific lighting or setup.

The analogies between these two interventions and the Montemartini Museum are far-reaching, thus a common logic is present in the three interventions: the restoration aimed to preserve the original building, emphasising some of its characteristics while removing the original scope (being a railway station or used to produce electricity), but also enhancing the scenographic aspect of the location's previous function and architecture. The three buildings, even if in different modes, assume the roles of strong backgrounds, robust presences of major entities, the spirit of industrial/technical pasts which have driven the choices in and reasons for the creation of these constructions. The three museums have a similar logic, as the main halls and area are cleaned and made completely visible to the visitors. There is a proper use of panels and new architectural structures in defining and organising each space and the designers inserted well recognisable elements, neutral but well characterised, which efficiently complete and support the needs of the exhibitions and visitors. The use of colours is a key consideration in these choices, as they are used to define areas and help to balance the new elements with the pre-existing parts. The artwork is always positioned accurately, if not sensationally, blending in or contrasting with the beauty or strength of the surrounding architecture and/or machinery. All their spaces are extremely interesting for photography work, allowing the continuous discovery of new perspectives.

As well as some common features being well recognisable, there are also some significant differences between these three museums. The large spaces of the Hamburger Bahn-

hof are used as containers for temporary exhibitions, offering an impressive and versatile volume to receive panels, artwork, statues and large provisional constructions. Almost all of the old technical apparatus has been removed and the structures, clearly shown, define the impressive architectural spaces. The temporary nature of the exhibition tends to enhance the permanence and the articulation of the architecture, which can host continuously different elements, offering an ever-changing perception of the museum. The relationship between exhibited elements and the surrounding architecture are not manifest as they are in the Montemartini Museum, or in the Gare D'Orsay, as the balance between architecture and artwork is more aseptic, modern and dynamic.

The beauty of the Gare D'Orsay owes a lot of its awesomeness to the wide, open and artistically detailed main pavilion of the former station. This space focalises the experience of the visit. The displayed elements are well balanced, appearing almost as if they are in a comfortable pose in front of the building. They look almost look as if they are visitors in the space, which is well organised into a rational and simple visiting route. The artwork exhibited in this museum is of a large volume (especially the statues) from the XIXth century and is well preserved and complete. In fact, the rules of contrasts between the artefacts and the architecture may seem similar to those seen in the Montemartini Museum, thus, it is important to note that the pieces in the Roman museum are findings: mutilated fragmented, and altered, which is a significant contrast to the well preserved, complete and perfectly exhibited masterpieces at the Gare D'Orsay.

A special poetic

For the common visitor, but to a significant extent also for the scholar, the influence of a place such as the Montemartini Museum is both powerful and fascinating. The consistent presence of large industrial remains and the old and new parts of the building coordinating the space and the presence of a rich catalogue of pieces and artwork of great beauty (Figure 11), enhance and stimulate certain poetical effects over visitors to the museum. It is quite clear how the ancient remains present themselves on two different levels. The first can be called "the vision", where the observer looks at the items, focuses on their shapes, observes the way they fill the space and starts interpreting them according to what it is possible to see directly. The observer wonders about the name of the subject in the statue and sees it framed in the industrial space, a presence that cannot be ignored, that somehow minacious, somehow with a pacific strength, grows all around and creates a new context. It may happen, however, that the visitor sees a valve, lever, or panel with a geometric pattern, or perhaps notices the massive metal or robust industrial design choices. Then the visitor's sight may meet the nearby marble and mosaics, noticing the gesture and recognising hands, feet and faces with their mind moving across time in a minimal amount of space. The "vision" moves elements from different ages, allowing their recognition and at the same time stimulating the mind in a continuous displacement across time.

The other level can be called "the resonance". The suggestions coming from the remains evoke specific perceptions, some of which are generic (the item is recognised for some

clear similarity to other items, animals or architectural space), while others are more personal, as they catch the attention of the observer and create an association to some mental images and create a parallel. Some of these effects can be transmitted to other observers and replied to, while others remain only as a personal perception. In both cases, the extreme richness of this event system creates a strong impression on people visiting this museum. There is maybe even a sort of echo between the ancient sculpted stones and the large, metallic machines. Furthermore, even if it may create some inaccurate interpretations or casual fascinations, it is a strong characteristic of this specific museum. Probably a stochastic but important value, intangible, but worth keeping and preserving. There is a condition of balance and contrast between the natural harmony of the organic shapes of stone bodies and the fluent, strong and repetitive mass of the old machines. What is presented to the visitors in some spaces, like the machines room, is not a traditional declination of poetry, nor something written with a phonetical attention, nor cacophonic, but a composition of different elements, all resulting from elevate human craftsmanship, stimulating the perception, creating an exhibition similar to a "valley of the echoes" where the comprehension of the observer is the main key in creating a different impression from the elements all around. This process seems to suggest a clear application of the words of J.M.G. Le Clézio:

> The function of a museum should be not to show us things, but to allow us to see ourselves through things, to measure ourselves in relation to the objects exhibited. (Le Clézio, 2011)

Conclusions

The statues exhibited in the former facility are inserted into a scenography, or it is possible to say that a special scenography has received a group of special actors. It is worth considering that these statues and architectural elements come from ruined buildings, some of which have been moved in the past from their original locations and then abandoned somewhere else. All the statues are clearly out of their contexts; the original home of these characters is gone forever and now they are in a new context that is clearly alien in time, shape and culture from their original one. There is no place for them to go back to, as the industrial environment assumes the role of some sort of spaceship, or time machine, serving as a location preserving their integrity and keeping them as they are, but with no chance of moving them far or near to their original location; they are separated from a distant past. There would be wrong to assume that any of the exhibited elements are in their rightful location, and there is no connection nor compliant factor to connect them to the robust metal industrial artwork (Figure 12). This complete abstraction creates a condition out of a classic contextualisation; all of them are out of place, but the strong contrast creates a sort of creative vortex between time and suggestions. The perspectives, opened, large and various, allow visitors to see the sculptures with often different, but always mechanical/industrial backgrounds. The space and exhibition at the Montemartini Museum is a collection of items from very different times. Looking at the massive presence of both the old machines and the former industrial space with the foreground of ancient artworks, it is difficult to describe the ar-

ticulated sensation coming from this unusual composition. However, in relation to this place, it seems possible to evoke the concepts regarding time from St. Augustine:

> Perhaps it might be said rightly that there are three times: a time present of things past; a time present of things present; and a time present of things future. For these three do coexist somehow in the soul, for otherwise I could not see them. The time present of things past is memory; the time present of things present is direct experience; the time present of things future is expectation. (St. Augustine, Book 11, Chapter 20, Heading 26)

In this museum, the perception of the items from different times is all turned into the past, but at two different distances. It moves the thoughts of the observer to a recent or distant past, where the recent one is too close to keep an illusion of modernity. The direct experience, on the other hand, happens on their overlapping and blending in the present, capturing suggestions from multiple references, both cultural and popular. The whole place solves its future in an apparent immobility; the statues have no place to come back, their world has disappeared, the machines have stopped forever, the whole ensemble seems to move to a non-future of immutable static moments and each moment is perceived as the following, thus it is fascinating and capable of opening multiple series of views to different distant times.

The lesson that the Montemartini Museum seems to offer is articulated in more than one scenario. In a positive sense, the reuse of industrial heritage is well-managed and valourised. The strong game of contrasts seems to create a fascinating phenomenon, which is at risk of being repetitive, putting in evidence a lack of connection between the building and what is being

exhibited, and defining a possible risk in one of the strongest aspects of this place: the contrast and the mixed time between industrial and Roman findings. For this museum, time now seems like a robust enemy: the excellent result of the first exhibition, of the "Machines and the Gods" event, appears quite distant in the past and that concept of the museum. Although this is fascinating, it is now moving towards the past with the exhibition and its contents. A certain lack of presentation techniques may be a consequence of its distance from today's approach to museum design, where the connection to contemporary technologies is well integrated and even expected. The lack of display technology may put it at risk of being less attractive as a museum, which thing it does not deserves, with the risk of being pushed into the niche of the fascinating, beloved, but also somewhat neglected museums. The minimal communication from the machines and statues, with very modest proportion in the display units, makes it more difficult to appreciate and recognise of the value to occasional visitors and newcomers. The full appreciation of the contents offered by the museum appears as something that requires proper preparation from the visitor; otherwise, it is not easy to follow all the proposals of the place. The rather complex circulation inside the rooms, often presents some limits in terms of exhibiting. The general impression is of a great capacity of attraction, but a limited capacity in arousing curiosity. The new positive intention for such a valuable museum is probably a re-opening towards the future, to recreate the possibility of expecting a new present. A challenge of being more than what it simply is in its static time, making gradual enhancements that may make this museum more attractive, better exploited, more didactic and more impressive to visitors.

Acknowledgements
The address and contacts of the museum are: Musei Capitolini, Centrale Montemartini, Via Ostiense 106, 00154 Roma, Information and reservations at +39060608 all the days from 9.00 am to 9.00 pm. Information official E-mail: info.centralemontemartini@comune.roma.it
The adaptation of the museum, the restoration of the machines and the educational section of the industrial archaeology sector were carried out by Acea.
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https://www.museumsportal-berlin.de/en/museums/hamburger-bahnhof-museum-fur-gegenwart-berlin/
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http://architectuul.com/architecture/hamburger-bahnhof-1997

St. Augustine, The Confessions, English online version (accessed: October 2018): http://www.ourladyswarriors.org/saints/augcon1.htm

Figure 1 - The façade of the Montemartini power plant develops the main front inside the lot in an open area. On the top central part there are the carved characters SPQR (*Senatvs PopvlvsQve Romanvs*, "The Roman Senate and People"), which connects the new building to the tradition of the public work from the Roman Age.

Figure 2 - Detail from the external lighting system and artwork from Duilio Cambellotti, 1896; the space of the Museum Atrium, with the collection of the Roman Sarcophagi and a large machine from *Pignone* industry. The staircase gives access to the Engine Hall.

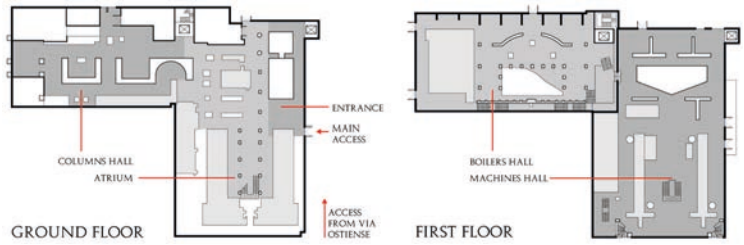

Figure 3 - Plan views of the ground and first floors of the Museum according to the schematic drawing available in the Montemartini Museum official website www.centralemontemartini.org

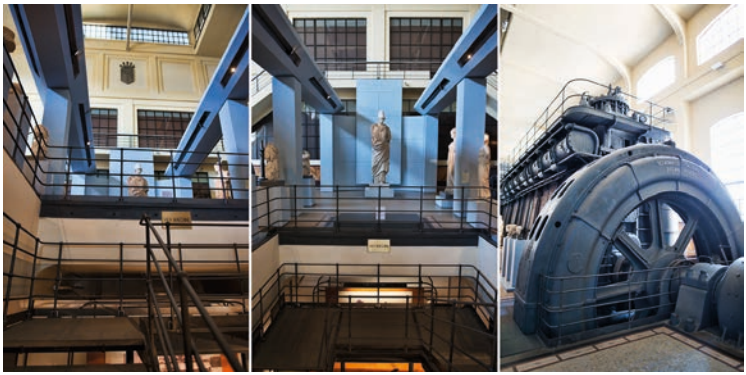

Figure 4 - The Engine Hall, from the staircase and interior; the large statue of Athena (in the so called "Velletri" version) copied from the original Greek model of the Vth century B.C. and various other copies from original Greek models; detail of one of the gigantic diesel engine in the hall.

Figure 5 - The engine room with the statue of Agrippina Minor in prayer (I century A.D., found during excavations of the *Casali*'s Villa at the Military Hospital, Rome, *Celio*, 1825). Made in basanite, the statue is set-up using a part of a nearby turbine as the base; the room with the mosaics from the *Horti Liciniani* of St. *Bibiana* (about 255 D.C.) and two statues representing photos of the model defined by *Skopas* (copies dated around the Hadrian's age, from the original of the IV century B.C., from the excavations of the *Domus in via Cavour*, Rome, 1940); a detail from an old steam engine.

Figure 6 - Statue of Aphrodite (Roman copy from a Greek original of the V century B.C.) from the Esquiline hill, in front of an old boiler machine; Statue of *Polyhymnia* the Muse (copy of a 2nd Century B.C. original) found during excavations in Via Terni, near the Variani Gardens in Rome, now placed in the mosaic room.

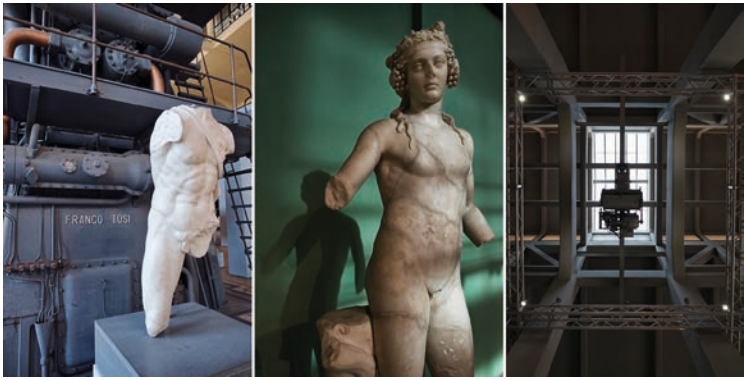

Figure 7 - Torso of a warrior, in front of the head of the large diesel engine; statue of *Dionysos* from the temple of *Minerva Medica*, *Horti Liciniani*, excavated in 1879; detail of the ceiling from the Columns Hall.

Figure 8 - Mechanisms and control panel from one of the large Diesel Engine; the Statue of bearded Dionysus, copy after Greek original of the 2nd half of 4th century B.C.

Figure 9 - The Hamburger Bahnhof in Berlin, now Contemporary Art Museum, view of the main façade and the interior during three different exhibitions (pictures by Jean-Pierre Dalbéra, Conrado Reis 2011, Christophe Robert 2011, Jason Paris 2010).

Figure 10 - The Gare D'Orsay in Paris: view of the front along the Seine; views of the interior; main pavilion.

Figure 11 - From the collection of Roman copies of various Greek original sculptures, two armless figures emerging in front of the large diesel engine, "Franco Tosi" branded, Engine Hall.

Figure 12 - Two pieces from the collection of heads in front of one of the large diesel engine, on the left a head of Apollo and on the right a head of a bearded Silvanus (Roman tutelary deity), from Via of the Imperial Fora, excavations in 1932.