

PIER LUIGI NERVI. Architecture for sport

The experimentation, ideas, methods and expertise of the talented Italian engineer and constructor

5 February – 2 October 2016

www.fondazionemaxxi.it

#PierLuigiNervi

*A new material and new themes
necessarily lead to new architecture*
(Pier Luigi Nervi)

Rome 4 February 2016. Stadia with innovative structures, diving boards that have become icons, sports centres with lace-like concrete domes, in the long career of **Pier Luigi Nervi** (1891 – 1979) research into sports facilities was a continuous fil rouge. From the first stadium built in Florence in 1929 to the Kuwait Sports Centre from 1968, **22 projects** and their stories make up the exhibition **Pier Luigi Nervi. Architecture for Sport** curated by Micaela Antonucci with Annalisa Trentin and Tomaso Trombetti of the University of Bologna at MAXXI **from 5 February to 2 October 2016**.

"This exhibition traces the constructional and formal genesis of Pier Luigi Nervi's architecture for sport - from the football stadia to the sports halls and the swimming pools - that in the collective imagination have been and still are remarkable settings for sporting events", says **Margherita Guccione** *Director of MAXXI Architettura*. "A model of success, one of the most important early expressions of the Made in Italy phenomenon and a fundamental point of reference for contemporary architecture and engineering."

The exhibition features **over 100 photographs, original drawings and documents** drawn from the rich heritage of the Archivio Pier Luigi Nervi, part of the MAXXI Architettura Archives Centre and presented together with **four models of the stadia from Florence, Rome, Swindon and Kuwait** made by LaMo and LaMoViDA (the Laboratorio Modelli di Architettura and the Laboratorio di Modellazione e Visualizzazione Digitale per l'Architettura) of the University of Bologna.

Organized on a chronological basis, the exhibition brings together the works in **three sections: Experimentation and innovation (1929/49), Concrete Champion (1950/60), From Italy to the world (1961/79)**, paying particular attention to the football stadia.

The presentation opens with a succession of **photographic panels** featuring Nervi's principal projects for sports facilities, the same panels that were attached to the walls of Nervi's studio to illustrate his work to public and private clients: the images include two enlargements of postage stamps produced in 1960 on the occasion of the Rome Olympics with the Palazzo and the Palazzetto dello Sport.

The first section of the exhibition **Experimentation and innovation (1929/49)** describes the process that led to the creation of the engineer's innovative constructional method with the *Giovanni Berta* stadium in Florence (1929-32) representing a starting point for systematic technical and design research that was to project Nervi into the midst of the Italian and international architectural debate.

However, it was the post-war years – those tackled in the section **Concrete Champion (1950/60)** – that conformed Nervi's success with a series of works in which formal invention goes hand in hand with constructional capability; these included the *Kursaal* bathing facility at Lido di Ostia (1950), a symbol of rebirth in the 1950s with its iconic diving board, and the works constructed for the Rome Olympics of 1960: the *Palazzo dello Sport*, the *Palazzetto dello Sport* and the *Stadio Flaminio*.

Together with the projects on display there is also the *Album 19* photographic album containing a vast collection of contact prints: from Gothic and renaissance churches to typewriters, from opticians studios to aircraft fuselages, images that served Nervi as references and cues for studies.

The final section of the exhibition **From Italy to the world (1961/79)** features above all projects realised abroad, from Europe to the United States, from South America to South Africa, from India to the Middle East, including the *Good Hope Center* at Cape Town, South Africa (1964-80), one of the Studio Nervi's most important international works, both in terms of dimensions and technical characteristics (at the time it was the world's largest concrete dome) and its political and symbolic significance (it was the first multiracial sports facility to be built in the period of apartheid, with no separation between blacks and whites).

At the centre of the hall a projection on a round screen mounted on the ceiling shows three remarkable **"pleated" or "ribbed" domes** constructed by Nervi that over the course of his career became a unique stylistic motif, his "architectural" signature in Italy and around the world: the *Palazzetto dello Sport* in Rome (1956 – 59), the *Palazzo dello Sport* at the EUR (1955 – 59) and the Cultural and Convention Center in Norfolk, Virginia USA (1965 – 71).

The exhibition is also enriched by a section devoted to the **photo files** from the Archivio Nervi. Of the over 4,000 forming part of MAXXI Architettura Archives Centre, **631 relate to projects for sports facilities** and are exhibited in reproduction and available for consultation, along with a selection of originals.

Together with the photographs, the drawings, the documents and the maquettes, the exhibition also features a special model in Plexiglas of the Palazzetto dello Sport made by two students from the ISIA (Istituto Superiore per le Industrie Artistiche – Rome) Aurelio Capri and Elettra Renzi, rendering visible the system conceived by Nervi to channel the forces in the building to the ground.

This model represents the central element in a series of guided visits dedicated to Nervi's work that also includes a "tactile" route designed for **blind and partially-sighted people**.

Realised in collaboration with the Centro Regionale Sant'Alessio, this walk includes a tour around the Palazzetto dello Sport introducing the built structure and an exhibition visit with the aid of the model and tactile panels.

On the occasion of the exhibition MAXXI Architettura will presenting the **publication of the inventory of the Pier Luigi Nervi Archive**: the result of a decade of complex archival work and a working tool and point of departure for future research, the Pier Luigi Nervi Inventory is the first of the Centro Archive's Inventories which form part of a specific section within the series of publications *Quaderni del Centro Archivi del MAXXI Architettura*.

The exhibition project **Pier Luigi Nervi. Architecture for Sport** is the fruit of joint research by MAXXI and the University of Bologna initiated in 2014 with a project that involved the Department of Civil and Environmental Engineering of Princeton University, the University of Florence, the University of Roma Tor Vergata, the Fondazione CEUR – Centro Europeo Università e Ricerca, the Scuola Superiore di studi sulla Città e il Territorio of the University of Bologna, the Historical Archive of the Municipality of Florence and the CSAC – Centro Studi e Archivio della Comunicazione of Parma. The results of this project have been presented in the touring exhibition *Pier Luigi Nervi. Gli stadi per il calcio* (Bologna, Cesena, Florence, 14 November 2014 – 28 May 2015).

The press kit and images of the exhibition can be downloaded from the Reserved Area of the Fondazione MAXXI's website at <http://www.fondazionemaxxi.it/area-riservata/> by typing in the password **areariservatamaxxi**

MAXXI – National Museum of XXI Century Arts

www.fondazionemaxxi.it - info: 06.320.19.54; info@fondazionemaxxi.it

opening hours: 11.00 AM – 7.00 PM (Tue, Wed, Thur, Fri, Sun) | 11.00 AM – 10.00 PM (Saturday) | closed Mondays,

Admittance free for students of art and architecture from Tuesday to Friday

MAXXI PRESS OFFICE +39 06 324861 press@fondazionemaxxi.it



MUSEO NAZIONALE
DELLE ARTI DEL XXI SECOLO

soci
founding members



con il sostegno di
supported by



partner MAXXI Architettura



Media partner



PIER LUIGI NERVI Architecture for Sport

1929-1949 | EXPERIMENTATION AND INNOVATION

Pier Luigi Nervi, Giovanni Berta Stadium, Florence (1929-1932)

Pier Luigi Nervi, project for a Littorio Stadium, Livorno (1932)

Pier Luigi Nervi, project for a 50/55,000-seat stadium [project for a stadium in Turin] (1932-33)

In the project for Florence's Giovanni Berta Stadium, built by his own construction company, Pier Luigi Nervi proposed revolutionary solutions for the time: beside the structural and formal novelty of emerging architectural elements – the aerodynamic curve of the grandstand's concrete roof, the sinuous external helical stairs and the impelling verticality of the Marathon Tower – Nervi here also boldly and originally decided to leave the stands' structure visible from the exterior.

After the great success of this stadium, Nervi decided to continue developing this typology, while always giving structural and technical innovation a central role in his projects: examples are to be found in the project for a stadium in Livorno, featuring a metal grandstand roof in *allumann-matt* (an alloy used in aeronautics and ships), flanked by an elegant helical reinforced concrete staircase; and the project for a 50/55,000-seat stadium in Turin, which presented an original solution with two-tier stands (which Nervi will use again in his enlargement project for the Berta Stadium, which was not executed).

Pier Luigi Nervi and Cesare Valle, project for a 120,000-seat stadium in Rome (1933)

Pier Luigi Nervi and Cesare Valle, project for a 150,000-seat stadium in Rio de Janeiro, Brazil (1943-47)

Nervi met the young and bright Roman engineer Cesare Valle at the end of the 1920s, and a strong friendship and intense professional collaboration arose between them. One of the first projects drafted together was for a 120,000-seat stadium for the World Cup that was to be held in Rome in 1934. The bold structural solution, characterized by the overlapping of a second ring of reinforced concrete stands cantilevered above the lower one, is the first of this kind and represents a fundamental milestone in the evolution of modern stadiums. The audacity and functional clarity of the interior structure is counterpointed by a more traditional monumental exterior casing, which rises from a podium accessed by staircases and is punctuated by the close succession of vertical walls that curve outwards at the summit to form a crowning ring. Although the project was never built, it sparked great interest and became an authoritative model for stadiums of large dimensions. Nervi and Valle were in fact called to re-elaborate it between 1943-1947 for a 150,000-seat stadium in Rio de Janeiro, the largest in the world at the time.

Pier Luigi Nervi, springboard for the pool of the Ugolino Golf Club in Florence (1935)

Pier Luigi Nervi, swimming pool of the Naval Academy in Livorno (1947-50)

In 1935, the Ingg. Nervi&Bartoli construction company executed a project by the young Florentine architect Gherardo Bosio for the Ugolino Golf Club. The large complex included a swimming pool for which Nervi, together with Bosio, conceived an elegant double springboard in reinforced concrete, which immediately stood out as one of the most original and evocative elements of the new complex: the continuous design from the ground to cantilevering element creates two wings that project lightly towards the water, balanced by the eccentric foundations hidden in the ground.

A decade later, Nervi proposed a springboard with similar design and elegance for the reconstruction of the Naval Academy of Livorno. In this project, Nervi experimented with structural prefabrication, inventing a new thin shell-like covering, and found a brilliant solution to avoid condensation: a barrel vault in reinforced concrete, built with wave-like prefabricated elements provided with holes to vent the hot and humid air. The vault is supported by a dynamic series of inclined pillars, connected to the side perimeter walls, which contain wide windows that ensure natural lighting above the fresh air supply grilles.

1950-1960 | MASTER OF CONCRETE

Pier Luigi Nervi and Attilio Lapadula, springboard of the Kursaal bathing establishment in Ostia, Rome (1950)

The springboard of the Kursaal bathing establishment on Rome's seaboard is one of the best-known symbols of Italy's economic boom in the postwar period. Crowded hotspot during the holidays or on the occasion of sport events, it became part of Italy's collective imagination thanks to the many movies it appears in. The project was born from the collaboration between the young Roman architect Attilio Lapadula and the already well-known Pier Luigi Nervi, and was built by the Ingg. Nervi&Bartoli company. Nervi's hand can be recognized in the "mushroom" covering of the establishment's restaurant and in the pool's springboard. The springboard is made of ferro-cement, the material Nervi had patented in 1943, with a dynamic H-shape whose slanted vertical bars are inscribed in a circle, and from which three platforms with different heights project.

Pier Luigi and Antonio Nervi, competition project for a Sports Palace in Vienna (1952)

Pier Luigi and Antonio Nervi, project for a Sports Palace in Florence (1954-56)

In the early 1950s, Nervi and his son Antonio worked on two projects for Sports Palaces, in Vienna and Florence, neither of which was built. The Vienna project proposal presented the first large reinforced concrete dome (a 128 m diameter) made of prefabricated wave-like ferro-cement elements (a system Nervi will use a few years later for EUR's Palazzo dello Sport in Rome) supported by radial inclined struts. A brilliant and original solution which blends formal quality and technique, ensuring lightness, an easy construction, good thermal and acoustic performance, and a diffused lighting. Around the Palace were placed the support services buildings, the gyms and the sports fields.

In the Florentine project, which would have been part of the sports complex along the Lungarno, in Bellariva, a rectangular below-ground-level sports field was flanked on its shorter sides by balconies and on its long sides by stands; on the long side opposite the entrance, the stands were doubled, with a second tier rising aboveground: this determined an asymmetrical cross section which gave a dynamic profile to the parabolic vault covering, made of wave-like prefabricated elements as in the Vienna project.

Pier Luigi Nervi and Marcello Piacentini, Palazzo dello Sport in EUR, Rome (1955-59)

Pier Luigi Nervi and Annibale Vitellozzi, Palazzetto dello Sport, Rome (1956-57)

Pier Luigi and Antonio Nervi, Stadio Flaminio, Rome (1956-59)

On June 15th, 1955, the International Olympic Committee assembled in Paris awarded to Rome the Games of the XVII Olympiad, choosing it over Lausanne with a final vote of 35 over 24. Rome's unequalled historical, artistic and monumental heritage had certainly contributed to this victory, but Rome did not have adequate sports facilities to host the Games. The only existing facilities, all in the former Foro Mussolini dated back to the Fascist Era. Pier Luigi Nervi played a main role in preparing Rome for the Olympic Games, with four projects which were telecasted and seen from audiences across the world: the Palazzetto dello Sport (with Annibale Vitellozzi), with its ribbed dome in reinforced concrete made of rhomboidal prefabricated elements and supported by radial Y-shaped struts; the Palazzo dello Sport in EUR (with Marcello Piacentini), covered by a 100 m-diameter "pleated" dome made of wave-like prefabricated elements and enclosed in a ring of glass wall; the Stadio Flaminio (with his son Antonio), made of 92 double-hinge structural frames in reinforced concrete which all have the same section but differ in height and width, creating a sinuous curve which encloses the sports field; and the viaduct of Corso Francia. Four construction "miracles", executed by the Ingg. Nervi&Bartoli company in a few years, which are monuments to the craftsmanship excellence of the Made in Italy, and which imposed Pier Luigi Nervi as the "master of concrete".

Pier Luigi Nervi, competition project for a multi-purpose hall in Kassel, Germany (1960-61)

Immediately after the great success obtained with the facilities created for Rome's Olympic Games, the Studio Nervi participated in an international invite competition held by the Municipality of Kassel for a multi-purpose pavilion to be built in the German town. Nervi designed a simple parallelepiped with a square base containing a rectangular sports field placed along its internal diagonal. The main idea of the project was that of maintaining an area around the field completely empty, thanks to retractable telescopic stands, thus ensuring flexibility of use and responding to the multi-purpose requirements of the competition. The covering was designed as a ribbed slab which forms a square-mesh grid, supported by pillars whose shape is determined by their ruled surface, which connects the circular base to the cross-shaped section at the impost level.

1961-1979 | FROM ITALY TO THE WORLD

Pier Luigi Nervi, Pavilion at Niddrie Playing Fields, University of Edinburgh, United Kingdom (1960-62) Pier Luigi and Antonio Nervi, project for a grandstand and club-house for the Liberty Bell Park Racetrack in Philadelphia, USA (1961-62)

In the early 1960s, Nervi designed two projects – which were never built – for small sports facilities. The first was a project proposal for a pavilion within a sports complex, which Nervi donated to the Department of Architecture of the University of Edinburgh. Nervi imagined two solutions, both consisting of symmetrical trestle-like structures in reinforced concrete with stands on both sides, covered by a roof that was cantilevered in the first proposal, but supported by twelve rectangular pillars in the second. In 1961, Nervi was in Philadelphia and was invited to draft a project for the facilities of the new racetrack, the Liberty Bell Park. He proposed a sensational structure with double prospect, as he had for the Edinburgh pavilion. On one side are the cantilevered two-tiered stands, on the other the club-house and the support services structures organised on four floors and crowned by a double platform roof with an overall 50 m span, made of reinforced concrete on a metal structure.

Pier Luigi Nervi, Project for a stadium in Swindon, United Kingdom (1963-66)

Pier Luigi and Antonio Nervi, competitive tender for the construction of a stadium in Novara (1964-76)

In June 1963, Nervi was commissioned by the City of Swindon, England, with the renovation of the city's football stadium and the creation of a new grandstand. Nervi designed an over 100m-long straight grandstand, which recalls the structural solution chosen for the Stadio Flaminio (trestle-like frames to support the stands' secondary structure), covered by a slim cantilevered roof in reinforced concrete. This model was developed into three versions, which all had the same structure and functions but varied in size and shapes. One of the most interesting formal and technical innovations here is the use, in the second version, of an element which Nervi had already used elsewhere and which had become a sort of stylistic signature: the use of the pillars with "variable section" or "ruled surface" which support the grandstand's slab.

During the same years, the Ingg. Nervi & Bartoli company participated in and won the competitive tender for the construction of a stadium in Novara, Italy, on a project by the Studio Nervi.

This structure is almost a return to the beginning of Nervi's career: the stadium is a rectangular structure with two straight grandstands, one covered by a cantilevered roof and one uncovered, joined by two curved elements on the shorter sides, just as in the Berta Stadium. But over thirty years had passed from that first project, and instead of the futuristic shapes of Florence's stadium we here find the more evolved and complex structures Nervi had experimented with in the stadiums of Rome and Swindon: the now well-known reinforced concrete trestle frames to support the stands, the inclined pillars with variable section, the cantilevered roof. Interesting new features are the use of steel for the roof and the external cladding of the stands, where the prefabricated elements create an elegant diamond-shape pattern.

Pier Luigi and Antonio Nervi, Good Hope Center, Cape Town, South Africa; joint-venture with the Colyn & Mering firm (1964-1980)

The Good Hope Center was one of the Studio Nervi's major international projects of the 1960s-1970s, for its dimensions and technical features as well as for its political and symbolic resonance.

The City of Cape Town entrusted Nervi with the design of a multi-purpose facility (for exhibitions, sports events, shows, etc.) for overall 20,000 m² and a capacity of 8,000 people. The project distributed the complex's functions over the triangular lot which had been assigned, placing the halls and sport services in lower structures and letting the square-plan monumental hall rise with its cross vault concrete covering, which was the largest of its kind at the time. The vault's structure is made of massive reinforced concrete arches, joined by pre-stressed concrete tie beams to neutralize thrusts; the curving sails are made up of triangular prefabricated elements that create a regular geometric pattern on the interior of the covering. Inside, great freedom in the use of spaces is guaranteed by retractable telescopic stands (as in the multi-purpose hall in Kassel 1960-61).

This project was not only significant from a technical and construction point of view. It also represented an important step against racial discrimination: the Good Hope Center was in fact the first multiracial sports complex built during the *apartheid*; it did not in fact have separate sections for blacks and whites, as all the other public buildings in Cape Town did at the time.

Pier Luigi Nervi with William and Tazewell & Associates, Sport Arena of the Cultural and Convention Center di Norfolk (USA) (1965-71)

Pier Luigi and Antonio Nervi, Rupert Thompson Ice Arena Hockey Rink at Dartmouth College, Hanover (USA) (1967-75)

After Nervi's acclaimed projects for Rome's 1960 Olympic Games, many of the commissions entrusted to the Studio Nervi all across the United States, where the Italian engineer had become a true celebrity, were for sports complexes of every kind. Not all these assignments went carried out, but Nervi nonetheless executed a series of extraordinary sports structures in the USA, which gave him even greater fame and notoriety.

In the early 1960s, the Dartmouth College of Hanover, New Hampshire, asked Nervi to design the Nathaniel Leverone Field House (1960-62) first, then the Rupert Thompson Ice Arena Hockey Rink (1967-75). This sports facility for ice hockey was designed with two parabolic-shaped grandstands in reinforced concrete and covered with an interesting slightly parabolic vault made – as always, in Nervi's "structural prefabrication" system – by modular prefabricated elements in ferro-cement.

Those same years, the Studio Nervi worked on the project for a Cultural and Convention Center (sports arena, exhibition hall and theatre) commissioned by the City of Norfolk, Virginia. The most noticeable building of the complex is the arena, which upon request of the commissioning body was to recall the Palazzetto dello Sport in Rome. This building however has a different structural dynamics: a great reinforced concrete dome, made of prefabricated elements bears on a perimeter ring which in turn is supported by a series of massive external Y-shaped pillars with variable section.

Since it had become difficult for Nervi to travel extensively, it became impossible for him to follow the construction sites abroad personally. His sons Antonio and Mario, who worked with him at the Studio Nervi, were of fundamental assistance to him in this phase. Projects in the United States also posed another issue regarding the construction phase: Nervi could not use his own construction company to execute his projects here, so he had to rely on local professionals, even for the drafting of the final structural and technical working plans.

Pier Luigi and Antonio Nervi, competition project for the Kuwait Sports Centre, Kuwait City (1968-69)

The project for the Kuwait Sports Centre was the main sports facility project that the Studio Nervi worked on at the end of the 1960s, and it was the conclusion and compendium of all the previous research on stadiums.

In 1968, the Emir of Kuwait launched an international invite competition for the construction of a new Olympic sports complex: besides Pier Luigi Nervi, Felix Candela, Lloyd Morgan & Jones and Kenzo Tange – who won the competition – were invited.

Pier Luigi and Antonio Nervi's proposal presented a sports complex organized in a simple and rational square layout, ordered by two axes of symmetry, and included the buildings for sports events (stadium, sports arena, swim stadium) and for other events, as well as structures for training and sports practice, for support services and parking.

Pivot and emerging volume of the complex is the monumental circular Olympic stadium with its surprising 300-meter wide dome made of aluminium space frame elements and resting on two rings of space frame beams supported by a ring of 64 reinforced concrete radial piers with variable sections.

An elderly Nervi, who increasingly relied on his sons, here amazed the world once more with his lively eagerness to experiment, abandoning the orthodoxy of reinforced concrete and ferro-cement to experiment with a complex and ambitious metallic space frame structure.

IN TOUCH WITH NERVI. PARTICIPATION AND INTEGRATION WITH ARCHITECTURE

As part of the exhibition, MAXXI Public Engagement offers a meeting and sharing opportunity that starts from Nervi's Palazzetto dello Sport and leads to Zaha Hadid's museum, connecting two architectures that have modified the landscape of the Flaminio district.

"In Touch with Nervi" is a new itinerary which aims at involving and integrating the general audience, migrants, the elderly and the visually impaired, through an engaging physical experience that communicates, in a simple and direct way, the main themes researched by this great Italian structural engineer.

A walk through the Flaminio district, a visit to the Palazzetto dello Sport and the exploration, at the MAXXI, of material such as drawings, photographs, tactile boards and a small model of the building, all specifically conceived to create a socialising moment and an exchange of perceptions and feelings.

The small model, on a 1:300 scale, was made by two students of the ISIA in Rome (*Higher Institute for Artistic Industries*) Aureliano Capri and Elettra Renzi, who reinterpreted the physical, aesthetic and design principles of the Palazzetto dello Sport project, commissioned by the Italian Olympic Committee (CONI) with precise requirements: limited costs, rapid construction and adaptability, so it could host different sports. The Palazzetto's project is based on the innovative techniques introduced by Pier Luigi Nervi, above all ferro-cement and a building method based on prefabricated elements, which made it possible to build coverings of such span by exploiting a dynamic composition of thrusts. The great 60m-span spheroid dome discharges its tremendous thrust in three places: the structural fan-shaped elements, the pre-stressed foundation ring and the trestle-like structures, which fork into two bodies, one oblique and one orthogonal to the ground. In the model, Nervi's static sensitivity is expressed by four Plexiglas concentric levels - the first being the point of origin of the thrusts and the other three their discharge points - and by strings which, starting from a small Plexiglas column, pass through holes pierced in every floor. These have a double function: they recreate the aesthetics of the ribbed ceiling's geometric pattern, but also represent the thrust paths which run uniformly and symmetrically along the whole perimeter.

The exhibited model is an interpretation of Nervi's work and offers a simplified, easily comprehensible version of the building, tactually explorable by all.

Project in collaboration with the Centro Regionale Sant'Alessio e Margherita di Savoia per Ciechi and with the 'Amatel' Architettura' association.

The Inventory of the Pier Luigi Nervi Archive in the Collection of MAXXI Architettura

Curated by Carla Zhara Buda

Collana | Quaderni del Centro Archivi del MAXXI Architettura – Serie | Gli inventari
ISBN 978-88-907133-2-3

The word inventory shares the same etymology and nuances with the verb to invent, that is, to discover, come upon. In this perspective, research reveals itself to be a creative activity, bearer of new visions and interpretations, some unexpected and some unpredictable.

An inventory is the means to accurately describe, through its logical structure, the contents of an archive – an architectural archive, in our case – so that these may be studied, reread, enhanced and communicated.

Through its exhibition activities, its consultation and research services, the arrangement and cataloguing of its collections' archives, the MAXXI Architettura has worked on the conservation, enhancement and communication of its vast and unique heritage for over a decade.

Publishing the inventory of the Pier Luigi Nervi Archive, one of the first which was acquired, is a step forward in this long process and is the first act of the programmed publication of all the more complex archives contained in the museum's architecture collections, such as the Sergio Musmeci, Enrico Del Debbio, Aldo Rossi and Carlo Scarpa archives, which have already been arranged and catalogued and are ready to be presented in paper, as further means of study and transmission.

The osmotic relation between archive and research, between conservation and enhancement, between history and architecture, finds its concrete expression in this inventory, which fully recreates the image and professional career of Pier Luigi Nervi, an inventor whose own research can undoubtedly be considered a creative activity.