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ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella XVI INTERNATIONAL FORUM Le Vie dei Mercanti



# WORLD HERITAGE and KNOWLEDGE Representation | Restoration | Redesign | Resilience

ARCHITECTURE HERITAGE and DESIGN | 2 Collana fondata e diretta da Carmine Gambardella



## The "Right" to the quality of the "Preservation" for Italian architecture of the Second half of the 20<sup>th</sup> century

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#### Abstract

The research addresses the issues of preservation, conservation and possible new destination of the Italian architecture of the Second half of the 20<sup>th</sup> century, which is more and more the object, particularly in recent years, of complex interventions managed, most of the times, through quite contradictory procedures that can compromise the integrity of the buildings involved. As Bruno Reichlin states: «The preservation of the modern and contemporary architectural heritage [...] is perhaps one of the great opportunities currently offered to the architect in order to rethink his/her profession», the "architect of the safeguard" should be in the position to operate directly in the field, having a deep knowledge of the genesis of the architectural work, its materials and construction techniques, the state of its conservation or alteration, as well as the procedural and operational issues necessary for is future spatial layout and functional destination: the project, the call for tenders, the works management, the construction site. This body of knowledge has to be compared with the current legislation, which in Italy - as far as the preservation of the architecture of the Second half of the 20<sup>th</sup> century is concerned – is unfortunately still lacking a significant consolidated jurisprudence. In a path that is in part alternative to what has already been produced by the institutional authorities set up for preservation, moreover, the research intends to propose some methodological suggestions about the categories and classification criteria present or excluded in the existing heritage lists, with the aim to include, in a more systematic way, all the restoration interventions entitled, for their architectural value, to be considered part of the heritage of the second half of the 20<sup>th</sup> century. Placing the emphasis on the specific figurative and distributive characters of some emblematic architectural cases, the proposed working method, while dealing with a new use of the building, intends to preserve as much as possible its original formal expression, language and perception.

**Keywords:** Preservation of the architecture of the Second half of the 20<sup>th</sup> century; Conservation project; Restoration; National heritage list; Copyright.

#### 1. Introduction (Carla Bartolozzi and Gentucca Canella)

This essay takes its cue from the results of the Turin conference of December 2016 *Conservation, protection, re-destination for the Italian architecture of the second half of the 20th century* [2], promoted by the Department of Architecture and Design of the *Politecnico di Torino* and the subsequent debate on the prole of restoration in a vast action of recognition of the value of the architectural works of the masters of the Italian architecture of the Second half of the 20<sup>th</sup> century. During the conference students and teachers of the main Italian architecture schools were involved in the realization of the exhibition-video *Reflections on the Second half of the 20th century Italian Architectures at risk*, to critically illustrate the degree of possible alteration in which today are likely to incur some of the most representative structures of the Second post-war period.

The experience produced a first survey, updated to 2016 and still ongoing, on the state of conservation of some important national case studies, now considered "at risk", through the creation of short film-documentaries of the actual situation compared with the documentation of the original project and enhanced by interviews with authors and researches / witnesses, introducing some first plausible issues:

- does the change of use of a building justify the uncontrolled change of its structure?
- deformation or degradation? What is most prejudicial for the transmissibility of the architectural work?
- does the restructuring necessarily involve the perceptual alteration of the architectural work?
- the requalification intervention cannot involve the original author?
- what is the destiny of an unfinished project?
- how can the protection action not contemplate restoration?

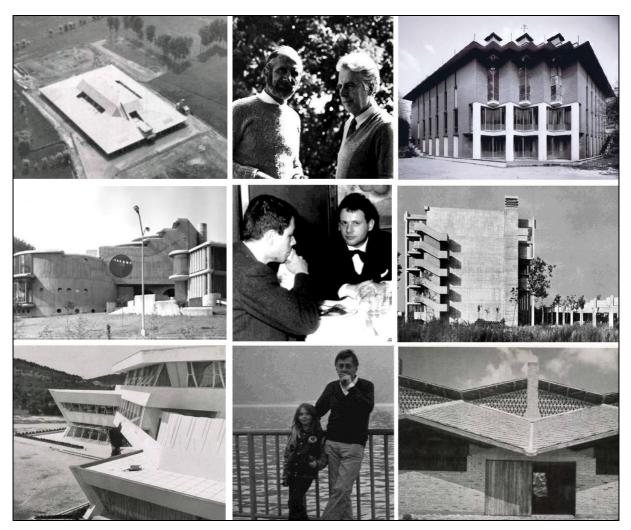


Fig. 1: Works and protagonists of Italian architecture of the second half of the 20<sup>th</sup> century.

The works: Roberto Gabetti, Aimaro Isola and Giuseppe Raineri, Torinese Horse Racing Company in Nichelino, Torino, 1958-59; Giorgio Raineri, Novitiate of the Sisters of Charity, Torino, 1962-65; Guido Canella, Michele Achilli, Daniele Brigidini and Laura Lazzari, Civic Center of Segrate, Milano, 1963-66; Vittoriano Viganò, Institute for minors "Marchiondi Spagliardi", Baggio, Milano, 1953-57; Marcello D'Olivo, Village of the Child in Opicina, Trieste, 1950-57; Giorgio Raineri with Antonietta Roasio, Agricultural cooperative in Montalenghe, Torino, 1957. The protagonists: Roberto Gabetti and Aimaro Isola; Guido Canella and Luciano Semerani; Aldo Rossi.

We have also tried to build a research that is complementary to what has already been produced in recent years by entities that are institutionally responsible for the heritage preservation (Ministry of Cultural Heritage and Activities, Monument and Fine Art Departments, Regions) and the organizations / associations involved (UNESCO, Do.co.mo.mo. International, Do.co.mo.mo. Italia), trying to define some possible operational criteria for the construction and transmission of the same documentary apparatus - initially through a series of structured files on an effective comparison between the original state of the work (intentionally delegated to the authors' reports and the archive drawings) and the actual conservation status (verified during the inspection phase) -, but also with reference to the correct application of a legislative apparatus on copyright in architecture that still today suffers from a jurisprudential deficiency (the monumental constraint can be recognized by the Ministry only for architectural works built more than seventy years ago).

It is useful to remember that a correct application of the Copyright Law could guarantee the control of the author also on the interventions for new functions. In fact, the art. 20 of Law 633/1941, while

specifying: «However, the author of a works of architecture cannot oppose the modifications that may be necessary during its realization [or even] to those other modifications that may be necessary when the work is completed»., also establishes: «However, if the work is recognized by the competent state authority "of important artistic character", the author will have the right to study and implement such modifications».

This decree which potentially has a great value for the work of architecture and for the author that perhaps could become, like the condition "at risk", one of the possible criteria from which to set priorities and urgency in the safeguard interventions.

Some recent solutions adopted for the integrity of recognized works, properly planned in the design phase, have then had negative results due to construction site decisions. This is the case, among others, of the Civic Center of Segrate (Milan, 1963-66), designed by Guido Canella, Michele Achilli, Daniele Brigidini and Laura Lazzari, object between 2003 and 2009 of a project for its conversion into an Art Schools with a library and an auditorium (initially designed by the original authors which were then unjustifiably excluded in the construction phase), later unfortunately also seriously deformed in its perceptive characters. And this despite the fact that the building received in November 2011, at the beginning of the conversion works, the "Recognition of the important artistic character" by the Contemporary Art and Architecture Department and Urban Peripheries of the Ministry of Cultural Heritage, with highlighted in the accompanying report: *«Unanimously recognized by architectural criticism among the most important and significant Italian works of architecture of the Second half of the 20th century, for its relationship with the urban context, the use of materials and its typological innovation».* 

Similarly, it is believed that the same attention must be paid to those restoration works - very often integrated with the installation project - which, from the post-war years to the end of the 20th century, have guaranteed the preservation, conservation and enhancement of major architectural heritage and which are also to be ascribed to the Italian architecture of the Second half of the 20<sup>th</sup> century as defined and included in the census objectives.

These structures are also in a state of risk similar to of the new structures, and therefore the same acknowledgment and protection are necessary to avoid alterations and transformations incompatible with their status. The need for regulatory compliance, the renewal of the plants, the solutions aimed to energy containment constantly put at risk interventions that do not yet enjoy regulatory recognition, for which it is necessary to activate procedures that involve the original architect and the relative sharing of new solutions design, as well as for the new architecture.

Finally, the decision to investigate, as an example of research, the Turin Stock Exchange, designed and built in 1952-56 by Roberto Gabetti, Aimaro Isola, Giorgio Raineri (with structures by Giuseppe Raineri), abandoned for some years and now at the center of a public debate for a new use - and, in these days, recognized by the Ministry of Cultural Heritage of "Important artistic character" -, is particularly significant and demonstrative of the steps described above: knowledge, verification of the structures, research on materials and construction techniques, applicability of the protection of the rules but, above all, the need for a compatible function that allows to keep as complete as possible the original perception of the building.

## 2. Possible additions to the Ministerial Census of Italian architecture of the second half of the 20th century (Gentucca Canella)

The important action of recognition and selection of the Italian architectural heritage of the second half of the 20<sup>th</sup> century promoted in the early years of the millennium by the Ministry of Cultural Heritage constitutes the starting point for any state of progress on the issues of protection. But the application of preventive action for protection is much more complex because, in the current legislation, the law 633/41 *«is the only device through which, even indirectly, it is possible to "recognize" a value to architecture contemporary»* [3].

The same criteria that establish the membership of the architectural work to the Italian cultural heritage are formally defined by the Ministry itself on the basis of the recurrence and bibliographic quality; the role and capacity for technological innovation, typological, as well as *«solutions to technical or social problems, etc.»* [4]. It is important to underline that, like the critical fortune of the work, the relevance and notoriety of the author as *«important figure in the panorama of regional, national or international architecture, even in the cultural debate»* has undisputed value.

These criteria should be sufficiently exhaustive and conditioning even in respect of a "free operation" claimed by owners or clients, whether public or private, in restructuring or new use, but certain generalization in the accreditation of architecture works of the Second half of the 20<sup>th</sup> century - that can be much or less significant - also confirmed on the portal of the Ministerial Census in the specific indication of *«site in constant implementation and updating»*, increases the interpretative disorientation to the exclusive advantage of uncontrolled actions.

Also the recent update of the Lombardy Census "Architecture in Lombardy from 1945 to today" (which includes about 700 records) - undoubtedly meritorious also for the involvement of the main Italian

archives (Projects Archive of the IUAV University of Venice, Study Center and Archive of Communication - CSAC of Parma, Center of high studies on visual arts - *Casva di Milano*, *Triennale di Milano*), as well as for the reproduction of a series of photographs of the recorded works taken in the current state - in many cases it does not allow recognition, even in descriptive reports, the intentions of the authors, the original features of the work, and even less the evidence of the alterations made.

It therefore becomes necessary to try to circumscribe the most significant examples of the second half of the 20<sup>th</sup> century architecture in a defined period of time, possibly contained between the second post-war period and the end of the nineties, establishing for the works to be protected a "priority criterion" founded not so much on the "necessity" of any routine maintenance or adjustment to current legislation (necessary that the same Italian legislation on copyright in most cases considers difficult to contemplate), but determined by the value and the status of the work, taken at random emblematic and demonstrative study not only of historical, aesthetic, sociological and cultural qualities but also of original and ingenious processes of functional, typological and figurative experimentation, as well as the use of innovative techniques and materials.

« I have so far defined the ambiguous "hegemonic" ambition of the architect of the safeguard, which seems to be destined to hunt in the same lands as the historian of art and architecture. Below I will illustrate my "conviction", which leads precisely to the territories of the historiographical survey that directly concern - and I would say almost materially - the architect. One of these, evidently, is the monographic study of the work» [5].

In the work of cataloging drawn up in the didactic research carried out at the *Politecnico di Torino*, as an integration to the usual procedures of recognition and cataloging of the architecture of the second half of the 20<sup>th</sup> century, we wanted to introduce, after an initial cognitive study on the architectural work and its author, the phase of the inspection as necessary contextual verification and testimony of the state of conservation of the building (flanked by video-photographic documentation).

In this first part, the sample sheets relating to case studies of "recognized national and international value" in Piedmont, today at risk of compromise, have been articulated in a first descriptive section of the work, intentionally taken from the authors' project reports: *«The preliminary development of monographic studies of buildings that could be "restored" should become a common practice and a meeting ground for architects and historians»* [6], and in a second section, which is documentary and iconographic, obtained from the first publications on the work put together from architectural sources and from the materials conserved in the firms of the same authors: *«an architectural analysis able to contribute all the resources, and current, of architectural criticism»* [7]. The final phase of the inspection completes the cards with brief video and photographic surveys updated to 2016-2017 and with a sort of first objective feedback on the changes undergone over time.

It is also useful to bear in mind that the possibilities offered to the author's architecture by a differentiated "case by case" approach and by a structured safeguard action on the identification of the main identifying characteristics of the work are difficult to match the most recent proposals for a "network" protection for the second half of the 20th century *«from a perspective that embraces a series of works and common characters that legitimize their cultural interest»* [8]. A serial approach to the intervention criteria risks weakening the specific "case by case" of the individual works and the intentions of the designer-author. Nor is it possible to make exclusive reference to the technical methodologies for the recovery of materials or "constructive knowledge".

In fact, if for the second twentieth century it is undeniable what was affirmed by Anna Maria Zorgno Trisciuoglio, in 2001: *«On the other hand, the need for a redefinition and renewal of professional profiles strongly linked to the cultural traditions of the local building is becoming increasingly urgent. These professional profiles should present themselves as carriers of old and new construction technologies, even if more and more contaminated with each other»* [9], it is perhaps true that the complexity of the recovery of a material in a state of deterioration or alteration, in particular way in the architecture of the second half of the twentieth century, it can only be consciously addressed also as the possibility of transmitting its linguistic code in its entirety.

In this perspective it can be considered an example, for the solution difficulties still present in the restoration actions, the treatment of concrete recovery in its use "exposed face" that connotes in a very singular way some of the most representative buildings made in the fifties and the seventies of the second half of the 20<sup>th</sup> century.

The preservation of its formal integrity must contemplate, even in works by the same author, the possibility of coding with different paths, therefore, depending on the case, as a declination of "variant" or on the contrary of "invariant" figurative and perceptive, entailing a diversification of treatment also in the resolution of the building site. Similar considerations are also necessary in relation to the element "window" in the architecture of the author, in its articulations (iron-window, u-glass, glass-blocking, curtain wall); or likewise in the so-called "fifth façade", that is the covering, preserving intact its design, proportions, projections, materials and surface finishes.



**Fig. 2**: Ina-Casa in Orbassano, Torino, 1954-55, by Roberto Gabetti and Giorgio Raineri. Example of cataloging: comparison between original state and current status, 2018 (Extracts from the Master's Degree Thesis of V. Marchisio, Politecnico di Torino, 2018 - Supervisors: G. Canella, C. Bartolozzi, T. Marzi)

**3.** Do restoration works belong to "Italian architectures of the twentieth century"? (Carla Bartolozzi) Moving the focus of interest to the cases of restoration and proceeding with the examination of what has been produced and published on the website of the DGAAP [10] shows an overview that gives us back the consistency of what has been recognized to today in the census of the architecture of the second half of the 20<sup>th</sup> century. Through the rigorous method at the base of the census itself, the data now available offer the scientific community opportunities for first consideration and discussion, also useful for a possible better future use of the instrument itself. The outcome of the nationwide survey, carried out in collaboration with many university departments that have signed agreements with the Ministry for direct research on the territory, combined with archival research and verification of the requirements set at the base of the census, constitutes as a whole a cataloging tool with extraordinary potential. The following is therefore to be intended as an input for possible subsequent steps.

A first consideration regards the quantitative aspects: of the 20 Italian regions involved there are still no data on the censuses of Umbria, Campania and Basilicata. It should also be noted that for each region the reports may be of a widespread nature throughout the territory - this for the most part - or concentrated in the metropolitan area of the regional capitals (this is the case of Rome for Lazio or Turin for Piedmont). Even the overall reports, divided between "flagged" and "exceptional value" oscillate between the 709 of Lombardy - the region with the largest and most widespread catalog - at 350 in Emilia Romagna and 292 in Tuscany, up to 64 in Liguria for the regions of minor territorial development, 50 in Valle d'Aosta and 100 in Molise. This makes obviously difficult a certain type of comparison, given an approach that has followed criteria that can change from area to area.

The total number today adds up to about 2,000 assets surveyed, even if the architectural work is still being completed and the data are still fluid, constantly updated and implemented. Nevertheless, some considerations can already be formulated to check whether, in the specific regional censuses already published, the restoration interventions that have characterized the panorama of Italian architecture of the Second half of the 20<sup>th</sup> century, are present and therefore ascribable to the more general category of Italian "architecture" to which the census is expressly dedicated. At present, among the seven criteria of the guantitative and critical types indicated in the methodological presentation of the Census, specific references to interventions on historical or monumental architecture are not found. but at the same time there are not even considerations that could lead to an exclusion of this category. Among the different types of intervention that include essentially new buildings, however, they appear, not in all the Regions, but in some significant cases, "interventions on the built environment" that, even though representing a minimum percentage, explicitly introduce the hybridization of the contemporary intervention on the historical heritage as an architectural work of the Second half of the 20<sup>th</sup> century, according to meanings that unequivocally intercept the category of conservation. This is a sign of overcoming a forced separation between design skills that coexist in the single figure of the architect. There are also some absences in the lists of the Ministerial Census which, in a context of such great cultural importance, could have been useful to find recognition. New interventions by some renowned Italian architects who have worked in the Second half of the 20th century have been recognized, while the so-called "architectural works of integration of historical buildings" or the conservation interventions have been left out. Through the search filter by author you can browse the site of the DGAAP to reconstruct a map of presences or absences, which gives us back a photograph that may still be more focused.

Among the most interesting examples of recognition is the case of the *Cittadella dei Musei di Cagliari*, an architectural work by Pietro Gazzola [11], designed in the years between 1956 and 1964 and built between 1965 and the following decade. Intervention surveyed as a "work of excellence" which integrates the design of the restoration and the new, with the research of Gazzola and Libero Cecchini

to keep in coherent dialogue the archaeological discoveries emerged during the works and the functionality of the modern structure intended a museum, library, exhibition hall.

In the case of Franco Minissi, the undisputed leading architect of restoration and museum projects in the years 1950 to 1990, six works are mentioned, one of which - the Archaeological Museum of Agrigento (1960-62) - classified as "the work of excellence". On the other hand, the restoration of the ancient walls of Gela (1952-55) turns out to be a "selected work" and there's no sign of one of his most celebrated works and at the same time less easily attributable to a clearly defined category (construction? ex novo architectural work? archaeological restoration? conservation?) which is the one related to the protection and musealization of the archaeological site of the *Roman villa of Casale in Piazza Armerina* (1957-1963). Of that realization, the project of which is due, by the way, to a close collaboration of Franco Minissi with Cesare Brandi, today remains almost nothing, following an unstoppable process that led, despite the strong opposition of a cross-sectional movement of opinion, the complete replacement of transparent covers designed by Minissi. A negative example of how in the twenty-first century an example of setting up an archaeological site based on the principle of conservation of the monument that is still very current [12] has been betrayed with choices of an entirely different orientation and design quality.

Even an architect like Marco Dezzi Bardeschi appears, from the census, represented mainly by interventions of new architectures rather than by its restoration works. Only one work by Dezzi, among the nine that have been recognized, is classified as a work of excellence and concerns a residential building in the district of *San Jacopino* in Florence (1974-76). Among his restoration interventions appears the "*Manica lunga della Biblioteca Classense*" in Ravenna (1979-84) and the most recent intervention on the *Church of S. Ambrogio* in Cantù (1995-2002). There is no recognition for the *Palazzo della Ragione* in Milan that in the early eighties of the.20th century represented the manifesto of conservation according to what was theorized by Dezzi Bardeschi himself [13].

For Massimo Carmassi, present in the census with eleven interventions, we recognize a work of excellence in the intervention for the Library and the historical archive of the Municipality in Senigallia (1995-1999). No mention for his interventions that have focused more in Tuscany, mainly in the province of Pisa; the two main achievements on historical-architectural heritage are missing: the restoration of Palazzo Lanfranchi (1976-80) and that of Teatro Verdi in Pisa (1986-89) [14]. The work of Carmassi has been constantly aimed to demonstrating the need for a formal coherence and logical continuity between the conservation intervention and that of re-functionalization and integration of the historical buildings, starting from its first Pisan works of the late seventies up to the last projects. In 2015, the jury of the Gold Medal for Italian Architecture awarded the most important award to Massimo Carmassi for the project to recover the western Silos of the bakery of Santa Maria di Verona barracks, intended as an university function. The jury's motivations highlight this close relationship between the two design skills, both of which are necessary for the achievement of the goal: «The ex novo interventions do not deny their contemporaneity. The glasses that surround the classrooms, the metal stairs, the cement inclusions do not seek mimicry and develop a story that intersects with the historical one, it includes the structural logic, the functional necessity and, starting from this, recover the visibility of the spaces while occupying them with new uses. If it is true that the intervention on the existing will be increasingly, at least in Europe, the main terrain on which to develop the architectural project and if it is true that in Europe the existing includes in itself a great historical heritage, then this building constitutes a teaching how the present past is not antithetical, in architecture, but complementary».

To Andrea Bruno, architect who throughout his career has always worked mainly on architectural heritage, with an international experience begun in the sixties in Afghanistan, the census report recognizes only two works, both cataloged "works of excellence". This is the restoration of the *Castello di Rivoli*, (1979-87), and the restoration of the *Ospizio di Carità* for the Faculty of Economics, both in Turin [15]. In particular, it should be noted that the Restoration of the *Castello di Rivoli* is included in the list of recognized works of "particular artistic character" in accordance with the law 633/41 - a very exclusive list that today includes only 31 works by Italian architects - thanks to a recent decree (6 August 2015).

Therefore, the list of conservation works, also expressions of «important figures in the panorama of regional, national or international architecture, even in the cultural debate» is still largely to be written. The catalog of the heritage of the second half of the 20<sup>th</sup> century must therefore open up to include all that, in terms of quality and critical recognition, have produced the "conservation architects". This also in order to connect, in an ever more coherent way, the action of protection for the architectonic works of the author to the necessary conservative interventions, that other will not be the result of a cultured and aware planning on the existent. As Amedeo Bellini claims the restoration *«is the execution of an architectural project that applies to a pre-existence, performs on it all the technical operations suitable to preserve the material consistency, to reduce the intrinsic and extrinsic factors of deterioration, to deliver it to fruition as a tool for satisfying needs, with the strictly necessary alterations, using a preventive study and a project as tools for increasing knowledge» [16].* 



**Fig. 3**: From left: Andrea Bruno: *Castello di Rivoli*, *"Manica lunga*" before and after the restoration; Massimo Carmassi: *Teatro Verdi* in Pisa, the new security staircase; Marco Dezzi Bardeschi: *Classense Library* of Ravenna, hall of eight pillars on the ground floor.

#### 4. Some first issues of procedure in the phases of re-destination (Gentucca Canella)

The architecture of the second half of the 20<sup>th</sup> century must follow its own path, the lack of specific critical attention, which has contributed to the preservation of the architectural heritage of the first half of the twentieth century and previous centuries, does not yet allow a reasoned historical location. To a valid analytical criterion, even if susceptible of additions, it is necessary to support an operative method that streamline the bureaucratic times of the project procedures (opinions, certificates, permits) at the same time to supervise the tendering, work direction, construction site, execution.

The "Law on the quality of architecture", of which the parliamentary process is underway, while providing for the establishment of a plan for the quality of public buildings and using in a more extended way the instrument of the declaration of "important artistic character", presents some unclear issues. On the one hand, in fact, it entrusts the three levels of the project and the works management to a single subject - looking positively to limit the damage produced in recent years by integrated contracts (where the executive project was entrusted to the same contractor) - other still relies in a somewhat random way to the procedure of the competition (design or ideas) also for «interventions of importance from an architectural, environmental, historical, artistic and conservative point of view».

In these structures, and even more so for works subject to monumental constraints or recognition by the Ministry of Cultural Heritage, it is necessary, on the contrary, to prioritize the possibility of a new procedure "by assignment" which, with the author's approval to the project of redevelopment and the new functional destination, provide for the assignment of work to the contracting company based on the actual qualification. Moreover, the feasibility of this "new training for protection", which could be extended by the architect, to the Director of the works, up to the same performers, is already covered in the same "Architectural Quality Law" through *«the promotion of high-level training initiatives [...] aimed at the knowledge and dissemination of architectural, urban and landscape culture»*.

Two possible additions to the tendering and construction procedures for the works of the second half of the 20<sup>th</sup> century:

- the creation of a Register of professionals and companies for the protection of heritage

The architect (the author where he lives or, alternatively, the qualified professional) would be in charge of the control of all the phases of the redevelopment intervention: from the project (preliminary, final, executive) to the construction site and subsequent testing. Companies specialized in modern restoration would also be selected for the expertise already acquired in conservation and experimentation.

- the training site

The phases of the building site, often characterized by prolonged times of recovery or restoration of the original elements in a state of decay, could be divided as follows:

- "ordinary" work, scheduled from the start of the works, characterized by a lower specialization, reduced costs and reduced times;

- "high risk" processing, planned for the entire course of the intervention, particularly complex and significant for safeguarding the perceptive characteristics of the work, characterized by greater specialization, variable costs and longer timeframes.

Also important is the preparation, both in the project phases and in the tender procedures, of a planned on-site verification, a series of "samples" to be submitted to approval before and during the construction site.

It would also be appropriate to provide for the active involvement of the subjects directly involved (owners, municipal administrators, users), and of the institutional bodies active on protection (Ministry, Superintendence, University).

## 5. The case study. The Turin Stock Exchange by Roberto Gabetti, Aimaro Isola, Giorgio Raineri and Giuseppe Raineri (1952-56) (Gentucca Canella)

Wanting to indicate to our students a first criterion to approach the architecture of the second half of the 20<sup>th</sup> century we could first, even by discounting a certain degree of approximation of the research phases, invite them to recognize any elements to be considered as "invariants", identifying characters and consequently unavoidable even in the protection action.

A second criterion, equally important, would involve the verification of the re-destination project, and its effective functional compatibility.

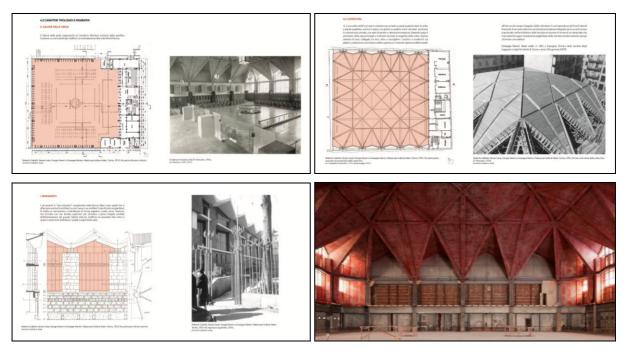
In the last semester we therefore proposed to the first year students of the Master's Degree in Restoration to work on the case study of the Turin Stock Exchange, currently abandoned in its original function and object in recent months of a redevelopment program.

Perhaps there are three original citations from the authors drawn from n. 215 of *Casabella-Continuità* of 1957 [17], to define the main elements and characteristics to be considered in the protection intervention (in the month of August the Ministry of Cultural Heritage of "Important artistic character" was recognized):

-The screaming room: «The life of the stock market takes place almost entirely in the trading room, which is the essential element of the building. The large square room (38.50 x 38.50 meters on the axis of the pillars) takes light on the two opposite sides (at midnight-east towards the garden and at midday-west towards Via Cavour)».

-The roof: «The dome that covers the living room is basically a square pavilion, with a slightly raised overhead curve, on the funicular of the loads [...] The strong push resulting to the edge is absorbed by reticular beams that continue the ribbed vault up to the perimeter pillars».

-The windows: «All windows are iron window, colored dark red. Windowsills, doorjambs, architraves of the windows, and the walls of the entrance hall, are in slabs of hammered basalt)».

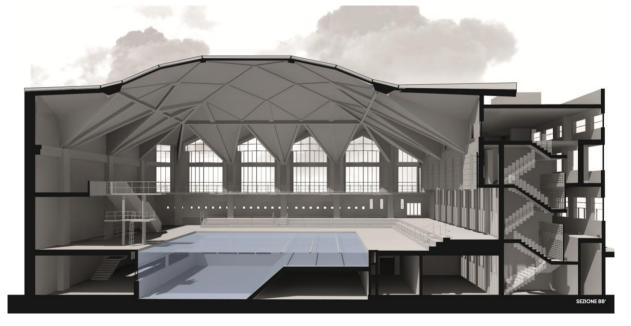


**Fig. 4**: The Turin Stock Exchange, 1952-56, by Roberto Gabetti, Aimaro Isola, Giorgio Raineri and Giuseppe Raineri. Identifying characteristics for the protection action and current status, 2018 (Extracts from the Master's Degree Thesis by V. Marchisio, Politecnico di Torino, 2018 - Supervisors: G. Canella, C. Bartolozzi, T. Marzi)

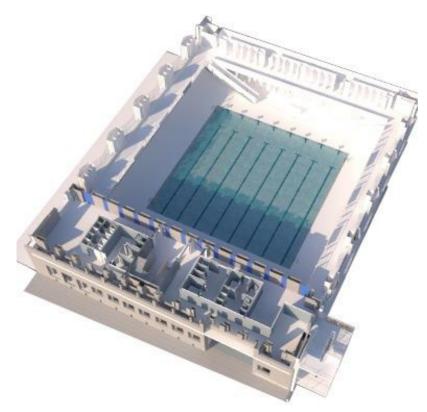
In the teaching proposal for the reimbursement of the Stock Exchange to "Popular bath with swimming pool and rehabilitation areas" - with reference to the German thermal baths of the second half of the 20<sup>th</sup> century with indoor pool and baths for medical treatment [18], but also to the municipal swimming pools of the early decades of the twentieth century -, we wanted to intervene on the structure and on the section recovering part of the existing basement (about five meters high) that, "discovered" and connected to the entire empty space of the room, accommodates the regulatory pool for free swimming (meters 25x20), with variable height for diving and for children's activities, edged by small

steps for the public. On the left side, compared to the main entrance, a series of rooms for the exclusive service of the swimmers redesign the figurative party of the original telephone booths of the former salon of the cries. The body of the offices has been transformed to the ground floor in the areas of control, ticketing, administration; while on the opposite sides there are two areas to bar / cafeteria and waiting, one with direct access also from via Cavour, the other open towards the green areas of the existing garden. On the first floor are the changing rooms with bathrooms and showers; on the floor according to the gym and the common areas overlooking the pool and *Piazzale Valdo Fusi*. The basement is divided between areas open to the public (with rooms for rehabilitation, sauna, massages, services, showers) and separate rooms for new technological systems.

The ribbed vault, the room of the cries, the double band of the frames retain in this new solution the exceptional features of the original building, if ever emphasized by the new proportions of the reservoir.



**Fig. 5:** Reduction of the Turin Stock Exchange to a popular bath with swimming pool and rehabilitation areas. (Master thesis by V. Marchisio, Politecnico di Torino, 2018 - Supervisors: G. Canella, C. Bartolozzi, T. Marzi).



**Fig. 6:** Reduction of the Turin Stock Exchange to a popular bath with swimming pool and rehabilitation areas. (students: E. Civettini, A. Portesi, Atelier Redevelopment of the consolidated city, Master's Degree in Architecture for Restoration and Valorization of Heritage, Politecnico di Torino, ay 2017-2018. Professors: G. Canella, R. Maspoli).

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Carmine Gambardella

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