

Moby Dick in città: problematiche di conservazione dell'ex acquario-rettilario del giardino zoologico di Torino

Moby Dick in the city of Turin: conservation issues of the former aquarium-reptilium of the zoological garden

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La mancanza di un adeguato riconoscimento di valore dell'architettura contemporanea ha purtroppo sovente lasciato spazio alla realizzazione di interventi di radicale trasformazione, determinando l'irreversibile modificazione dell'originario impianto. È questo il caso dell'ex acquario-rettilario del Giardino zoologico di Torino, progettato dall'architetto Enzo Venturelli alla fine degli anni cinquanta del '900. Edificio di stampo espressionista e razionalista, esso presentava soluzioni architettoniche e strutturali particolarmente interessanti e articolate. Il contributo intende approfondire la conoscenza dell'edificio e delle sue trasformazioni, evidenziando le problematiche legate alla conservazione del patrimonio architettonico contemporaneo.

Unfortunately, the lack of adequate recognition of the value of contemporary architecture has often left room for radical change, resulting in irreversible alterations to the original structure. This is the case of the former aquarium-reptilium of Turin's Zoological Garden, designed by architect Enzo Venturelli at the end of the 1950s; an expressionist and rationalist building characterised by particularly interesting and articulated architectural and structural solutions. The contribution intends to further the knowledge of the building, its specific features and transformations, highlighting the problems related to the conservation of the contemporary architectural heritage.

Introduction

The preservation and restoration of a legacy are motivated and justified by the values (historical, artistic, cultural and functional) attributed to it. Inevitably, decisions and behaviour towards assets vary according to the recognition of their value.

During recent decades, there has been an important process of expansion of the concept of heritage, which has led researchers and restorers to pay more and more attention to both modern and contemporary heritage. Although “assessment of significance is part of a process requiring sufficient distance in time [...] [and] this lack of distance in time complicates matters in the case of modern heritage”¹, there has been a growing awareness that the cultural value attributed to historical assets also includes works produced by modern and contemporary culture. In the last few decades, the heritage of “new” architecture which, according to Giovanni Carbonara, includes “everything that has been built over time, from the pre-war years up to the present day”², has become the subject of specific studies and interventions, aimed at guaranteeing its permanence over time³. Nevertheless, as Susan Macdonald points out, “we have not yet achieved widespread recognition and support for the conservation of twentieth-century places, nor have we arrived at a shared vision, approach, or methodology for doing so”⁴. Furthermore, “if the cult of modern monuments already poses problems, one can easily imagine the disorientation produced by the multiplication of types of buildings for specialised use, techniques, materials, construction procedures and the rapid succession [of movements] which characterised, in particular, the second half of the 20th century”⁵. Unfortunately, the lack of recognition of value, inadequate knowledge and capacity for interpretation sometimes leave room for interventions which, instead of optimising the existing buildings, lead to their irreparable deterioration. In fact, as Carla Bartolozzi points out, when it comes to adapting buildings to new needs or changing their use, “the end result is often a trivialisation and homologation of the intervention [...] instead of an opportunity to plan the necessary updates, which should themselves be aimed at the common goal of a substantial conservation of the asset, which may also include necessary additions, with respect for the existing structure”⁶. Materiality and constructional, structural and spatial characteristics are, in fact, sacrificed in the name of functional adaptation and performance improvement, without taking into due account the cultural value of the buildings and sites.

Up to now, the debate between technicians and intellectuals has mainly focused attention on well-known works and emblematic cases, while much of the heritage of contemporary architecture is still waiting for recognition and protection, with adequate rehabilitation and optimisation processes. A broadening of the horizons of the historical research is needed, to discover and communicate the specific features and qualities of more recent buildings and urban settlements, to refine the operational tools of restoration and evaluation, and to set in motion recovery processes that also manage to ‘exploit’, in cultural, social and economic terms, the great resource represented by more recent buildings and urban settlements⁷. The former aquarium-reptilium of Turin Zoo provides a clear illustration of the main problems of conservation of contemporary architectural heritage. Little appreciated by its contemporaries, the building has only recently been re-evaluated after its preservation had already been significantly compromised in interventions that have not taken due account of its architectural and cultural

1 Ron van Oers, *Introduction to the Programme on Moderne Heritage*, in «World Heritage Papers», n. 5, UNESCO, 2003, pages 8-14, p. 10.

2 Giovanni Carbonara, *Avvicinamento al restauro*, Liguori, Napoli 1996, pages 590-591.

3 For a more in-depth analysis of contemporary architectural heritage conservation issues, see «Conservation Perspective». The GCI Newsletter, *Conserving Modern Architecture*, spring 2013; Susanna Caccia, *Contemporaneo*, in Chiara Dezzi Bardeschi (ed.), *Abbecedario minimo Ananke. Cento voci per il restauro*, AltraLinea edizioni, Firenze 2017, pages 43-46.

4 Susan Macdonald, *Modern matters. Breaking the Barriers to Conserving Modern Heritage*, in «Conservation Perspective». The GCI Newsletter, *Conserving Modern Architecture*, spring 2013, pages 4-9, p. 5.

5 Anna Maria Zorgno, *Architettura e tecnologia per il recupero. Nuove frontiere di ricerca*, in Guido Callegari, Guido Montanari (eds.), *Progettare il costruito. Cultura e tecnica per il recupero del patrimonio architettonico del XX secolo*, FrancoAngeli, Milano 2001, pages 27-28, p. 28.

6 Carla Bartolozzi, *Il Palazzo a Vela e i padiglioni delle regioni nell'area di Italia '61. Processi decisionali e trasformazioni*, in Guido Montanari (ed.), *Italia '61 a Torino. Una modernità tradita*, SPABA, Torino 2003, pages 69-90, p. 70.

7 See Pietro Petrarola, *Architetture ed arti "moderne": per una verifica metodologica intorno al restauro*, in «Parametro», n. 266, 2006, pages 26-31.

8 See Stefano Setti, *The Image as Reaction. Nuclear Painting and Architecture, Italy 1951-1958*, in «Histories of PostWar Architecture», n. 1, 2017, pages 1-20.

9 Francesco De Caria, *L'architettura nucleare e l'urbanistica spaziale*, in Mario Marchiando Pacchiola (eds.), *Enzo Venturolli*, Quaderni della collezione civica d'arte - Pinerolo, n. 30, 1992, pages 24-30, p. 27.

10 Enzo Venturolli, *Manifeste sur l'architecture*, Office National Italien de Tourism, Paris 1958, p. 144.

11 Enzo Venturolli, *Lettera dell'arch. Venturolli a proposito del manifesto dell'architettura atomica*, in «Atti e Rassegna Tecnica della Società degli Ingegneri e degli Architetti di Torino», n. 4, 1958, pages 144-145, p. 145.

value. This contribution aims to retrace the events that determined the current state of conservation of the building, highlighting the main issues related to the preservation of this architectural heritage.

1. Enzo Venturolli and “Nuclear Architecture”

Showing great affinity with the “*Arte Nucleare*” movement born in the early 1950s in the Milanese environment⁸, Enzo Venturolli promotes spatial urbanism and nuclear architecture. Starting from an examination of the characteristics of cities and, in particular, of historical centres, overrun by traffic and lacking places where people can meet up quietly, Venturolli proposes both their gradual abandonment (and partial destruction) as they are “no longer functional to the needs of current urban life”⁹ with the realisation of new extensions in which the particular conformation of the buildings and their distribution would facilitate life in the urban environment and the enjoyment of a free spatial vision. At architectural level, Venturolli believes it is necessary to elaborate projects representing “the poetic, cultural and spiritual necessities of the age he lives in”¹⁰. Therefore, “comfortable building systems of abused linear and plain boxed forms [have] to be counteracted by a spectacle of beauty which could uplift the spirits”¹¹. Based on an artistic and idealistic vision of architecture, a free composition of lines and shapes, dynamism, asymmetry and plasticity characterise his projects, not totally appreciated by the critics, who highlighted a “lack of correspondence between the architectural layout, often simple and ordinary, and the uniform contradictory nature of the enclosures”¹² (as in Mastroianni’s house) (Figure 1).

Fig. 1 – Enzo Venturolli, Casa Mastroianni, Turin, 1955 (Credit: Manuela Mattone 2022).



2. Turin Zoo's aquarium-reptilarium: from construction to recovery

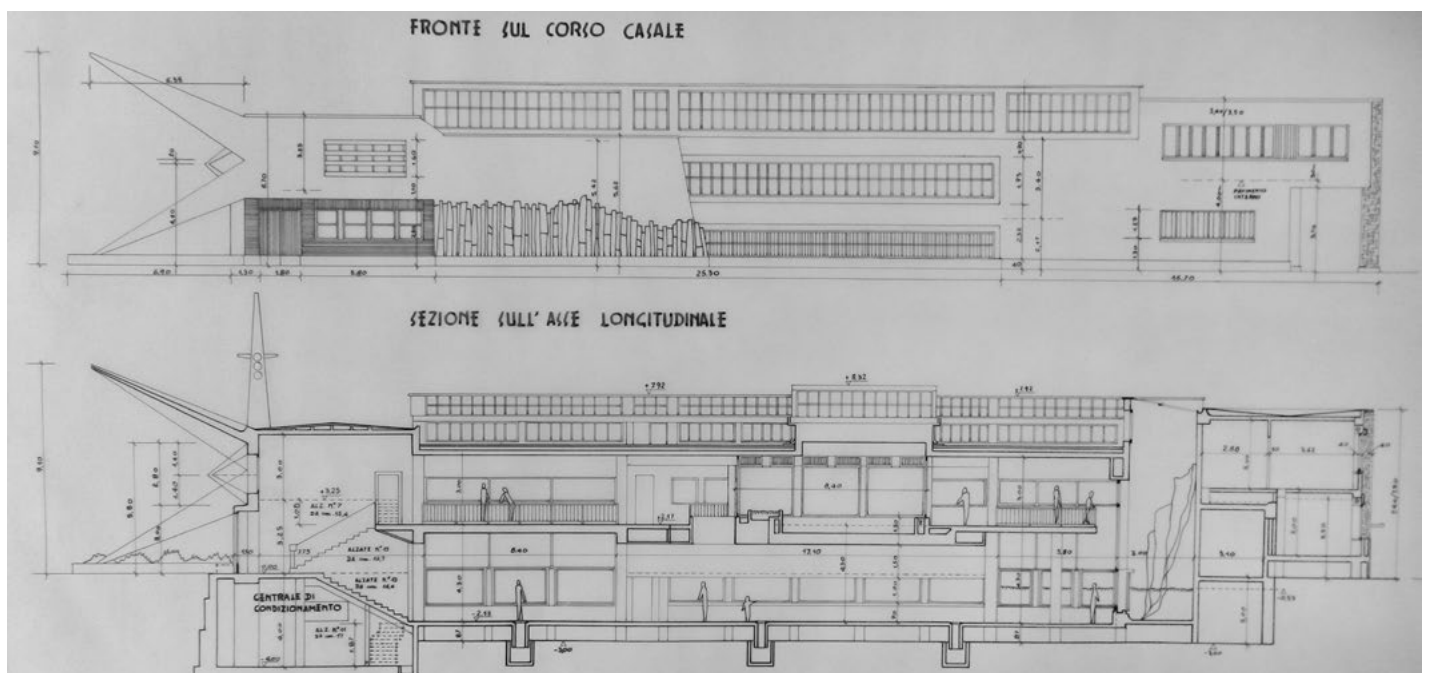
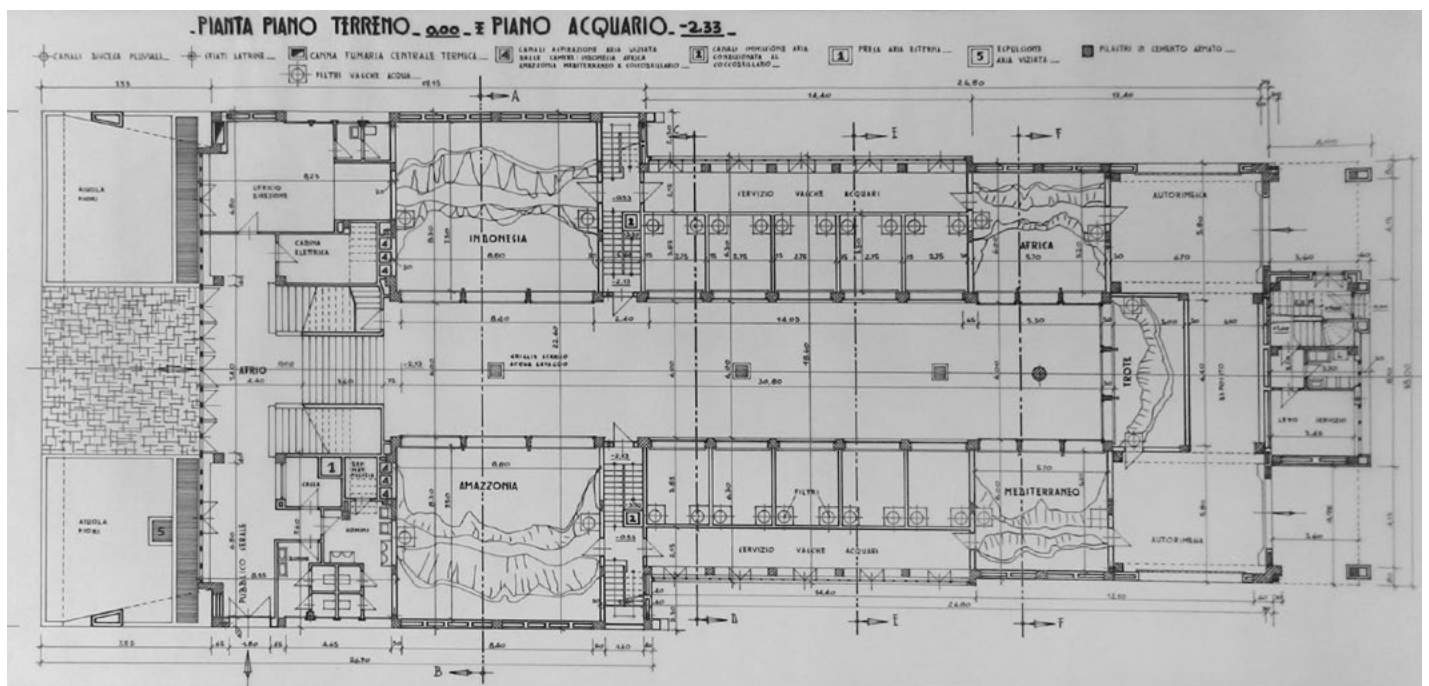
In the middle of the 20th century, Turin City Council decided to build a zoo, “a quintessentially post-war product, becoming one of the most successful popular entertainments in Europe during the 1950s”¹³. The intervention was carried out thanks to the collaboration established between the municipal authorities and Molinar, a company established in 1885 for the import of wild animals. In 1954, the Society was assigned a 30-year lease for the Parco Michelotti area along the south-eastern bank of the river Po. The zoo, designed by the engineer Gabriele Manfredi, was organised as “an irregular and naturalistic archipelago of enclosures”¹⁴, with small and large concrete boxes, playgrounds and hilly areas, designed specifically to host different animal species. In 1957, the zoo was expanded for the first time, with the construction of the house for giraffes and elephants. Venturelli, who was given the

12 Giulio Morgan, *Moby Dick a Torino: l'Acquario-reptilario di Enzo Venturelli*, in «L'Architettura Cronache e Storia», n. 9, 1961, pages 810-815, p. 814.

13 Eric Baratay, Elisabeth Hardouin-Fugier, *Zoo: a history of zoological gardens in the West*, Reaction Book, London 2002, p. 203.

Fig. 2 – Enzo Venturelli, Aquarium-Reptilarium at the Turin Zoo, 1958. Ground floor plan (Archivio di Stato di Torino, Sezione Corte, Archivi di Famiglie e Persone, Venturelli Enzo, Disegni, c.3/f.1).

Fig. 3 – Enzo Venturelli, Aquarium-Reptilarium at the Turin Zoo, 1958. Side elevation and longitudinal section. (Archivio di Stato di Torino, Sezione Corte, Archivi di Famiglie e Persone, Venturelli Enzo, Disegni, c.3/f.1).



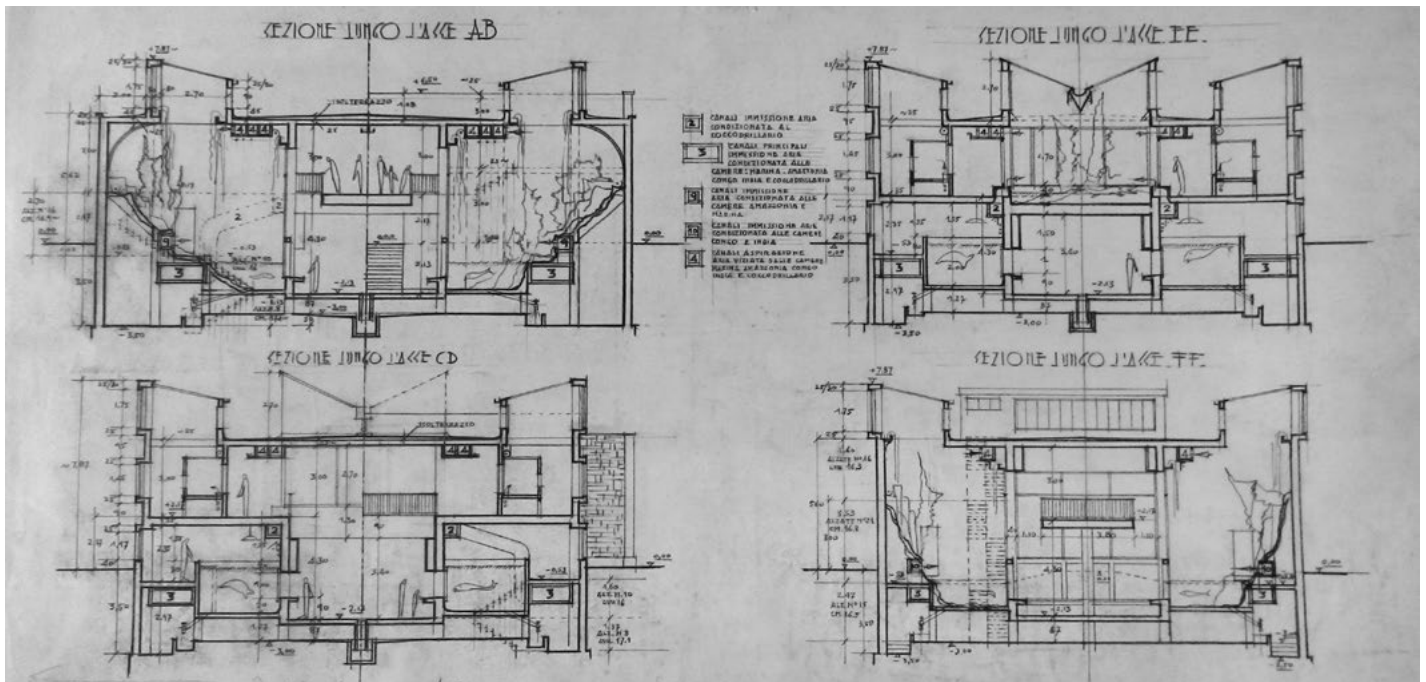


Fig. 4 – Enzo Venturelli, Aquarium-Reptilium at the Turin Zoo, 1958. Cross sections (Archivio di Stato di Torino, Sezione Corte, Archivi di Famiglie e Persone, Venturelli Enzo, Disegni, c.3/f.1).

commission, designed a building consisting of two symmetrical cubic volumes, connected by a small building, resembling “those same ‘plain box forms’ which, just one year later, Venturelli would vehemently reject”¹⁵ in the *Manifeste sur l’architecture* (1958).

The following year, Venturelli was commissioned to build the aquarium-reptilium, which was “supposed to stand out as a true paradigm of modernity, efficiency, and attractiveness”¹⁶. The building design was based on a careful examination of the aquariums present in the zoos of Berlin, Munich and Frankfurt, with the intention not only of offering “a demonstration of underwater and terrestrial fauna, but also a complete and more open view of the real environment in which animals live in different climates and at different latitudes”¹⁷. An expressionist and rationalist building¹⁸, at the time of its construction it presented particularly interesting and articulated architectural and structural solutions. The linearity of the plan, with a T shape, was a counterpoint to the great sculptural entrance, of zoomorphic inspiration (Figures 2-4). Resembling a biomorphic mouth (like as a whale’s mouth), the latter consisted of a continuous glazed entrance surmounted by a brise-soleil made of a series of metal notches and a cantilevered reinforced concrete canopy with two lateral supports (Figures 5-6). The aquarium-reptilium reveals an unusual layout, in which technical, structural and functional problems were solved. The interior space was organised on two levels, with exposed reinforced concrete pillars and no internal partitions, except for the glass windows that delimited the biological chambers at the beginning and end of the exhibition route¹⁹. The arrangement of the structures and rooms allowed visitors to see the chambers from both floors, without the first-floor slab interrupting the continuity of the glazing. In the centre of the building, on the first floor, was the crocodile house (Figure 7), the ceiling of which rested on the pillars and architraves of the aquarium located on the floor below. Although not totally appreciated by contemporary critics, according to whom “the plasticism of the building [could have found] an expression that was both freer and less extroverted: therefore, more coherent”²⁰, the aquarium-reptilium did, however, lead to a of the negative judgment that had previously been expressed towards Venturelli’s work²¹, considered “a violent act, stagnantly anarchic and conformist”²². As

14 Gregorio Astengo, *White Whale: The Aquarium and Reptile House at the Turin Zoo and the Architecture of Enzo Venturelli (1955-1965)*, in «Architectural Histories», n. 7(1), 2019, pages 1-16, p. 2.

15 *Ibid.*, p. 6.

16 *Ibid.*

17 Archivio di Stato di Torino. Sezione corte. Archivi di Famiglie e Persone, Venturelli Enzo, Carteggio (Giardino zoologico di Torino), busta 14, fascicolo 3, *Relazione tecnica*.

18 See Agostino Magnaghi, Mariolina Monge, Luciano Re, *Guida all’architettura moderna di Torino*, Celid, Torino 2006, p. 208 and Cristiana Chiorino, Giulietta Fassino, Laura Milan, *Architectural Guide. Turin*, DOM Publishers, Berlin 2016.

19 *Acuario y Reptilario*, in «Informes de la Construcción», n. 17, 1965, pages 21-32.

20 Morgan, *Moby Dick a Torino* cit., p. 814.

21 Alessandro Martines, *Acquario-reptilario e Casa delle Giraffe al Giardino zoologico*, in Maria Adriana Giusti, Rosa Tamborrino (eds.), *Guida del Piemonte. Architettura del Novecento*, Allemandi, Torino 2006, pages 298-299.

22 *Ibid.*



Fig. 5 – Enzo Venturelli, Aquarium-Reptilium at Turin Zoo, 1960. The main façade (Archivio di Stato di Torino, AEV, b. 14/f. 3).

Fig. 6 – Enzo Venturelli, Aquarium-Reptilium at Turin Zoo, 1960. Entrance hall (Archivio di Stato di Torino, Sezione Corte, Archivi di Famiglie e Persone, Venturelli Enzo, Carteggio, b. 14/f. 3).

Fig. 7 – Enzo Venturelli, Aquarium-Reptilium at Turin Zoo, 1960. Interior of the building and crocodile cage (Archivio di Stato di Torino, Sezione Corte, Archivi di Famiglie e Persone, Venturelli Enzo, Carteggio, b. 14/f. 3).



23 Astengo, *White Whale: The Aquarium and Reptile House* cit., p. 1.

24 Archivio di Stato di Torino. Sezione corte. Archivi di Famiglie e Persone, Venturelli Enzo, Carteggio (Giardino zoologico di Torino), busta 2, fascicolo 3.

25 Gabriele Maschietti, Maria Muti, Pietro Passerin d'Entrèves, *Giardini zoologici. Vicende storico-politiche degli zoo torinesi (1851-1989)*, Allemandi, Torino 1990.

26 Bartolozzi, *Il Palazzo a Vela e i padiglioni delle regioni nell'area di Italia '61* cit., p. 70.

27 Archivio Edilizio della Città di Torino, Prat. 2188/2004, prot. 2004-1-5527. Soc. M.A.S. Juvarra srl. *Trasformazione dell'acquario-reptilario dell'ex-giardino zoologico in centro di attività culturali multimediali e di spettacolo*.

28 <https://www.torinovivibile.it/nuovo-parco-michelotti-pronte-le-linee-dindirizzoscelte-dai-cittadini/> (accessed 12 August 2024).

stated by Gregorio Astengo “the aquarium-reptilium offered the rare case where the architect’s sculptural vocabulary coincided with the construction of an efficient and meaningful public space, making it the most effective embodiment of Venturelli’s nuclear architecture”²³. In 1987, following the closure of the zoo, the aquarium-reptilium and the other buildings were abandoned, waiting for the identification of a new use for the entire area. In 1988, a group of researchers from the Politecnico di Torino, coordinated by Professor Luciano Re, was given the task of analysing the consistency of the architectural and natural heritage of the zoologic garden and identifying a suitable reuse proposal. Choosing to take back the river bank for public use, the proposal was to redevelop the central portion of the zoo. This was to become the premises of an institution destined to offer the public “the tools for an approach to the contents and methodologies of naturalistic observation, regarding the specificities of the Po River environment”²⁴. A proposal to set up a Centre for naturalistic training and research was proposed, with teaching, exhibition and naturalistic observation functions, envisaging both the recovery of the former aquarium-reptilium and the “giraffe and elephant house” and the creation of a “captive-breeding” centre and a “butterfly house”, to increase the Centre’s scientific efficiency and appeal. Specifically with regard to the former aquarium-reptilium, which would house the captive-breeding centre, because of the presence of a wall structure that could not be easily modified, the project envisaged a rearrangement of the spaces, adapting to the specificities of the pre-existing structure, with the remodeling of the scenery and renewal of the installations²⁵.

The intervention could have been “an opportunity to plan the necessary updates, which should themselves be aimed at the common goal of a substantial conservation of the asset, which may also include necessary additions, with respect for the existing structure”²⁶ and represent an added value for the entire site. Unfortunately, its non-implementation led to a partial and discontinuous use of the architectural heritage present in the former zoological garden, leading to its progressive ruin. In the nineties, some of the buildings of the former zoo were reused both for exhibition purposes, setting up temporary pavilions within the buildings, and educational and entertainment activities. In 1997, the Juvarra Multiteatro theatre company suggested the functional renovation of the former aquarium-reptilium to host multimedia cultural activities, and shows organised by the company. The proposal, accepted by Turin City Council in May 2001 and focused exclusively on preserving the building’s external image, forgetting its identity, would lead to the partial demolition of the former reptile house, of which only the access canopy and the foyer would be preserved²⁷. The project was not completed: in 2005 the Landscape Commission of the City of Turin stopped the work and the building, already partially demolished, was abandoned again, awaiting a more suitable solution (Figures 8-10).

In 2019, the City Council approved the *Guidelines for the recovery and use of Michelotti Park - Former Zoological Garden Area*²⁸ This document was the outcome of a participatory activity involving members of the public and informal groups interested in promoting the recovery of the area and its proper management. It envisaged the reactivation of the park as a place of recreation, with the installation of elements of street furniture, movable structures for workshops and sporting activities, and the development of the trees. However, the demolition of the buildings of the former zoo was proposed, with the exception of the former aquarium-reptilium, which would host cultural and



Fig. 8 – The former House of Giraffes and Elephants. Abandoned for many years, in 2012 it became part of the project Street Art Museum and murals were painted on the external façade (Credit: Manuela Mattone, 2021).

Fig. 9 – The former Aquarium-Reptilium. Remains of the partial demolition carried out in 2001 (Credit: Manuela Mattone, 2021).

Fig. 10 – The former Aquarium-Reptilium. State of conservation of the main façade in 2021 (Credit: Manuela Mattone, 2021).



educational activities, setting up “an open-air arena to be used for theatre performances or as a teaching area”²⁹.

In June 2020, the City Council granted the Grilli Spettacoli cultural association a license to use the former aquarium-reptilium and its external area. The license, with a duration of 19 years, should have ensured the recovery of the building to be used for theatre and museum activities promoted by the association³⁰. The intervention focused on the preservation of the remaining parts of the original building, which are today considerably run down, and their integration with new architectural elements. The former aquarium-reptilium and the new

²⁹ https://servizi.comune.torino.it/consiglio/prg/documenti1/atti/allegati/201900029_4.pdf (accessed 8 August 2024).

³⁰ The project envisages the construction of the MiMTO, the largest puppet museum in Europe, which will house the numerous puppets owned by the Grilli family. <http://www.comune.torino.it/verdepubblico/parchi-e-giardini/parco-michelotti-l-ex-acquario-reptilario-allassociazione-grilli-spettacoli-un-altro-tassello-verso-il-completo-recupero-dellarea/> (accessed 8 August 2024).

Fig. 11 – The former Aquarium-Reptilium. State of conservation of the main façade in 2024. Neglect and lack of maintenance have led to a further deterioration of the building's condition (Credit: Manuela Mattone, 2024).

Fig. 12 – The former Aquarium-Reptilium. State of conservation of the side façade (Credit: Manuela Mattone, 2024).



building constructed in continuity with it would host a small theatre for puppets, an exhibition area, workshop classrooms, an area for temporary exhibitions or conferences, as well as a café and a terrace with a botanical garden. The museum would be set up in the remaining parts of the former aquarium-reptilium: a new functional distribution was planned together with all the necessary interventions to guarantee better exploitation of the space. The new volume, adopting different materials and specific formal solutions, would fill the hole left by the demolition carried out in 2005.

In September 2021, the building was recognised as an asset of outstanding interest and listed under Italian Legislative Decree 42/2004. Despite the incongruous transformations of the interiors, the former aquarium-reptilium was identified “as a rare and precious testimony of a rationalist and expressionist approach to zoomorphic architecture, matured with originality in the confrontation with artistic avant-gardes and capable of qualifying the river bank of Michelotti Park”³¹. Imagining for the former zoo a vocation linked to contemporary art, the hypothesis of allocating the building to the Puppet Museum was abandoned, calling for the identification of a new location for the MIMTO³².

³¹ <https://censimentoarchitetturecontemporanee.cultura.gov.it/scheda-opera?id=2667> (accessed 8 August 2024).

³² <https://torinocronaca.it/news/home/300511/gabbie-nel-mirino-dei-senzatetto-addio-al-museo-delle-marionette.html> (accessed 13 August 2024).

In June 2022, the former zoo was reopened to the public: 19,000 square metres of public green space were returned to the city. The buildings belonging to the zoological garden were cleaned up and made safe, thereby ensuring their preservation. However, a lack of funds prevented the desired restoration works, which envisaged the reuse of the buildings for cultural activities. In order to allow the people who use the park to understand the origin of the buildings, the installation of panels illustrating the history of the park and the original use of the architectural assets has been proposed for the time being³³. As for the former aquarium-reptilium, after decades of neglect and the partial demolition of the building, a solution which, by managing the necessary changes, will allow the preservation of its remains, proposing an alternative use, has still to be found. Unfortunately, the state of neglect in which it stands is contributing to its fast deterioration (Figures 11-12). It is hoped that intervention to allow reuse will soon be carried out. By interpenetrating the new functions with the given spaces, materials and forms, this type of intervention will be able to increase the semantic value of the building by exploiting the adaptive potential of what still remains.

Conclusions

The aim is to analyse the events that have affected Turin's former aquarium-reptilium of Turin in order to highlight the problems related to the conservation of contemporary architectural heritage. Failure to recognise its cultural value, or a delay in doing so, often leads to its deterioration or demolition. As Theodore Prudon points out, "establishing the architectural and historical significance of the built environment of the second half of the twentieth century is challenging, and often conflicting"³⁴. There are a considerable number of buildings for which conservation is particularly difficult due to the highly specialised nature of their previous use. The preservation and recovery of this heritage require deeper and more widespread knowledge and awareness of its real patrimonial value. The latter is an essential pre-requisite for the permanence of the asset and for the development of reuse projects suited to the specific features of the buildings. "Without losing the essence of the original building and respecting design ethos"³⁵, these interventions should propose a contemporary and sustainable use of this heritage, reconciling at most the different conservative, functional and economic needs.

33 In view of the high economic commitment required by the recovery project of the former zoo, the City of Turin intends to activate a public-private cooperation that will allow the valorisation of the site to be completed. <https://torinocronaca.it/video/torino/313197/occupazioni-abusive-futuro-gabbie-ex-zoo-parco-michelotti-corso-casale-torino.html> (accessed 13 August 2024).

34 Theodor Prudon, *Preservation, design and modern architecture: challenges ahead*, in «Journal of Architectural Conservation», n. 23, 2017, pages 27-35, p. 29.

35 *Ibid.*, p. 31.