

Identity, drawing, design. A survey on Italian creativity 19th - 20th century between the Accademia di Brera and Politecnico di Milano

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Abstract: The opportunity for this essay arises from an inter-university research and exhibition about the work of architect Camillo Boito (1836-1914), which was presented in the Project Gallery of the Politecnico di Milano (2021-2022). Boito's work is relevant since he dedicated himself to defining a «national style» for the projects of the new united Italy (1861), exploring and enhancing the formal and stylistic contents of the country's two-thousand-year history of architecture. His work was based on his own archeological studies and included directing exemplary restorations. At the same time, he was interested in the heritage of industrial arts skills, promoting the transition between quality craftsmanship and the serial development of manufactured products. The exhibition methods tested the effectiveness and capacity for restoring knowledge of information, places, environments according to the possibilities offered by the new media: "in presence" in the exhibition space and in the perceptive virtuality of spherical projection, "at a distance" by the website soon online.

Keywords: heritage—experience design—spherical pictures.

[Resúmenes en inglés y portugués en la página 188]

Introduction

The opportunity for this short essay arises from a recent inter-university research and exhibition on the work of architect Camillo Boito (1836-1914) which was presented in the Project Gallery of the Politecnico di Milano (2021-2022). This is the first public outcome of a patiently coordinated digital archiving of all original project drawings, previously scattered in numerous Italian institutions. The exhibition featured original publications, analogue and digital models of the works created by the students, alongside an interesting photo gallery prints from Boito's historical collection at the Brera Academy. Additionally, a digital photographic actual survey was showcased in a spherical projection at the new Labora 360° theater. In this research, I collaborated with curators Professors Luca Monica, Stefano Cusatelli, Annalisa B. Pesando, Sandro Scarrocchia serving as a Member of the Scientific Committee and contributing specifically on photographic iconography, spanning both historical and contemporary perspectives. This event aligns with the objectives, of the #Neweuropeanbauhaus movement (for a syntetic report of the research, and a photo gallery of the exhibition, see the links in "references").

Boito's work is relevant because he devoted himself to defining a «national style» for architecture and interiors of the new unified Italy (1861). He explored and enhanced the formal and stylistic contents of the country's two-thousand-year history of architecture, based on his own archeological studies. Additionally he even directed exemplary restorations. At the same time, he was interested in the preserving heritage of industrial arts skills, promoting the transition between quality craftsmanship and serial development of manufactured products.

Camillo Boito: a masterful XIX sec. italian architect outline

Boito was trained in Venice at Pietro Selvatico's School of Architecture. There, students were encouraged to study «national styles of the Middle Ages» in Italy, which was seen as a need of architectural «truth», since it involved expressive and material form of a people. Venice itself was described as «a picturesque variety of lines», and a gentleness of ornamentation that would be better applied to architecture today». In 1856, Boito was chosen by Selvatico as an adjunct professor to the chair of architecture, and subsequently made study tours to Tuscany and Rome, where he studied Cosmatesque art in 1857. In Florence he deepened his knowledge of Gothic monuments. He returned to Venice in 1859, and later moved to Milan to join his brother Arrigo, who was still a student at the Conservatory. In 1860, Boito became professor of architecture at the Brera Academy under Prof. F. Schmidt.

As President and Professor of Architecture at the Brera Academy of Fine Arts, and later founder of the School of Architecture at the new Milan Polytechnic, Boito established a training method. It was based on accurate knowledge of geometric drawing and decorative design, he promoted and organized an incessant institutional, academic and editorial debate for the coordination and valorisation of the quality and language of design, conceived unitarily at all scales: from the building in the city, to the architectonic spatial proportions up to the interiors and decorations, to the coordinated design of the furnishings.

His approach to design and his civic perspective as an architect, left a legacy among his students. In the late

20th and early 21st century, his historicist, eclectic and monumental conception was part of new projects during city development.

In the specific context of this short essay, the elements of continuity and even more importantly, of discontinuity between the evolution of industrial arts and what would later be defined as «Design» are to be defined very cautiously, conceptually and terminologically.

Some clear strategies in Boito's theories and works are exemplary. For instance, regarding interior design and details, he defined serial and combined decorative elements within the overall composition, integrating architectural space with specific artistic interventions.

A comparative analysis of Boito's theories and works regarding the subsequent development of design can be appreciated, with some references already existing in current academic literature. However, dwelling on it would be redundant with the objectives and limitations of this paper. Nonetheless, some of the terms have a clear assonance with the subsequent and current design culture. This is the main theme of the research underlying the exhibition, exemplarily illustrated in Paolo Portoghesi's *Lectio Magistralis* at the School of Architecture Urban Planning Construction Engineering. In the unitary conception of the project, the various scales of the drawing had to convey the same attention, both functionally and stylistically. This approach was made in order to make the «body» of the building dialogue with the «body» of the inhabitant, potentially surrounding the visitor's path with the same sensorial, visual, proxemic and tactile experience.

The search for beauty, therefore, was not merely proclaimed in generic terms but practiced through the architect's choices of competence. The essence of Boito's project: not only focuses on aesthetically superficial terms, but also on deepened commitment with functional logic, compositional articulation of spaces, technical-constructive appropriateness, involvement of artists and craftsmen with specific skills in the working of specific materials.

Theory, drawing, image.

In all these phases of elaboration and research, Boito skilfully and diversely used two essential and integrated strategies of the expression of ideas. The theoretical language of *text* and *word* (through numerous critical essays, editorial and educational initiatives, persevering teaching activity, lively literary activity of narrative and autobiographical fiction, organization of calls for project competitions for new civic activities in the cities) and the visual language of drawing and image (in project drawings, for the promotion of teaching Drawing at all levels of education, illustrated drawing, and also pioneering photography in publications).

In the elaboration of all these initiatives, Drawing was explicitly or implicitly affirmed with a positivistic determination typical of its era, as an instrument capable of transforming ideas into forms, matter into artifacts, buildings into environments for the new civil society. In other words, it was considered a tool, almost an algorithm, we could say to achieve visual intermediation

that could bring together the most diverse cultures and formations into an interdisciplinary dialogue.

From drawing to photography.

Significant attention was paid by Boito in photography. This new visual technique Boito represented turned out as useful and detailed mnemonic support. It allowed, through «an art born of a ray and a poison», to depict architectural artifacts accurately and reproducibly. In fact, his collection originally consisted of an autobiographical repertoire of destinations from his own Grand Tour of architectures, monuments, styles.

Photography, therefore, introduces a factor of «iconicity» into the eclectic quotations, which can be stenographically evoked as inspirational sources, without necessarily the philological burden due to a canon, but even with the freedom to emulate its aesthetics. Thus, photography is delegated a conspicuous part of the «copying» process of the relief, although evidently still far from photogrammetric accuracy. In addition to his personal collection of prints, which I studied in my PhD thesis, his direction gave important impetus to the systematic collection of the first photographs of works of art and architecture also for educational purposes - also in slides on glass - which have now become a cultural asset in their own right.

Disciplinary multiplicity and popularized publishing.

This cross-cultural trust and interdisciplinary competence indeed characterized intellectuals of the 19th century, before the specialist divide of the 20th century, which marked the legacy of disciplinary specializations and powerful techno-scientific capacities, sometimes making us regret a possible unitary vision of knowledge in the face of the seemingly irredeemable complexity of the present. In this period the Universal Expositions began and developed, representing a phenomenon of international communication of innovations and trade, such as a true public interdisciplinary diplomacy in the formation of popular culture of product quality.

In Italy, some enlightened publishers promoted an almost encyclopedic series of small popular and technical volumes written by the leading experts in the technical, manufacturing and artistic sectors of the period. The Hoepli Manuals contributed to the professional or amateur sharing knowledge in the homes of Italians, as did the publishing of other groups such as Istituto di Arti Grafiche di Bergamo or Vallardi Editore.

The main publishing work, promoted and directed by Boito, was the magazine *Arte Italiana Decorativa e Industriale* (1892 - 1911), an exemplary review of the Italian and European art industry in the second half of the 20th century.. This edition follows similar well-known movements such as the *Ver Sacrum* of the Secession in Vienna, the *Jahrbuch* of the *Werkbund* in Germany, the *Arts and Crafts* in Great Britain and the *Arts décoratifs* in France.

Exemplary masterpiece case studies.

Some of Boito's works, accurately represented in the exhibition, emblematically demonstrate this desire for design integration at different dimensional scales between architecture, industrial and decorative arts, in the enveloping accuracy of the design and realization: such as the famous staircase of Palazzo Cavalli Franchetti in Venice (1886), and the former Museo Civico in Padua (1879).

In these works, the architectural morphology of the ensemble is declined in the structural constraints of the typology in the ascending path, in the ergonomic and visual proportions towards the vertical space, accompanying the path with bas-reliefs, polychrome and inlaid marble coverings, geometric decorations - which frame the large openings to the light of the Gothic style windows - and design the entire space of the walls and vaults of the ceiling.

Visual artists, bas-relief decorators, stone and wood craftsmen, wrought-iron blacksmiths and bronze sculptors were involved in the material realization of the design of these places, which, forcing the chronology of terminologies, could be defined as 'total work'.

During the making of these projects, a special care was taken to organize the sequences of decorative elements, and even some serial parts of the construction itself, such as the columns of the balustrades of the stairs, using elements that were serial-produced. The design of which would become a reference prototype for other constructions, documenting the samples, perhaps some still in plaster, in an absolutely pioneering way, using the new representation technique that had recently become available: the photography.

Generally speaking, the design experimentation of each work has the predictable habit of becoming the reference for further citations, but the awareness demonstrated by Boito in rendering the artifact as an emblematic and exemplary object, almost a design manual in the solidity of the artifact, also supports the methodological value of his choices in his theoretical writings, and makes his works like iconic compositions, as if prepared to be grasped and recombined for umpteen reworkings.

International influence from Boito legacy and critical fortunes.

Several of his pupils also found their way to Argentina, where you find numerous traces, documented by now well-detailed studies, in public and private buildings that are also influenced by 19th-century Italian influence in Buenos Aires. An interesting study could be carried out in collaboration with local scholars on similar Latin American experiences of 19th-century stylistic integration between architecture and industrial arts, and of possible local publications that emulated Boito's cultural imprint. Thanks to the possible intercontinental dissemination of the editions he promoted, albeit in a multicultural context and far from a specific monumental and historical heritage to which they could refer.

Exhibition design - experience design.

In the complete repertoire of Boito's works presented in the exhibition, these two case studies were documented by visual wall multi-projections of the original digitized drawings, original publications from the extensive repertoire of the Historical Archive of the Politecnico di Milano, scale models both in analogue and digital 3D prints. In addition, the photo gallery features reproductions of the original 19th-century prints from Boito's Personal Photographic Collection - preserved at the Brera Academy of Fine Arts - were here compared with a survey of architectural photography that I realized in digital shooting; some of these interiors pictures captured by spherical camera (suitable for viewing in VR / AR) were presented by the support and courtesy of the Politecnico's new Labora - physical and virtual modeling -360° Theater.

Conclusions

This research experience, which was conducted and researched jointly by a group of scholars from different institutions, activated the resources of this current generation's interests, as had already happened in some of those of their masters, by retracing historical traces in the knowledge of their common origins. As in every phase of culture, each epoch seeks and recognises - according to its own interests and cognitive strategies - the affinities and discerns the differences with those who preceded it, or attempts to explore the unexplored in its own source. Despite the diversity of disciplinary competences and specific research activities, this path has made it possible, thanks to digital technologies as well, not only draw light into the collection of information and consultation of the original documents. In some ways preserved and shareable for study in a certainly non-invasive manner, but to make the disciplines dialogue with greater agility and the possibility of comparing sources and interpretations. History is unrepeatable, and particularly in this case, the biography and works of Camillo Boito have further - should it still be necessary to realize this, a wealth of nuances and a multifacetedness of skills in which it is difficult to completely identify. The inheritance in the design culture of this author surprises us, precisely because it demonstrates an impressive creative and interpretative capacity to experience the contradictions and complexities of the present. This 'modernity' is the essential message, sharp and interpellating the closer one gets to reading it.

Lastly, the exhibition methods tested the effectiveness and capacity for restoring knowledge of information, places, environments according to the possibilities offered by the new media. In presence in the exhibition space, at a distance in the website - soon on-line - and in the perceptive virtuality of spherical projection.

All this has been done with and for the new generations of students in the very place of the School that Boito founded, with ideas, methods, intuitions; and also giving way - exactly on the eve of the First World War - to the twentieth century that we retrospectively know. New

great challenges similarly await us in our present, but we are certainly encouraged by these robust examples.

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Resumen: La oportunidad de este ensayo surge de una investigación y exposición interuniversitaria sobre la obra del arquitecto Camillo Boito (1836-1914), que se presentó en la Galería de Proyectos del Politécnico de Milán (2021-2022). La obra de Boito es relevante ya que se dedicó a definir un «estilo nacional» para los proyectos de la nueva Italia unida (1861), explorando y potenciando los contenidos formales y estilísticos de la historia milenaria de la arquitectura del país Su trabajo se basó en sus propios estudios arqueológicos e incluyó la dirección de restauraciones ejemplares. Al mismo tiempo, se interesó por la herencia de las técnicas de las artes industriales, promoviendo la transición entre la artesanía de calidad y el desarrollo en serie de productos manufacturados. Los métodos expositivos pusieron a prueba la eficacia y capacidad de restauración del conocimiento de la información, los lugares, los entornos, según las posibilidades que ofrecen los nuevos medios: «en presencia» en el espacio expositivo y

en la virtualidad perceptiva de la proyección esférica, «a distancia» por la página web próximamente en línea.

Palabras clave: patrimonio-diseño de experiencias-imágenes esféricas.

Resumo: A oportunidade para este ensaio surge de uma pesquisa e exposição interuniversitária sobre o trabalho do arquiteto Camillo Boito (1836-1914), que foi apresentada na Galeria de Projetos do Politécnico de Milão (2021-2022). O trabalho de Boito é relevante, pois ele se dedicou a definir um "estilo nacional" para os projetos da nova Itália unida (1861), explorando e aprimorando os conteúdos formais e estilísticos dos dois mil anos de história da arquitetura do país. Ao mesmo tempo, ele estava interessado no patrimônio das habilidades das artes industriais, promovendo a transição entre o artesanato de qualidade e o desenvolvimento em série de produtos manufacturados. Os métodos da exposição testaram a eficácia e a capacidade de restaurar o conhecimento de informações, lugares e ambientes de acordo com as possibilidades oferecidas pela nova mídia: "em presença" no espaço de exposição e na virtualidade perceptiva da projeção esférica, 'à distância' pelo site logo online.

Palavras-chave: patrimônio - design de experiência - imagens esféricas.

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