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IV CONVEGNO INTERNAZIONALE E INTERDISCIPLINARE  
SU IMMAGINI E IMMAGINAZIONE

4th INTERNATIONAL AND INTERDISCIPLINARY CONFERENCE  
ON IMAGES AND IMAGINATION

# IMG23

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A cura di / Edited by  
Stefano Brusaporci, Pamela Maiezza, Adriana Marra  
Ilaria Trizio, Francesca Savini, Alessandra Tata



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Atti del IV Convegno Internazionale e Interdisciplinare  
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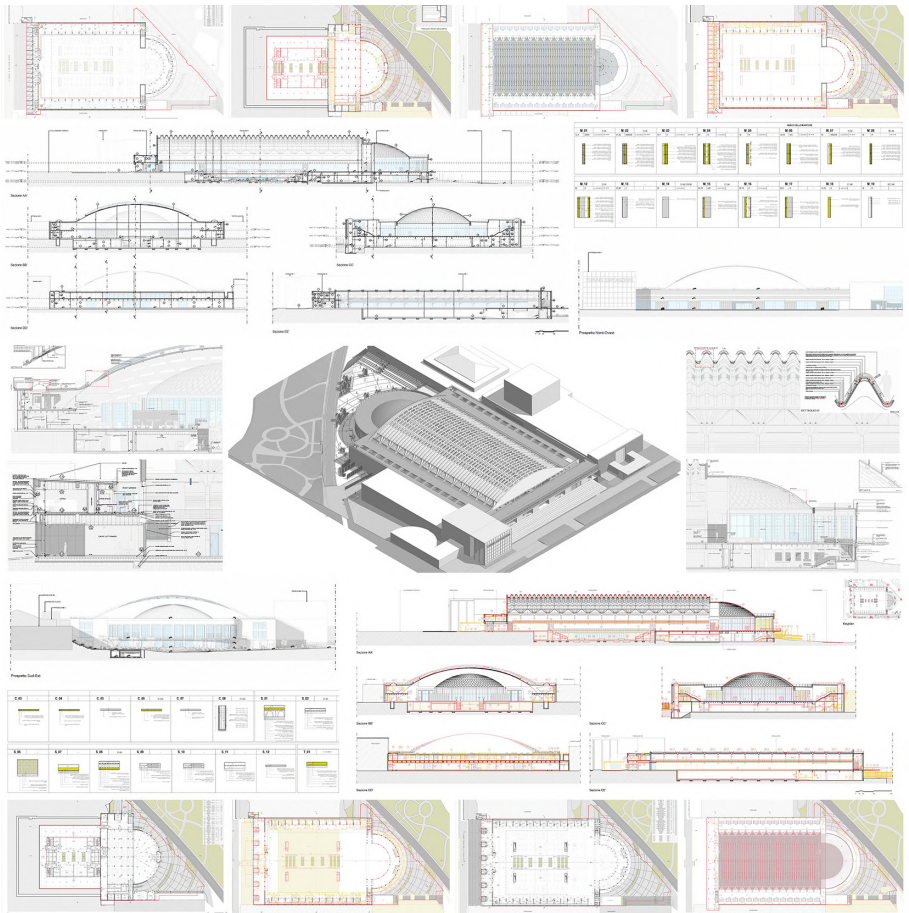
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**IMAGIN(G)  
HERITAGE**



# A Heritage of images witnessing the passage of time

## The renovation of the Torino Esposizioni complex

### Abstract

The essay describes the outcomes of the restoration of the Torino Esposizioni complex, an exemplary work of mid-century engineering by Pier Luigi Nervi. The complex is well known to the community for its various uses over the years and for the complete state of neglect it has been in since the post-Olympic period. In line with the call's suggestions, the Padiglione 2 well manifests the passage of time through a collection of images, between history and memory. The important work of digitizing the artifact and especially the HBIM modeling of the pavilion can be told through images.

### Keywords

Pier Luigi Nervi, Torino Esposizioni, Civic Library, Pictorial turn, Digitization.



## INTRODUCTION

As part of its policy of enhancing the value of its real estate assets, the city of Turin has submitted a proposal for intervention in the Po River area to the Ministry of Culture. The work includes the redevelopment of the Parco del Valentino and the restoration of the Torino Esposizioni complex. The renovation of Torino Esposizioni constitutes a unique opportunity for the regeneration of exceptional architecture in which to place the new Central Civic Library of Turin and the training and advanced research activities in the field of Architecture of the Politecnico di Torino. The new complex is proposed as a space open to the city and to the multiplicity of its users, as the fulcrum of connection of a cultural system that is in part fragmented today, linking presences of exceptional architectural and landscape value. This contribution is not intended as a mere chronicle of the events that led to the proposal of this important intervention on one of the most emblematic works of the Italian 20th century. Instead, the excuse is particularly stimulating to emphasize the renewed role attributable to images: images can be usefully employed as evidence of the passage of time, reinforcing the notion that the visual paradigm can appropriate an equal and complementary role to the verbal one. In this stylistic exercise, it is precisely through a narrative set in images that the passage of time and the various events that have affected this artifact can be effectively described. In this context, new technologies play a fundamental role, in the transition between past, present and future: sketches, drawings and historic images give way to three-dimensional representations in axonometric and perspective views, some with more technical content, others more mimetic and popular, allowing us to imagine what will be, while at the same time implementing an already rich heritage of images so intimately linked to the history of the artifact.

## A RICH AND CONTROVERSIAL PAST DESCRIBED THROUGH MULTIPLE REPRESENTATIONS

The Sottsass-Nervi building stands in the southern part of Valentino Park; the area insists on the site of the former Palazzo del Giornale, built in 1911 for the Universal Exhibition organized for the fiftieth year of the Unification of Italy (fig. 1a). The Palazzo del Giornale was built to exalt Turin's presence and the role on the international scene, showing its identity as a great industrial pole, home to important manufacturers and factories, above all FIAT.

The buildings of Torino Esposizioni are incredible examples of architecture and structural engineering realized between the end of the 1930s and the early 1960s by some of the great engineers and architects of that historical period; it is no coincidence that perhaps the most representative pavilion, the Nervi one, destined to house the new Central Civic Library, is currently included in the UNESCO World Heritage List. The complex was born in 1937 as the 'Palazzo della Moda' designed by Ettore Sottsass; over the years, thanks to famous designers such as Roberto Biscaretti di Ruffia, Pier Luigi Nervi and Riccardo Morandi, the building underwent several transformations and it became an architectural organism known throughout the world as an exceptional example of structural engineering.

The buildings were designed by outstanding architects of the Art-Nouveau era, such as Pietro Fenoglio, Giacomo Salvadori and Stefano Molli. The idea represented by the main pavilion was the recreation of the production cycle of the powerful instrument of mass communication, the Newspaper: from the production of the paper support to the casting of the characters, from typesetting to folding (fig. 1b). Inside, there were exhibitions on related industries, the iconography of famous journalists, a exhibition of caricatures, as well as Calendar and Illustrated Postcard Exhibitions.

**Fig. 1** - Bono, *The route from the newspaper palace to Sottsass's project*, 2023, Digital composition. a) Facade of "Palazzo del Giornale", picture b/n. (Mussatti, 2017, p. 10). Private collection of Giorgio Pelassa; b) Interior of "Palazzo del Giornale" with printing presses, picture b/n. (Balocco, 2011, p. 93. In: Mussatti, 2017, p. 21); c) Facade of "Palazzo della Moda", picture b/n. Retrieved February, 20, 2023 from <https://www.exclusivebrandstorino.com/it/guide/torino-la-cultura-della-moda-italiana/>; d) Interior view of the dance garden in the Palazzo della Moda, picture b/n. (Casabella n.133, 1939, p. 27. In: Mussatti, 2017, p. 113); e) Physical model, picture b/n. (Gregnanin, 2010, p.15. In: Casabella n.108, 1936, pp. 20-25); f) Framing and general floor plan, picture b/n. (Gregnanin, 2010, p. 15. In: Casabella n.108, 1936, p.20- 25); g) Sections, picture b/n. (Gregnanin, 2010, p.15. In: Casabella n.108, 1936, pp. 20-25).



**a**



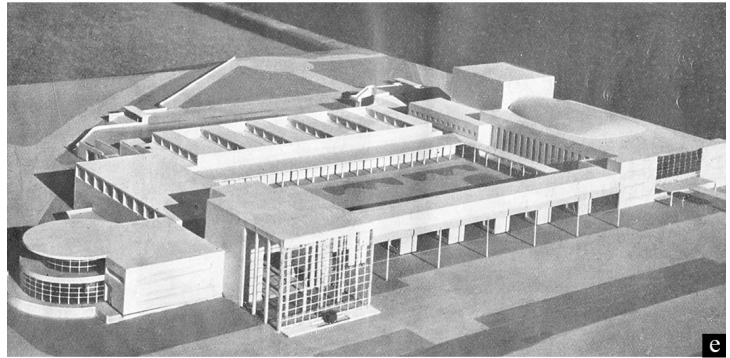
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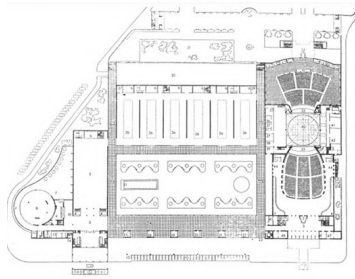
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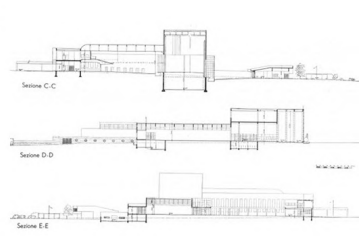
**d**



**e**



**f**



**g**

In 1928, the Esposizione Nazionale Italiana was organized. After this event, just in front of the Palazzo del Giornale (Garuzzo, 1928), the first Palazzo della Moda was built in 1932, designed by Umberto Cuzzi for the interiors, by Annibale Rigotti, Aldo Morbelli and Gino Levi Montalcini; the latter was also in charge of the subsequent exhibition (fig. 1c-d). In the following year, a competition was announced for the design of the second Palazzo della Moda, replacing the Palazzo del Giornale. The new building stands out for its rationalist architecture, with pure and simple forms, in stark contrast to the opulence and decorative emphasis of the previous Palazzo del Giornale.

In 1947, the newly founded Società del Palazzo delle Esposizioni needed flexible exhibition spaces for various events. It was decided to grant the society the space of the Palazzo della Moda. The project was assigned to Roberto Biscaretti di Ruffia, an engineer from Fiat, whose outline design maintained the layout of Sottsass's project (figg. 1e-f-g). In 1947 the contract for the reconstruction of the Palazzo della Moda was awarded to Pier Luigi Nervi.

For Pavilion 2 Nervi designed a basilica with a rectangular free surface of 81x112 m. This is scanned along the longitudinal axis by a series of inclined, sinuously shaped shelf-pillars with a pitch of 7.5 meters to support the roof vault and the intermediate floor which acts as a balcony projecting over the nave. The inclined pillars in turn rest on shaped plinths to counter the thrust of the enormous vault covering the central space (fig. 2a-b). Completing the nave, towards the park, is the large glazed apse as already provided for in the Biscaretti project (fig. 2c). To build the pavilion, Nervi uses innovative systems already experimented by the Società Ing. Nervi e Bartoli of Rome, forerunners in the prefabrication of ferro-concrete systems.

In addition to the construction advantages (fig. 2d), the structure combines an admirable architectural expressiveness particularly appreciable in the transition from the undulating vault to the large inclined pillars. For the construction of the semicircular apse, at the bottom of the nave, characterized by a diameter of 60 meters, a construction system based on the prefabrication of lozenge-shaped elements, connected by cast-in-place reinforced concrete ribs, is adopted (fig. 2e-f). The overall thickness, taking into account the ferrocement of the lozenge-shaped tiles, is only 7 cm. The entire system of the horizontal structure, with the visible ribs that design the framework, together with the undulating and perforated ribs of the great vault, constitute that admirable structural and compositional creation that characterizes the originality and beauty of Nervi's masterpiece.

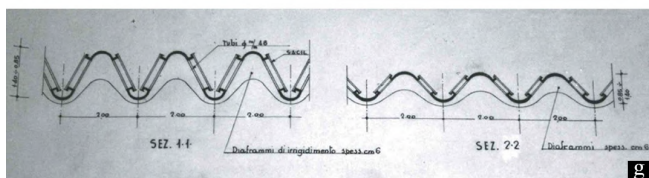
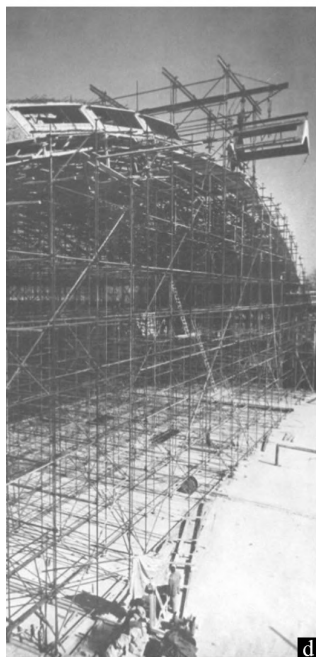
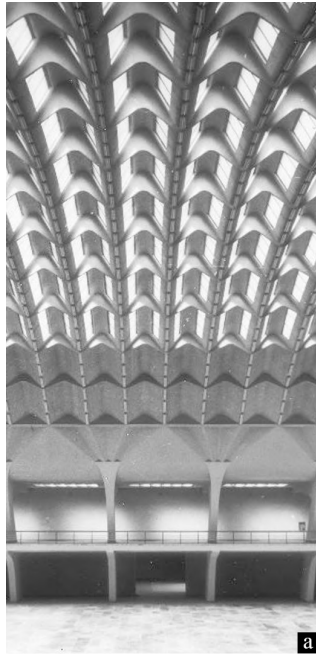
The complex was intensively used during the 1960s and 1970s as an exhibition center and the venue for several editions of the Salone dell'Automobile di Torino (fig. 3a). In 1989, the trade fair activity was transferred to Lingotto, beginning a period of scarce use, interrupted only for the 20th Winter Olympic Games, when the building hosted ice hockey matches (2006) (fig. 3b). Since 2015, the Torino Esposizioni complex has hosted various exhibitions such as the contemporary art festival 'Paratissima' (fig. 3c).

## RECENT IMAGES TO DESCRIBE THE NEW DESIGN PROPOSAL

Starting from the restoration of these buildings, now not used and in part already degraded, the architectural and functional redevelopment project is proposed as a broad urban regeneration operation to establish new functions such as reading, studying and research, in a way that complements the area's historical uses, which have always been oriented towards culture, education, nature, sport and food.

The project for the new Civic Library pays attention to the conservation and enhancement of the existing architectural and structural elements, while preserving the original legibility of the exceptional 20th-century structures. The proposal also focuses on the definition

**Fig. 2 - J. Bono, *An innovative construction: the forms and connections of Nervi's structure*, 2023, Digital composition. a) Front view, picture b/n. (Domus 231, 1948); b) Side view, picture b/n. (Gregnanin, 2010, p. 17. In: Carpanelli, 1955, p.227); c) Apse, picture b/n. (Gregnanin, 2010, p.18. In: Carpanelli, 1955, p. 226); d) Assembly of the prefabricated elements of the vault on "innocent" tube scaffolding, picture b/n. (Gregnanin, 2010, p.20. In: Carpanelli, 1955, p.224); e) single element of the corrugated vault, picture b/n. (Gregnanin, 2010, p.21. In: Carpanelli, 1955, p.223); f) Alignment of prefabricated elements for installation, picture b/n. (Gregnanin, 2010, p.21. In: Carpanelli, 1955, p.223); g) Technical detail of iron and concrete roofing, Indian ink inchostro on glossy paper, 580x1364 mm. (Vernizzi, 2011, p. 43. In: CSAC Parma, coll. 157/2)**



**Fig. 3 - J.** Bono, *The life of Torino esposizione complex from the 1960s to the present day*, 2023, Digital composition. a) Showcase of Turin's automotive industry, "Il Salone dell'automobile", 1954, picture b/n. Retrieved February, 19, 2023 from [http://www.torinoesposizionegetty.polito.it/history/torino\\_esposizioni](http://www.torinoesposizionegetty.polito.it/history/torino_esposizioni); b) Ice hockey rink during the Winter Olympics, 2006, picture RGB. (Urban Center Metropolitan, 2014, p. 16. In: Marinò, 2015, p.102); c) Cultural exposure: Paratissima, 2014-2015, picture RGB. Retrieved February, 20, 2023 from <https://www.urbanitaly.com/portfolio-item/turin-mollino-nervi/>



of the distributive, functional and technical elements of the entire complex as well as the individual functions, consistently with the architectural values expressed by the Soprintendenza Archeologia Belle Arti e Paesaggio. The new Library assumes all the values and attractive potential of a modern public library, a cultural and information center, but also a meeting and socializing place, easily accessible to users of all ages and of different cultural and social conditions and backgrounds, thanks to the increased informative potentials (including multimedia), greater visibility and attractiveness, together with the comfort of the rooms.

The Library will constitute a showcase and a laboratory on current affairs to offer every citizen the possibility of reinterpreting the past by looking at the present and the future, as envisaged by the Faro Convention. Participatory processes and the co-creation of content by citizenship will be promoted; the meeting and exchange between generations, different audiences and new citizens will be fostered,

also through its being digital, technological and connected: given the evolution of digital and its pervasiveness, the library will have to be digital in all its parts.

The proposal is conceived to harmonize with the wider project that included the construction of the Architecture, Design and Landscape Campus. The new library will therefore play a decisive role within the new structure, embodying a place of absolute centrality for the community, but even more so to be the point of reference for all users of the Valentino Campus such as students, lecturers and researchers. Unlike the Anglo-Saxon campuses, in fact, the campus was not dedicated only to the academic education, but was open to the rest of the citizens, thanks to its welcoming and strongly permeable structure, even though it was identifiable and had an unmistakable cultural imprint. It is therefore evident how important the theme of coexistence between citizens and the academic world will be.

The future library will have three levels: on the ground floor, traditional reading and study activities will be concentrated; two underground sub-floors: the first will be used mainly for the technological system, the second for the storage of the library's holdings. On the balcony floor there will be coworking spaces, private and laboratory rooms that can be used for activities of an educational and informative nature.

The areas close to the entrance are conceived as a space of connection and integration with the outdoors, in which a literary cafeteria and a laboratory for urban and social experimentation for the participatory planning of cultural initiatives are planned. The central part of the ground floor, where the traditional reading and study activities were located, is organized with furnishing elements delimiting the different areas, without resorting to fixed structures; along the sides: open shelves, the service and back office areas of the staff, stations for self-service lending and return. In the final part of the apse, which completely overlooks the park, there will be spaces for reading in a classical and informal manner, so as to enhance the views to the outside through the large windows and the contact with nature in the park. In the great hall, the paths will be very intuitive and determined by the very conformation of the building and the few interventions in the project that preserve the original image of Nervi's design: users will be able to move freely on the level square, descend to the underground functions in the underground courtyard, climb up the internal balconies, exit onto the external balcony, enter the square-park and then enter the Valentino park from this new exit.

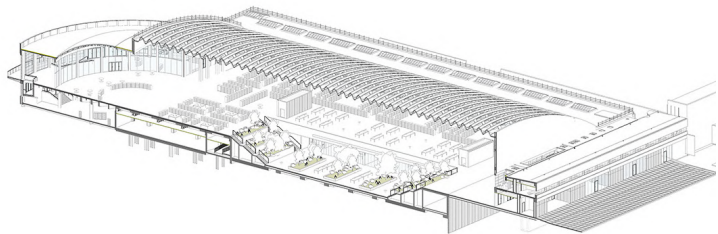
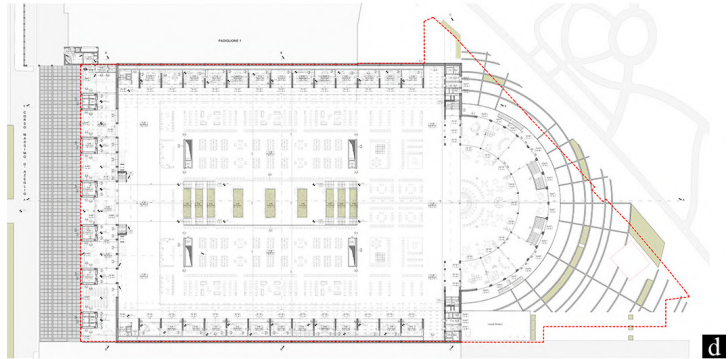
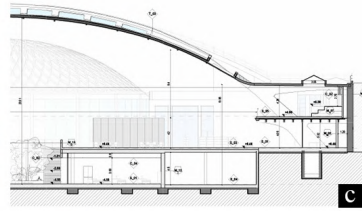
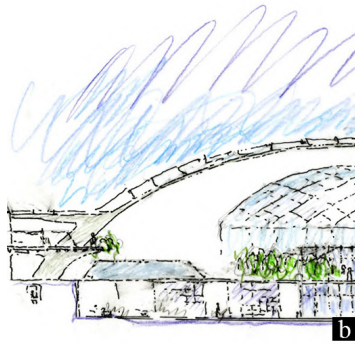
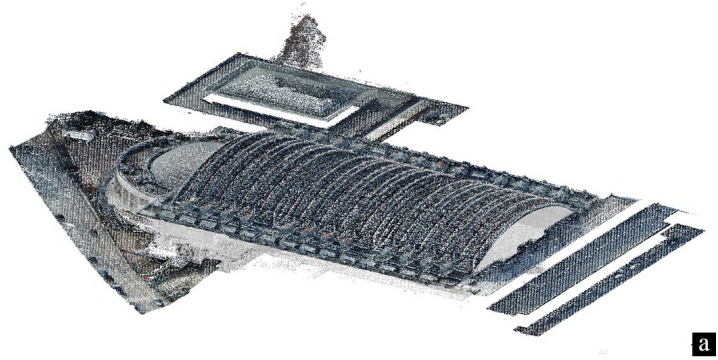
Although this is not the right moment to delve into the operational procedures adopted, as far as the design process is concerned, an integrated metric survey and the consequent production of point clouds (fig. 4a) allowed for the exact reproduction of the state of the art of the building. The subsequent processing in the BIM environment (fig. 4 c-d-e) allows to keep track of the existing situation and what is to come: the images previously commented are very interesting from a historical point of view but absolutely unrelated, while the infographic database collected will be a valuable documentary resource for the management of the construction site and the useful life cycle of the building. In this regard the images produced have a dual value, both documentary and informative, telling a part of history and constituting themselves a documentary heritage of undoubted value for years to come.

## CONCLUSIONS

Through this narration described and explained through a multitude of collected images, it is possible to reaffirm - in the words of Thomas Mitchell - how images have the tendency to become alive in different declinations. Specifically, two of the five declinations introduced by the author emerge forcefully within this contribution: in the first paragraph the images root their vitality in the memory and imagination of the ob-

**Fig. 4 - J. Bono, *The restitution of the project through images*, 2023, Digital composition.**

a) ICIS S.r.l., Point cloud restitution, picture RGB; b) Arch. Aimaro Isola, Vision of the project, watercolor sketch. Retrieved February, 20, 2023 from <https://www.isolarchitetti.com/index.php/padiglione-nervi-torino>; c) J. Bono, Cross-section, RVT elaborate; d) J. Bono, Ground floor plan with context, red outline highlights the intervention area, RVT elaborate; e) J. Bono, Axonometric cutaway of the inner courtyard, the focus of the project, RVT elaborate



server; in the second part the images acquire their vital force through their legibility, thanks to the addition of texts, captions or encodings (Demaria, 2019). Going back to this last point, which recalls one of the three principles introduced by the acronym B.(I-nformation).M, it is possible to unveil the common thread that allows the image (or in this case a collection of images intimately connected to each other) to become the founding element of architecture. This attitude is visible thanks to a twofold look: the superficial one, taken on by its representation as an illustration, description, communication and explanation of its formal and technical characteristics; then, the deeper one, in which the image takes root and takes root and allows the "project to develop, grow and finally come to fruition" (Cicalò, 2010, p. 20).

## ACKNOWLEDGMENTS

Although the contribution was conceived jointly, M. Lo Turco is author of paragraphs *Introduction* and *Conclusions*; A. Tomalini of paragraph *Recent images to describe the new design proposal* and J. Bono of paragraph *A rich and controversial past described through multiple representations*.

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**Cover figure - J.** Bono, *Recent images telling the story of the new project proposal*, 2023, Digital composition.



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