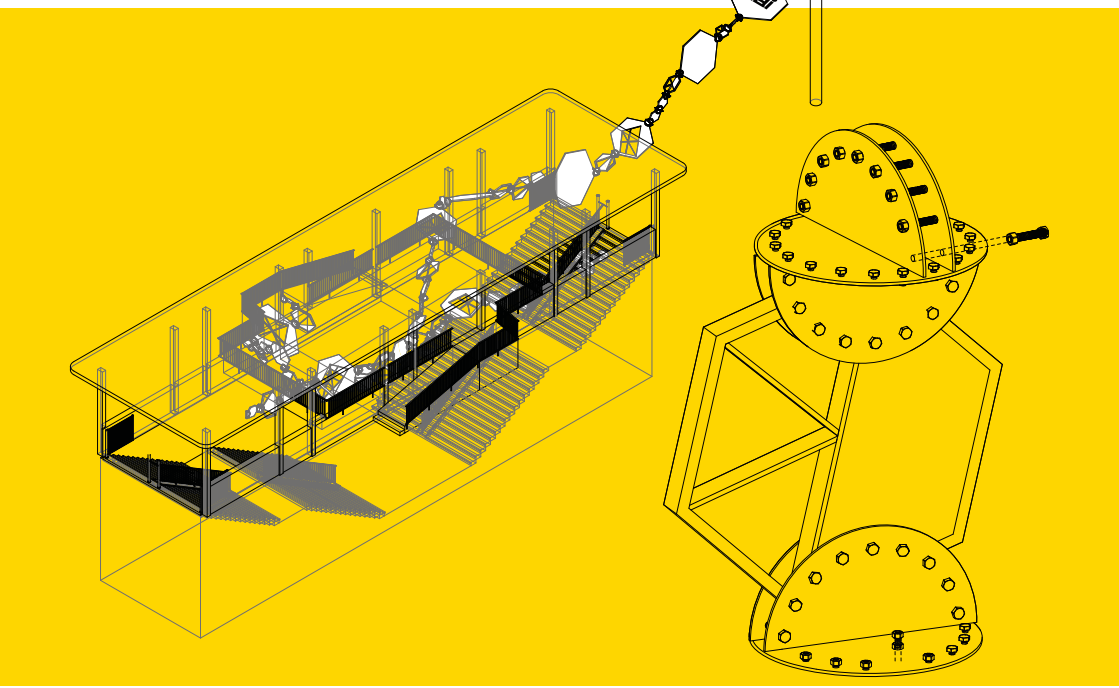
Details

Davide Crippa
Barbara Di Prete



EDIZIONI
IL PAPAVERO

Details

Sustainable exhibit from
a constructive perspective

The text underwent double-blind peer review, in accordance with the criteria defined for publication in the Series

ISBN 978-88-3294-253-8

© Copyright EDIZIONI IL PAPAVERO

Unauthorized reproduction, even partial, by any means made, including for internal and educational use, is prohibited.

EDIZIONI IL PAPAVERO - MARKETING D'AUTORE
of Martina Bruno
Via Francesco De Sanctis, 32
83030 Manocalzati (AV)

Rights of translation, electronic storage, reproduction and adaptation, in whole or in part, by any means are reserved for all countries.

Authors:
Davide Crippa (Università Iuav di Venezia, Dipartimento di Culture del Progetto) and Barbara Di Prete (Politecnico di Milano, Dipartimento di Design)

The work is published in a digital E-Book version only ISBN 978-88-3294-253-8
Copies of this limited edition were produced for the exclusive use of the Authors.
The publication is not commercially available in the print version.

Promoted by:
Social Factory S.R.L.
Via San Benigno, 4 - 20133
Milano
info@designdifferente.it
www.designdifferente.it

Project funded by the European Union - Next Generation EU - PNRR
Transizione Digitale Organismi Culturali e Creativi

Essays and project sheet texts:
Davide Crippa - Università Iuav di Venezia, Dipartimento di Culture del Progetto (sheets 1-18)
and
Barbara Di Prete - Politecnico di Milano, Dipartimento di Design (sheets 19-35)

Graphics and layout:
Ideas srl

Finanziato dall'Unione europea
NextGenerationEU

MINISTERO DELLA CULTURA

DESIGN DIFFERENTE

"Funded through the Public notice for the submission of proposals for interventions for the cultural and social regeneration of small historic villages, to be financed within the framework of the PNRR, Mission 1 'Digitalization, innovation, competitiveness and culture', Component 3 'Tourism and Culture 4.0' (M1C3), Measure 3 'Cultural and Creative Industry 4.0', Investment 3.3 'Support to the cultural and creative sectors for innovation and the digital transition', financed by the European Union – NextGenerationEU and managed by the Ministry of Culture"

Index

Section 1 Pag. 10

Reuse and sharing as exhibition paradigms Pag. 11
D. Crippa

The transformative potential of exhibit design Pag. 21
B. Di Prete

Section 2 Pag. 51

The Re-Factor Research Pag. 52
D. Crippa, B. Di Prete

Sheet 1: F. Albini, Scipione, Brera Art Gallery, Milan 1941 Pag. 55

Sheet 2: F. Albini, Permanent Exhibition, Civic Galleries of Palazzo Bianco, Genoa 1949 Pag. 60

Sheet 3: F. Albini, New Italian Art, Liljevalchs Konsthall, Stockholm, 1953 Pag. 65

Sheet 4: A. and P. G. Castiglioni, Industrial Design Section, Triennale di Milano Palace, Milan 1954 Pag. 70

Sheet 5: C. Scarpa, Piet Mondrian, National Gallery of Modern Art, Rome 1956 Pag. 75

Sheet 6: A. and P. G. Castiglioni, RAI Pavilion, 34th Milan Fair, Milan 1956 Pag. 84

Sheet 7: A. and P. G. Castiglioni, Montecatini Pavilion, Paint Hall, 37th Milan Fair, Milan 1959 Pag. 89

Sheet 8: F. Albini and F. Helg, Montecatini in Southern Italy, Montecatini Pavilion, Milan Fair, Milan 1961 Pag. 91

Sheet 9: A. and P. G. Castiglioni, RAI Pavilion, 43rd Milan Fair, Milan 1965 Pag. 99

Index

Sheet 10: A. and P. G. Castiglioni, Showroom Flos, Milan 1968 Pag. 101

Sheet 11: AG Fronzoni, Concrete Poetry Exhibition, Ca' Giustinian, Venice 1969 Pag. 109

Sheet 12: M. Di Puolo, Theatre in the Weimar Republic, Palazzo delle Esposizioni, Rome 1978 Pag. 111

Sheet 13: AG Fronzoni, 7 Sets for Teatro del Falcone, Genoa 1979 Pag. 119

Sheet 14: A. Castiglioni, Italian Pavilion – TELECOM, Geneva 1979 Pag. 121

Sheet 15: A. Castiglioni, The Other Half of the Avant-garde, Palazzo Reale, Milan 1980 Pag. 129

Sheet 16: F. Albini and F. Helg, Temporary Exhibitions Hall, Castello Sforzesco Art Gallery, Milan 1980 Pag. 131

Sheet 17: P. Polato, 100 Objects of Italian Design, Triennale di Milano, Milan 1999 Pag. 139

Sheet 18: Migliore+Servetto, Stand Thonet '04, Salone del Mobile, Milan 2004 Pag. 141

Sheet 19: A. Andraos and D. Wood, The Good Life: New Public Spaces for Recreation, Pier 40, Hudson River, New York 2006 Pag. 149

Sheet 20: A. Scandurra, Gold Medal for Italian Architecture, Triennale di Milano, Milan 2009 Pag. 151

Sheet 21: Nendo, The current state of Kanazawa crafts, 21st Century Museum of Contemporary Art, Kanazawa 2009 Pag. 159

Sheet 22: Calvi Brambilla, FontanaArte Flagship Store, Milan 2013 Pag. 161

Sheet 23: C. Zucchi, Innesti/Grafting, Italian Pavilion, Venice Biennale, Venice 2014 Pag. 169

Index

Sheet 24: C. Zucchi, Sempering, XXI International Exhibition of the Triennale di Milano, MUDEC – Museo delle Culture, Milan 2016 Pag.178

Sheet 25: Migliore+Servetto, Leonardiana, Castello Sforzesco, Vigevano 2016 Pag. 183

Sheet 26: Nendo, 50 Manga Chairs, Cloister of San Simpliciano, Milan 2016 Pag. 188

Sheet 27: F. Librizzi, NOI/US Stories of communities, Ideas, Products and Reggiane Lands, Palazzo dei Musei, Reggio Emilia 2016 Pag. 193

Sheet 28: Studio Azzurro, Water Projects, Magazzino del sale, Venice 2017 Pag. 198

Sheet 29: F. Librizzi, Tires/Viscose, André Kertész, Casa Saraceni, Bologna 2019 Pag. 203

Sheet 30: F. Librizzi, A Certain Collector B, Yosuke Bandai, International Museum and Library of Music, Bologna 2019 Pag. 208

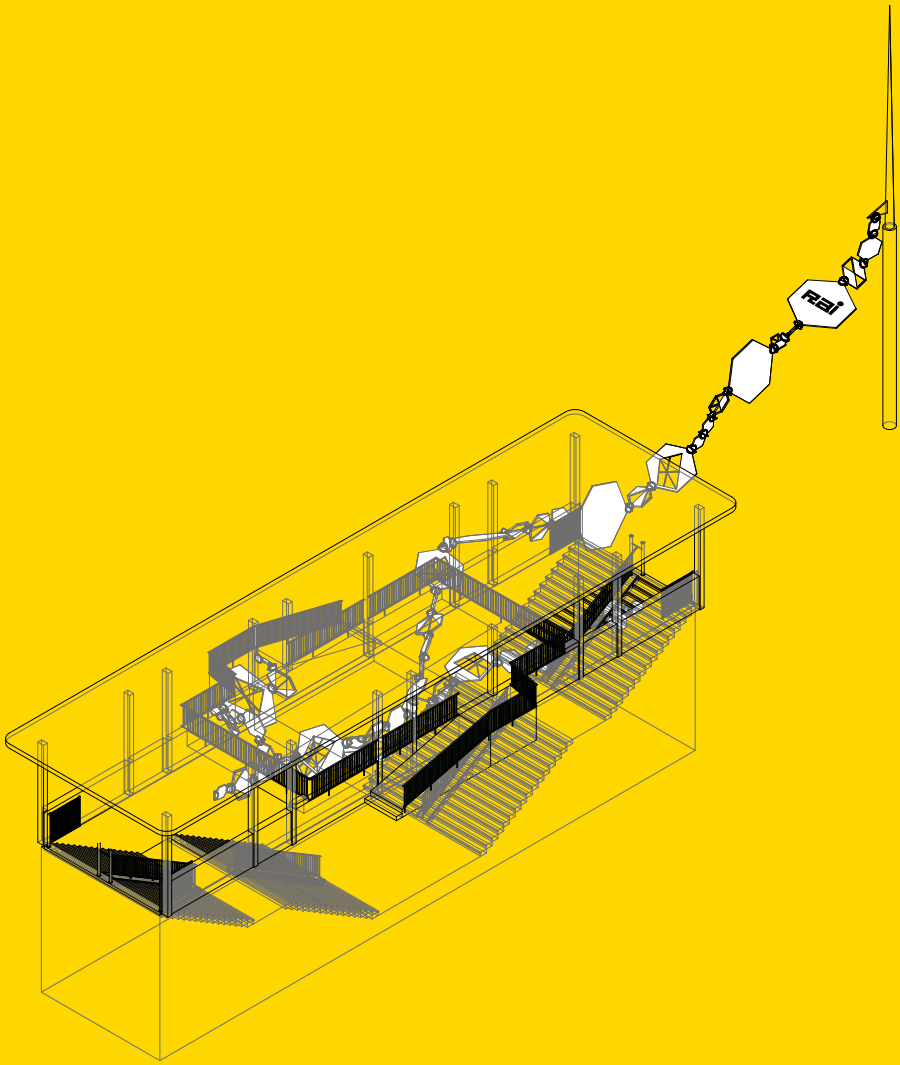
Sheet 31: M. Cassani, Studio Folder, Broken Nature: Design Takes on Human Survival, XXII Triennale di Milano, Milan 2019 Pag. 213

Sheet 32: Formafantasma, The Disquieted Muses, Central Pavilion, Venice Biennale, Venice 2020 Pag.218

Sheet 33: DotDotDot, Raphael and the Domus Aurea, Rome 2021 Pag. 223

Sheet 34: S. Boeri and J. Blanchaert, Next of Europe – Homo Faber, San Giorgio Maggiore Island, Venice 2022 Pag. 232

Sheet 35: DotDotDot, Rodin and Dance, MUDEC – Museo delle Culture, Milan 2023 Pag. 241


rai

Section 1

This section of the book offers a broad introduction to a series of relevant and no longer deferrable issues related to the field of sustainable exhibition design.
It consists of two contributions that provide a scientific framework for the topic, positioning it within both the European and specifically the Italian context. This framework is developed from multiple perspectives: social, environmental, design-related, constructional, regulatory, and historical-critical. Yet, the analysis of the current situation always aims toward the definition of desirable future scenarios and practical, achievable outlooks.

Reuse and sharing as exhibition paradigms

The contribution of design to the ecological transition of exhibition setups

D. Crippa | Università Iuav di Venezia
Department of Culture del Progetto



Fig. 1. Exhibition "Design. An Exhibition". Reversible structures designed with 3D printed wood lath and joints. SID 2024. Università Iuav di Venezia, Palazzo Badoer.

Reuse and sharing as exhibition paradigms

The contribution of design to the ecological transition of exhibition setups

Exhibition setups are traditionally conceived as temporary events, destined to generate waste in the worst cases, or, at best, as goods to be stored in museum warehouses, often doomed to be forgotten under layers of dust and time. However, the value of these exhibition devices should not be considered limited to the duration of the exhibition or event for which they were designed. Every element, every material employed in a setup possesses potential that often goes untapped but could (and should) be reused in alternative contexts—especially in light of contemporary demands that call for increased responsibility in terms of sustainable design.

This approach highlights the need to rethink setups as "open systems," capable of adapting and transforming over time. Rethinking setups with a view toward durability, rather than ephemerality, can also contribute to generating new design and cultural opportunities.

If reuse now represents a contemporary paradigm—gaining traction across all sectors with a pronounced sensitivity toward the "second life" of things—the regeneration of setups (whether museum, trade fair, cultural, or entertainment) must become both a design objective and a conscious choice, essential for the economic, environmental, and social sustainability of the sector.

In this sense, recovering materials, entire artifacts, or individual exhibition com-

ponents is not just an ecological decision—it also constitutes a strategic design approach for adding value and meaning to these items, creatively extending their useful life and reimagining their application in innovative ways, both functionally and semantically.

Socio-Cultural Framework

The traditional model of industrial production and consumption is based on a linear system that depletes resources uncontrollably, without considering any form of recovery or reuse. This economic model—strongly oriented towards consumerism and planned obsolescence—has unfortunately contributed to the rise of a widespread throwaway culture, in which goods are designed to lose value (and meaning) rapidly. This involves not only functional obsolescence, but also aesthetic obsolescence, which has fueled constant pressure to renew and repurchase, increasing the production of objects still in good condition but no longer marketable. Rethinking their value and promoting their creative reuse represents an effective response to this pervasive culture of waste.

Over the years, this model (strongly anthropocentric) has proven increasingly dangerous: it has led to a growing production of waste and, gradually, to the depletion of natural resources.

The recent climate and environmental crisis, and more broadly the growing economic and social instability, have now made clear all the limits of this consumption model, making the transition to a more sustainable and flexible system increasingly urgent. In this sense, it also becomes necessary to abandon a purely anthropocentric vision in favor of a multi-species perspective, capable of learning from nature in order to "mimic the highly effective nutrient flow systems and metabolism of nature, 'cradle-to-cradle', in which the very concept of waste does not exist" (McDonough, Braungart, 2003).

It is in this context that the circular economy emerges as the most credible alternative; it proposes a virtuous production cycle that transforms waste into reusable resources and promotes values such as reducing, reusing, recycling, and recovering (Annicchiarico, 2023). This "new" paradigm reinforces the need to design goods that can regenerate, minimizing waste through reuse, recycling, and reintegration of materials and products into the same production chain.

The pioneering theories of authors such as Pearce and Turner, who laid the foundations for the concept of a circular economy (1990), have since been developed by many cultural, commercial, and institutional actors, including the Ellen Ma-

cArthur Foundation (2012). Within the field of exhibition design, this framework has found one of its cornerstones in the theory of "design for disassembly" (McDonough, Braungart, 2003)—which calls for designing artifacts that can be easily dismantled to facilitate their subsequent reassembly. In recent years, this principle has also become the focus of political and regulatory discussions (for example, the requirements set out in the CAM for events – Minimum Environmental Criteria for sustainable events).

The Exhibition Sector as a Sustainability Challenge

The cultural exhibition sector, particularly the museum sector, is currently facing significant challenges in terms of sustainability.
The production of exhibitions and events involves the use of large quantities of materials, often non-recyclable, and results in a high environmental impact, as exhibition setups are usually destined to be dismantled and discarded once the event ends. This approach generates enormous waste, while current regulations supporting sustainable change are proving to be still insufficient.
Nevertheless, there is a growing interest—emerging from companies, institutions, and individual professionals—in more sustainable design solutions capable of reducing ecological impact and promoting the adoption of circular economy practices in exhibition design. Thanks also to the activities promoted by the sustainable exhibit cluster (IUAV, 2023), the need for a systemic rethink has become increasingly evident, aiming to overcome the technical, cultural, and design barriers that hinder the spread of more sustainable and less episodic practices.
If we are to speak of a challenge, this sector, more than others, confronts us with issues that are no longer postponable. The economic aspect of exhibitions, for instance, raises ethical questions, but increasingly financial ones as well: projects are becoming more scenographic, with a strong narrative and communicative charge, yet often serve ephemeral trends or the self-referential preferences of clients. Moreover, the tendency to use expensive materials—sometimes without real justification, non-recyclable, and used for a very short duration—results in high costs with no long-term return of value.
An analysis of the costs incurred by prestigious institutions such as the Triennale di Milano (Crippa, 2024) highlights the urgency of finding more efficient and economical design solutions, both during production and disposal phases.
While awareness among those who work daily with public and private entities is now well established, and their sensibility already oriented towards sustainable

choices, on the political level the lack of adequate initiatives, tax incentives, and specialized regulations is striking; paradoxically, it is at the legislative-institutional level that the main obstacles seem to reside, hindering the transition toward circular exhibition models.

Another challenge lies in the need for exhibition setups to adapt to specific contexts; for this reason, working on modularity, flexibility and—as explored in this research—on joints as both technical and conceptual nodes, appears to be a clearly defined direction. Modular exhibitions that use easily disassemblable and reusable components reduce the need to produce new materials for each event, enabling the adaptation of existing structures for new purposes over time.

The general lack of strategies for managing the "afterlife" of exhibition setups makes the sector highly dissipative and prompts broad reflections that should not focus solely on the design phase in the strict sense (i.e., the design of lightweight, assemblable, reversible, and customizable elements to be staged), but also on the planning of the entire process—therefore considering the costs—direct financial costs as well as indirect social and environmental ones—associated with the logistics, transport, and storage phases.

One of the most critical issues related to their management is, in fact, the post-event phase: once dismantled, exhibitions rarely find a clear destination and are often set aside without considering their potential for reuse. On one hand, there is a lack of adequate facilities for storing and possibly redistributing materials (only recently have some digital platforms, such as "Non Si Butta Via Niente," started to network the resources of various Italian museums for shared use); on the other hand, there is a lack of standardized yet flexible solutions to promote a culture of recycling—one that does not compromise the beauty and unique appeal of exhibition solutions.

This remains an open and crucial question: how can we recognize, protect, and enhance goods that can, in all respects, be defined as "non-waste waste" (Crippa, 2023, p. 26). The goal is to integrate the concept of sustainability from the earliest planning stages, developing actions capable of adapting over time and space.

It is precisely the issue of time that seems to represent the most complex challenge for the exhibition sector: temporary setups are by nature ephemeral which entails a significant environmental impact.

Temporariness thus becomes a paradox: the immediacy of the event must coexist with its ability to construct positive imaginaries that endure in the memory of visitors, and at the same time, it must coexist with the uncertain fate of the materials and structures employed.



Fig. 2. Exhibition "Design. An Exhibition". Reversible structures designed with 3D printed wood lath and joints. SID 2024. Università Iuav di Venezia, Palazzo Badoer.

The Role of Design as an Agent of Change for Ecological Transition

Design, as an interdisciplinary discipline, has a crucial role in the ecological transition. In this sense, its task is not limited to promoting process efficiency or material circularity, but is also expressed in its ability to raise public awareness about environmental issues, creating exhibitions that are themselves vehicles for messages of sustainability.

Design, therefore, is evolving towards a model that not only manages information, artifacts, logistics and afterlife, but also becomes an educational and formative tool, aimed at raising awareness among people about environmental issues and at actively building, from the bottom up, a circular culture.

The transition towards a culture of reuse and sustainability implies, in fact, a profound change in consumer behavior: education and awareness are essential to accelerate this cultural change. In this sense, the contribution of exhibitions such as "Broken Nature: Design takes on Human Survival" (XXII Triennale di Milano, 2019) has been fundamental. Anticipating the now widespread discourse, it brought public attention to the urgency of a "restorative design," aimed at

mending the increasingly fragile ties between humans and the environment.
In this context, even the designer – traditionally oriented towards the creation of the "new," of unique, original and innovative products – must find a different professional identity, directing their skills towards increasingly multidimensional and multi-actor contexts, positioning themselves as a figure capable of synthesizing different forms of knowledge and adopting a systemic vision. The designer, in fact, no longer limits themselves to designing forms and imaginaries, but must be able to valorize what already exists, adopting practices of sustainable reuse and solutions that reduce environmental impact.
Design must therefore also become an act of reinterpretation, which assigns new functions and new meanings to materials and exhibition devices, even before assigning them new forms.
In this way, every exhibition will no longer be seen as a structure destined to disappear, but as a product that can be proposed again as it is, or transformed, readapted to new spaces, new cultural contexts and types of collections, with a value that goes beyond its immediate life cycle.
In a broad sense, we could say that design acts as an agency, that is, as a force capable of influencing the surrounding environment. As James P. Lantolf and Steven L. Thorne argue, agency also has a social value because "it entails the ability to assign relevance and meaning to things and events" (2006, p. 143).
Continuing this seemingly bold parallel, we could take up the key points identified by Albert Bandura (1997), who defines five fundamental parameters of agency, which we could, by transposition, apply to design: the capacity for symbolization, that is, the representation of knowledge, for example through language; the capacity for forethought, that is, to anticipate (and guide) future events; the capacity for self-regulation, which refers to the ability to set objectives and consequently evaluate the actions to be planned; the capacity for self-reflection, that is, the ability to reflect critically and consciously on one's own actions.
These five capacities, which operate in synergy, assign each person a proactive, selective and transformative role with respect to the environment, and in this sense they can fully illustrate the role that design assumes as a primary agent of change for the ecological transition.

Repair, Reuse, Recycle: The "Re-factor" Code

In this briefly outlined scenario, the paradigm being proposed is, first and foremost, that of reuse (in exhibition design, reuse of materials, components, and

finished products useful for display purposes). The practice of reuse is conceptually very close to that of repair because both extend the life of objects without modifying them - that is, without reinserting them into the production chain to transform them into a new secondary raw material.
In this way, in addition to reducing energy and production consumption, reuse and repair give objects a new identity starting from their memory, enhancing the traces of time passed. It is an approach that opposes the logic of immediate and generalized replacement with the value of the "old" and the "imperfect." In many cases, in fact, reuse and repair not only "save" the object, but also confer upon it an eccentric value—be it aesthetic, functional, or semantic—that otherwise would not have been revealed.
The Repair Manifesto by Platform21 (2018) is very indicative in this regard, because it does not merely promote repair as an operational practice, but as an act of collective awareness, which challenges the dominant throwaway consumption model.
Reuse (whether direct, which maintains the integrity of objects and repositions them in new contexts, or transformative, which modifies them superficially and not chemically) consists in adapting materials inherited from previous situations without significantly manipulating them; howe-



Fig. 3. Exhibition of interior design models made by students of Università Iuav di Venezia. Ca' Tron, Venice, 2024.

ver, it cannot be left to chance or luck: in order to make it a systematic practice, it must be planned from the outset of the exhibition, designed in such a way that its specific parts can later ensure easy adaptation to new configurations.
In this sense, the nodes, construction joints, and assembly systems—as connections between parts—acquire a central role.
In the exhibition field, reuse represents a viable path toward sustainability, but circular design implies a vision that goes beyond mere repair or direct or transformative reuse, acting also on recycling. The difference between the two terms is substantial, because one reuses a good that has not yet become waste, while one recycles something that has already become waste and that, at least apparently, is no longer capable of fulfilling the original purpose for which it was conceived.
One of the most widespread practices in this regard is the transformation of existing materials into "secondary raw materials" (typically recycled paper, regenerated plastic, metal recovered from production scraps); even in this case, we are faced, first of all, with a process of re-signification: waste is no longer seen as something to discard, but as a resource that can be reused to create new meanings and new forms.
The results are products—and, in a broader sense, exhibitions—that are obviously functional, but also surprising for the perceptual and sensory aspects introduced by the new materials.
Emblematic, in this case, is the experience of Luca Cipelletti, who in the installation The Shit Evolution (Fuorisalone 2016), winner of the Milano Design Award 2016, transformed the concept of waste into a sensory and educational experience, exploring both the aesthetic and the structural and perceptive potential of Merdacotta®, an innovative material obtained from dried manure and clay.
In summary, the present research, not by chance named Re-factor, puts into play the strategy of the "5 Rs" (Riduzione, Riuso, Riciclo, Raccolta, Recupero), concepts promoted in Italy already since 1997 with the aim of spreading an increasingly circular economy. Among these concepts, certainly those known in English as Reduce, Reuse, and Recycleconstitute the three founding pillars for a truly sustainable economic-productive model.

The Reuse of Exhibition Setups as a Creative and Sustainable Response

Returning to the specific context of exhibition setups, reuse emerges as a creative response to the temporariness brought by exhibitions and events in general.

It is referred to as a "creative response" because, through the reinterpretation of existing materials and objects, new narratives can be created, in which the past becomes a resource for the future.
Exhibition setups, in this framework, are no longer mere supports for an event, but become true manifestos of regenerative practices, where every element has something to tell: they are no longer seen as negligible "residues," but as elements that carry with them a history of use, transformation, and memory. This strategy of action makes it possible to create projects that are alive and dynamic, in which every object maintains a link with its past, but adapts and reinvents itself in new contexts.
Emblematic in this sense is the project developed by Design Differente for the CAP stand at "Ecomondo" (2021), where some furnishings were made using the leftovers created by the CNC cutting of flat panels that would later compose other pieces of furniture for the same stand (physically, these leftovers represent a "negative," but symbolically these production scraps acquire the appeal of the void and the gap as transformative potential). Equally powerful is the narrative underlying the ecological choices pursued in the project Zero Waste Bistro, a pop-up restaurant entirely built according to the principles of the circular economy, presented during NYCxDESIGN 2018 by the Finnish Cultural Institute in New York. Here, the installation, designed by Linda Bergroth, transformed the space into a new manifesto of sustainable dining, using recycled plastic panels made from the recovery of tetrapak packaging.
The reuse of materials and devices in exhibitions thus responds to a practical need, but also becomes an opportunity to propose new communicative, visual, and perceptive qualities. In particular, one can consider the macro-division into two fields of meaning that refer to a dual aesthetic matrix connected to reuse: the aesthetic from waste and the aesthetic ofwaste (Di Prete, Ratti, 2023). The boundary between the two categories is seemingly blurred, but it allows us to identify a different design approach that a designer can adopt with respect to waste: they can act on the physical structure of the material, or they can act on its symbolic structure, with two obviously antithetical outcomes.
To try to exemplify some possible consequences, one can think of Martì Guixé's project The War That Is Coming Is Not the First for the MART in Rovereto (2004) and that of Aravena for the Foyer of the Venice Biennale (2016), both aimed at transforming the remains of the previous installation into an evocative installation, capable of interpreting the "rubble" in terms of value as well as functionality.

Following the lesson of these two projects, which are certainly forerunners of an approach now recognizable, the exhibition Waste Age: What Can Design Do? was set up between 2021 and 2022 at the Design Museum in London using components from previous exhibitions. Once again, attention to sustainability was not limited to the contents on display, but also involved the exhibition design itself (the URGE collective adopted strategies to limit CO_2 emissions and to optimize the life cycle of materials; biodegradable and low-impact material solutions were chosen, for example, based on wool and local clay; the structures were designed to be easily disassembled and reused in other contexts).
In all these cases, the exhibition design thus becomes not only a space for display, but also for transformation and reinterpretation.

Sharing Exhibition Setups as Inclusive and Sustainable Response

One of the solutions to give a concrete and large-scale perspective to reuse in exhibition design is represented by "sharing," that is, the sharing of resources among institutions, public and private entities.
Digital sharing platforms first and foremost offer a service of accessibility, as they allow small and large enterprises to become aware of the goods made available online by other national entities, and enable them to exchange materials, structures, and assets useful for multiple exhibitions.
Obviously, this practice directly reduces the need for new productions of exhibition artifacts, contributing to minimizing environmental impact, but indirectly it also helps lighten the storage problem borne by individual institutions, if the goods begin to circulate towards places of actual use.
In this regard, the observation made by Alessia Salerno, head of Fondazione Prada, appears definitive. During the final FSE workshop of the "NSBVN – Sustainable Exhibit" project (May 29, 2025, Università IUAV di Venezia), she emphasized the impossibility for Italian museum institutions to continue storing artifacts that now require a land use no longer available nor sustainable for the institutions themselves.
In this context, sharing positively impacts exhibition costs, but it is also an act of social sustainability because it promotes dialogue and inclusiveness among institutions, increasing common access to resources that might otherwise be limited.
Digital platforms that facilitate sharing thus expand the potential scope of reuse, offering it greater chances of success. From a longer-term perspective, they will support the creation of collaborative networks that will allow more efficient ma-

nagement of materials, ensure a fairer distribution of resources, and foster greater visibility and communication of individual organized initiatives.
Currently, many experimental digital platforms are already active, especially in the architectural field and concerning the reuse of building components; it is not surprising, however, that the exhibition sector is lagging even in this specific area, in line with a general lower political and regulatory attention to the topic.
This lack of interest has also been reflected in fewer funding and growth opportunities for these network initiatives, among which the virtuous case of META (Domusweb, 2021) stands out. The pilot project of NSBVN – Non Si Butta Via Niente, a Milan-based start-up – represents a best practice that is becoming a model, acting precisely as a collector among museums; this experience is charting a new path which, surely, will soon find further developments and applications.
Digital technologies can therefore play a central role in improving the sustainability of exhibition design. Not only because these digital platforms facilitate the networked reuse of materials and systemic resource management, but also because through digital fabrication technologies, some construction solutions can be made open source and used according to site-specific needs, with local materials that eliminate transportation costs, and with customization possibilities that ensure versatility of the solutions to be adopted.
Moreover, digital technologies make it possible to manage more accurately the information related to the life cycle of exhibitions: by being able to handle large data sets, it becomes possible to oversee the LCA (Life Cycle Assessment) process even when, to coordinate all the variables present in an exhibition, the level of complexity to be managed is very high.
Among the parameters to consider, one must not forget the energy savings derived from the use of more efficient technologies: energy management, which implies minimizing consumption during all phases of the design process—from the construction of exhibition artifacts to the lighting of the exhibition itself—constitutes a fundamental aspect in the sustainable approach to design.
Therefore, not only the visible and immediately recognizable aspects should be considered, but also all those intangible aspects that often contribute significantly to the impact of an exhibition.

Conclusion

This research highlights how reuse is not only an ecological action, but a true design strategy that can transform the exhibition sector.

Sustainability, in fact, is not only a matter of reducing consumption or disposing of materials, but implies a broader rethinking of the entire life cycle of exhibitions. Design, in this context, must increasingly take on the role of programming and guiding the process, in addition to managing the project;
every element conceived for the exhibition must be able to be recovered, reused, adapted, and transformed in new contexts.
In this framework, even the logistics of materials plays a crucial role in minimizing environmental impacts; without an adequate network that allows the recovery and transfer of materials from one exhibition to another, reuse risks remaining a limited and ineffective practice.
The speculative future of exhibition design no longer imagines a succession of installations destined for oblivion, regardless of their media success,
but rather a process in which each exhibition becomes part of a broader system, capable of regenerating itself continuously and reciprocally.
Reuse (and the sharing of goods as its premise) become fundamental principles that will allow design to respond to the environmental, economic, and social challenges of the present, contributing to a more equitable and collaborative future.

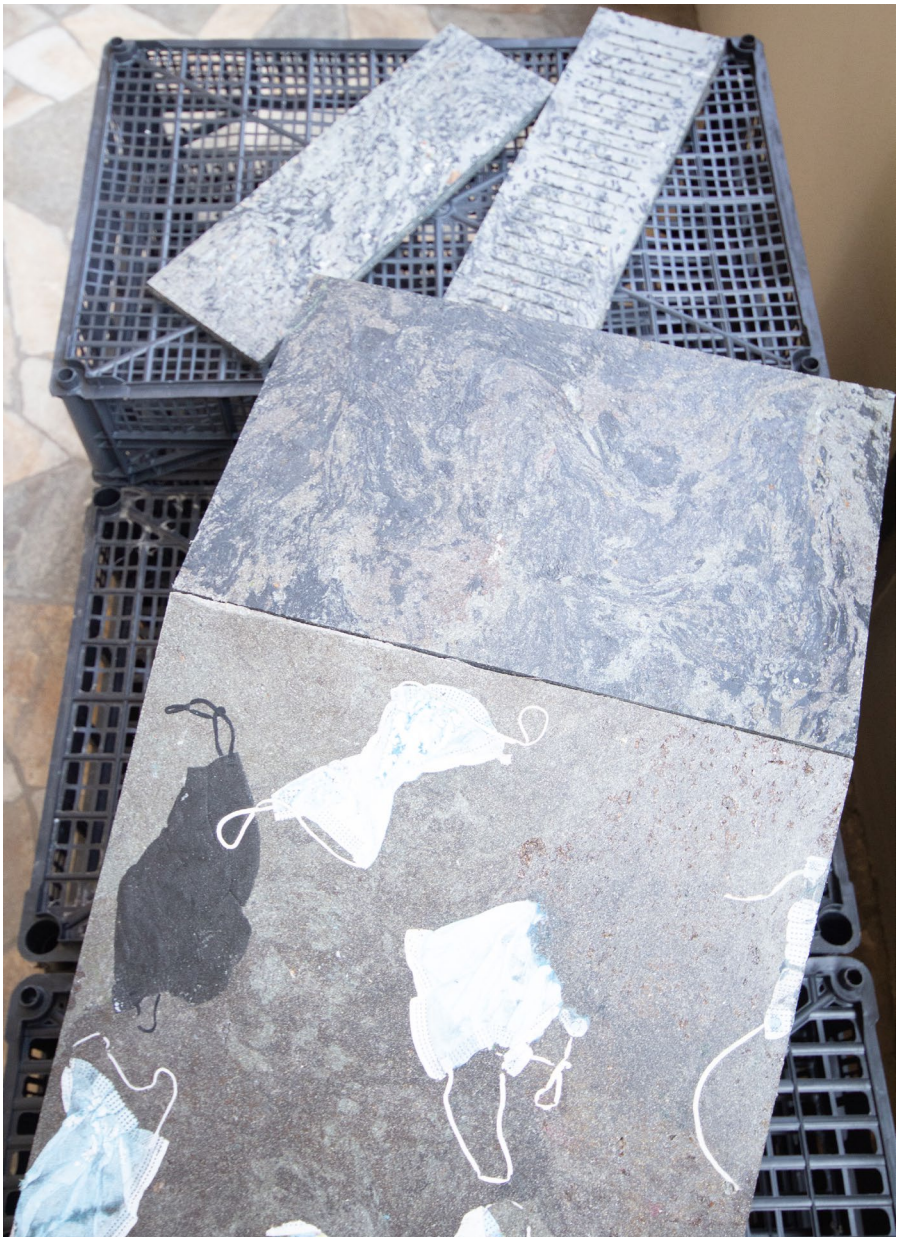


Fig. 4. Skateboard ramp created through the reuse of antibacterial masks. Ro-Guiltless Plastic Award. Milan Design Week 2021.

References

Annicchiarico, S. (2023). 3CODESIGN – 3R: Reduce, Recycle, Reuse – National Gallery. https://nationalgallery.bg/exhibitions/%D0%B5%D0%BA%D0%BE%D0%B4%D0%B8%D0%B7%D0%B0%D0%B9%-D0%BD-3%D1%80/

Antonelli, P. (2019). Broken Nature: Design takes on Human Survival, XXII Triennale di Milano. Milan: Rizzoli Electa.

Bandura, A. (1997). Self-Efficacy: The Exercise of Control. Worth Pub.

Crippa, D. (ed.)(2024). NOWA. Milan: Maggioli Editore.

Crippa, D. (ed.)(2023). Non Si Butta Via Niente. Milan: Maggioli Editore.

Di Prete, B. & Ratti, L. (2023). Pratiche e sperimentazioni dell'exhibit sostenibile. In D. Crippa (ed.), Non Si Butta Via Niente (pp. 42–63). Milan: Maggioli Editore.

Domusweb. (2021). Il riuso come forma d'arte: a Milano apre Spazio META. https://www.domusweb.it/it/citta-sostenibili/2021/06/16/il-riuso-come-forma-darte-a-milano-apre-spazio-meta.html

EMF, Ellen MacArthur Foundation (2012). Towards the Circular Economy: Economic and Business Rationale for an Accelerated Transition. https://www.ellenmacarthurfoundation.org/towards-the-circular-economy-vol-1-an-economic-and-business-rationale-for-an

Lantolf, J. P., & Thome S. L. (2006). Sociocultural Theory and the Genesis of Second Language Development. Sperling Paperback.

Mairs, J. (2016). Alejandro Aravena uses over 90 tonnes of recycled waste for Venice Biennale entrance halls. Dezeen. https://www.dezeen.com/2016/06/02/venice-architecture-biennale-2016-recycled-waste-exhibition-entrances-alejandro-aravena/

McDonough, W., & Braungart, M. (2003). Cradle to Cradle: Remaking the Way We Make Things. North Point Press.

META – Recupero materiali e scenografie (2021). META. https://www.spaziometa.it/about

NSBVN – Exhibit2.0: The Ecological Turn (2024–2025), research program launched under the call "TOCC – Capacity building for cultural operators to manage the digital and green transition." Lead partner: Università Iuav di Venezia.

NSBVN – Non Si Butta Via Niente (2024). First National Conference on Sustainable Exhibition Design promoted by Università Iuav di Venezia and the Sustainable Exhibit Cluster, June 17–18, Venice, Ca' Tron headquarters.

NSBVN – Sustainable Exhibit (2023–2025), research project funded by the "PR VENETO FSE" call of the Veneto Region; final workshop with all museum, fair, academic, and professional stakeholders involved. Università Iuav di Venezia, May 29, 2025.

NSBVN – Sustainable Exhibit (2023). Inter-academic research group promoted by the Department of Design Cultures of the Università Iuav di Venezia. https://sites.google.com/iuav.it/nsbvn/gruppo-di-ricerca

Pearce, D., & Turner, R. K. (1990). Economics of Natural Resources and the Environment. Baltimore:

Johns Hopkins University Press.

Platform21 (2018). About Platform21. https://www.platform21.nl/page/133/en.html, accessed on 14.02.2025

https://ar.ch.it/exhibitions/the-shit-evolution-fuorisalone-2016

http://www.brokennature.org

https://designmuseum.org/exhibitions/waste-age-what-can-design-do

https://fciny.org/projects/zero-waste-bistro

https://www.mart.tn.it/mostre/la-guerra-che-verra-non-e-la-prima-grande-guerra-1914-2014-138730

https://www.nonsibuttavianiente.it

https://www.spaziometa.it

Bibliography

Andersen, M. S. (2007). An introductory note on the environmental economics of the circular economy. Sustainability Science, 2(1), 133–140.

Artribune. (2022). Nonsibuttavianiente, la startup che ricicla gli allestimenti delle mostre. https://www.artribune.com/progettazione/design/2022/06/nonsibuttavianiente-startup-ricicla-allestimenti-mostre/

Artribune. (2021). Apre Spazio META a Milano: il riciclo dei materiali di mostre e allestimenti al centro del progetto. https://www.artribune.com/progettazione/2021/12/spazio-meta-milano-riciclo-materiali-mostre-allestimenti/

Artribune. (2021). Spazio META: il riuso come forma d'arte e sostenibilità. https://www.artribune.com/

Chapman, D. (2004). Sustainability and our cultural myths. Canadian Journal of Environmental Education (CJEE), 9(1), 92–108.

European Commission (2022). 2022 Strategic Foresight Report "Twinning the green and digital transitions in the new geopolitical context." https://knowledge4policy.ec.europa.eu/publication/2022-strategic-foresight-report-%E2%80%9Ctwinning-green-digital-transitions-new-geopolitical_en

Cooper, T. (2006). The value of longevity: Product quality and sustainable consumption. Paper presented at Sustainable Consumption and Production: Opportunities and Threats, Wuppertal, Germany.

Crippa, D., Cason Villa, M., Di Prete, B., Ratti, L., Rebaglio, A., Zanini, M., & Zanotto, F. (2022). Verso un progetto circolare, tra architettura e allestimento: Piattaforme digitali per il riuso. AGATHÓN – International Journal of Architecture, Art and Design, 12, 234–245.

Crippa, D., Di Prete, B., Rebaglio, A., Ratti, L., & Cason Villa, M. (2022). L'exhibit design verso una transizione ecologica. MD Journal, 14, 198–209. University of Ferrara – Material Design Laboratory, pp. 198–209.

Crippa, L., et al. (2022). Sostenibilità e innovazione nel settore espositivo. Milan: Maggioli Editore.

De Lucchi, M. "Sull'ecologia del design", in F. Bulegato, S. Polano, It begins here and ends there, Electa, Milan, 2004.

Engelman, R. (2013). Beyond sustainababble. In State of the World (pp. 3–16). Washington: Island Press.

Fassi, D., & Galluzzo, L. (2010). Temporary events and sustainability. In F. Ceschin, C. Vezzoli, J. Zhang (eds.), Sustainability in Design: Now! Proceedings of the LeNS Conference, Bangalore, India, 29 September – 1 October 2010, pp. 1416–1421.

Franklin, K., & Till, C. (2019). Radical Matter: Rethinking Materials for a Sustainable Future. Thames & Hudson.

Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? Journal of Cleaner Production, 143, pagg. 757–768.

Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. Journal of Cleaner Production, 114, 11–32. https://doi.org/10.1016/jjclepro.2015.09.007

Greyson, J. (2007). An economic instrument for zero waste, economic growth and sustainability. Journal of Cleaner Production, 15(13–14), 1382–1390. https://doi.org/10.1016/jjclepro.2006.07.019

Gugliotta, F. (2021). Rossana Orlandi: Il rifiuto è un valore, salviamolo. IFDM. https://ifdm.design/it/2021/09/06/rossana-orlandi-il-rifiuto-e-un-valore-salviamolo/

Hawkes, J. (2006). Why Should I Care? Museums & Social Issues, 1(2), 239–246. https://doi.org/10.1179/msi.2006.1.2.239

Hera Group. (n.d.). SCART: Il lato bello e utile del rifiuto. from https://scart.gruppohera.it

Homrich, A. S., Galvão, G., Abadia, L. G., & Carvalho, M. M. (2018). The circular economy umbrella: Trends and gaps on integrating pathways. Journal of Cleaner Production, 175, pagg. 525–543.

ICOM Italy. (n.d.). Recycling of museum exhibitions. The survey launched by the Working Group of the Lombardy Regional Coordination. In icom-italia.org, www.icom-italia.org/riciclo-allestimenti-museali-lindagine-avviata-dal-gruppo-di-lavoro-del-coordinamento-regionale-lombardia

Internal Displacement Monitoring Centre (IDMC). (2023). Global Report on Internal Displacement 2023. IDMC. https://www.internal-displacement.org/global-report/grid2023

International Council of Museums. (2022). Sustainability and museums: Practices and guidelines. ICOM.

Kirchherr, J., Piscicelli, L., Bour, R., Kostense-Smit, E., Muller, J., Huibrechtse-Truijens, A., & Hekkert, M. (2018). Barriers to the Circular Economy: Evidence from the European Union (EU). Ecological Economics, 150, 264–272. https://doi.org/10.1016/j.ecolecon.2018.04.028

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. Resources, Conservation and Recycling, 127, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005

Lanziger, M. (2021). Musei e crisi ambientale. In AgCult, www.agenziacult.it/interni/sviluppo-sostenibile-musei-e-crisi-ambientale

Maida, D. (2021). La Germania chiede ai musei qual è il loro impatto sull'ambiente. In artribune.com, www.artribune.com/dal-mondo/2021/01/germania-musei-impatto-ambiente

Marini, E. (2019). Riciclare e rigenerare: Tutte le differenze tra questi due processi. Rifo S.r.l. https://

rifo-lab.com/blogs/rifo-stories/riciclare-rigenerare-differenza

McDonough, W., & Braungart, M. (2010). Upcycling: Beyond Sustainability. New York: North.

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. W. (1972). The Limits to Growth. Universe Books.

Murray, A., Skene, K., & Haynes, K. (2017). The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. Journal of Business Ethics, 140(3), 369–380. https://doi.org/10.1007/s10551-015-2693-2

Paoletti, I. (2021). Genius Materialis: Materiali, sostenibilità e progetto. Berlin: Springer.

Paoletti, I. (2021). Siate materialisti! Turin: Einaudi.

Re-Biennale. (n.d.). Piattaforma per il recupero e il riuso dei materiali espositivi. https://www.rebiennale.org/

Rota, M. (2019). Musei per la sostenibilità integrata. Milan: Editrice Bibliografica.

Ruffilli, M. (2010). Design ed ecosostenibilità. In D. Brunelli (Ed.), Eco-design per gli allestimenti temporanei (pp. 10–11). Tuscany Region, Department of Architecture and Design Technology Pierluigi Spadolini.

Sessions, G. (1999). Ecocentrism and the anthropocentric detour. In C. Merchant (ed.), Ecology: Key Concepts in Critical Theory (pp. 140–151). Amherst: Humanity Books.

Vezzoli, C. (2017). Design per la sostenibilità ambientale. Progettare il ciclo di vita dei prodotti. Bologna: Zanichelli.

Vezzoli, C., & Manzini, E. (2007). Design per la sostenibilità ambientale. Bologna: Zanichelli.

Walker, S. (2012). Sustainable by Design: Explorations in Theory and Practice. London: Routledge.

Wallpaper. (2022). Waste Age: What Can Design Do? https://www.wallpaper.com/design/waste-age-exhibition-design-museum-london

Wautelet, T. (2018). The concept of circular economy: its origins and its evolution. https://doi.org/10.13140/RG.2.2.17021.87523

World Economic Forum (WEF). (2023). Global Risks Report 2023. WEF. https://www.weforum.org/reports/global-risks-report-2023

World Economic Forum, Ellen MacArthur Foundation, & McKinsey & Company. (2014). Towards Circular Economy Report. https://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf

The transformative potential of exhibit design

Second Life, First Impact: Rethinking Exhibition Design Between Awareness and Legislation

B. Di Prete | Politecnico di Milano
Department of Design



Fig. 5. Presentation given by ICOM Italy during the first conference of the NSBVN Cluster - Sustainable Exhibit. Ca' Tron, Venice, 2024.

The transformative potential of exhibit design

Second Life, First Impact: Rethinking Exhibition Design Between Awareness and Legislation

This research is based on the acknowledgment of several social and environmental crises that affect both the world of work, our production model, and the health of our planet; these are deep crises that demand no longer postponable responses. The climate crisis, in particular, despite its slow progression—and therefore barely perceptible in daily life—is now evident and recognizable in objective phenomena, both on macro and micro scales (Klein 2019, Wallace-Wells 2020, Kolbert 2014). Yet, our future depends precisely on the gap between macro and micro, between objective trends and individual perception: ecosystem deterioration is constant and progressive, but our perception is fragmented and tends to make us underestimate the magnitude of the problem.

"The Room of Change" (Accurat, 2019) and "Warming Stripes" (Hawkins, 2018) are just some of the communication and installation projects that make this paradox we are experiencing visible (Levitan, 2024), highlighting the danger that subjective interpretation might hinder the affirmation of a rooted culture of sustainability, turning it into a distant and deferrable concept.

Although the delay between cause and effect can lead to potential indifference, the increasingly numerous and alarming phenomena of environmental fragility have by now led to collective awareness, attesting to the necessity and urgency of concrete actions in defense of the environment. The climate crisis is no longer a

remote possibility, but a current and dramatic reality that defines our present.
We must therefore necessarily adopt a reversal of perspective, taking the category of the temporary as a privileged field of design, precisely because it is perceptively elusive and—perhaps not by chance—still devoid of virtuous practices.
Creating artifacts for a limited time horizon does not reduce their impact; it multiplies the effects, since their production is continuous and rapidly consumed.

When the Temporary Leaves a Mark

From the perspective just described, temporary exhibitions—precisely due to their transitory nature—constitute a dangerously neglected sector: the "aura of the ephemeral" that surrounds them (Sudjic, 2009) has likely contributed to legitimizing the practice of dismantling as a conclusive gesture, rather than as a moment of transition toward a new life.
Conceived as communication devices destined to dissolve along with the event that generates them, even today in the contemporary sustainability debate, they are often ignored—mistakenly considered a marginal field compared to architecture or industrial design. Yet, they have a highly significant economic and environmental impact: expensive materials are used for short periods and then often must be disposed of without a real perspective of reuse or recovery.
Although the exhibit constitutes a specific sector of our discipline, its long trail of irresponsible consumption therefore demands a concrete and immediate rethinking. And if its provisional nature has so far led to little attention to sustainability issues, today it is precisely this transience that makes the need for change evident.
From a design point of view, however, the challenge is twofold and more complex than it might appear: the ephemeral becomes a challenging and still unexplored creative ground, turning into an opportunity to experiment with new languages, new materials, new technologies, but also to demonstrate how reducing environmental impact does not necessarily compromise the narrative and spatial quality of exhibitions.

Holistic design and social responsibility

In light of the urgencies just described, all actors involved in the exhibition process (clients, designers, fitters, hosting institutions, legislators, and policy makers) are called upon to take action and assume responsibility in order to spread a new culture of sustainability within exhibition practices. A collective mobilization is

desirable, but also (and above all) museum institutions, custodians of our memory, are now called to take on a guiding and cultural leadership role.
It is a matter of affirming the principle of social responsibility not as an abstract concept, but as an attitude, a way of facing the design challenge, a new approach that transforms our gaze and allows us to interpret even the ephemeral as an opportunity for circularity.
Overcoming the "logic of the provisional," we must therefore succeed in spreading and consolidating a new design culture in which sustainability is not an obstacle to creativity, but a driving force for experimenting with new possibilities. The growing European attention to the issue (consider, among others, initiatives such as the New European Bauhaus and the Gallery Climate Coalition) makes us hopeful for a possible change, but the exhibition sector must first and foremost rethink its internal processes, integrating the sustainability requirement from the design phase. Consider broadly that "eighty percent of the environmental impact generated by products is determined [precisely] in the design phase" (Thackara, 2008). Of course, this implies far-reaching planning, which must range from spatial design to the rethinking of materials, from process management to post-event programming, from the choice of the most responsible construction techniques (also in energy terms) to the conscious planning of logistics, transport, assembly, disassembly, storage. Only in this way will it be possible to transform temporariness into an opportunity for innovation and reduction of environmental impact. The challenge is historical and even more cultural than technical, but it should not frighten us because, as Walker (2006) reminds us, design must not simply correct, refine or modify the existing by learning from the mistakes of the past, but must sketch out new scenarios and offer new paradigms: "the designer must go beyond, not simply designing ecological products, but questioning our conception of 'functional objects', reformulating our conceptions of the product and re-evaluating our notions of aesthetics." In this sense, sustainable design requires a true change of perspective, a new way of thinking about exhibitions, their impact and their potential reuse, inviting us to experiment, precisely through the codes of background–installation–object (Crippa & Botta, 2024), a renewed balance between replicability and creativity, between reuse and innovation.

Anticipating the future: traces of sustainability in the history of exhibition design

Given these premises, this research has analyzed the criticalities and potentiali-

ties of temporary exhibitions starting from a historical, theoretical, and practical analysis, in order to propose solutions applicable in the present. Reflecting on the past shows us, in fact, that even before sustainability was formally recognized as an explicit objective, some design choices were already (indirectly) responding to needs for optimization and impact reduction. Masters such as Carlo Scarpa and the Castiglioni brothers teach us by example how their projects, even without a declared ecological intention, still embraced principles of sustainability; consider, for example, their construction details for the various pavilions created between the 1950s and 1960s at the Milan Trade Fair or the Triennale di Milano, but also those studied for the retrospective on Piet Mondrian at the National Gallery of Modern Art in Rome, in 1956, which were both technically effective in terms of replicability and scalability of the artifacts, and capable of giving life to narrative and poetic exhibitions, always respectful of the context (for further insights, see the project sheets in section 2 of the book).

The adoption of modular or composable systems, the reuse of materials still in good condition and the use of easily transportable and reconfigurable solutions (consider, for example, the spread of dry-assembled joints) probably stemmed from practical, economic and logistical needs, but even today they represent good practices for reducing the environmental impact of exhibitions. Already in the 1960s and 1970s, ecological demands had therefore entered the design debate – brought to the attention of the public and critics by prominent scholars such as Richard Buckminster Fuller (1981) and Tomás Maldonado (1981, 1992) – but it was the birth of so-called sustainable design, initially defined as "ecological" (Madge, 1997), that marked a fundamental theoretical and practical shift: it signals the evolution from unconscious design to a process that instead incorporates sustainability as one of its founding principles.

Looking, therefore, at the history of exhibition design becomes crucial to draw lessons still useful today: the legacy and lesson we can derive from it play a key role as "seeds of the future."

Ecology and Design: Perception, Awareness and Information

Exhibition design encapsulates high narrative values, as it must enhance the story it presents; it thus possesses great communicative potential, capable of influencing the user's experience. Without exaggeration, one could say that it often remains as an experiential trace in the visitor's memory, especially when it activates interactive dynamics. Its legacy, therefore, manifests both in the experiences of

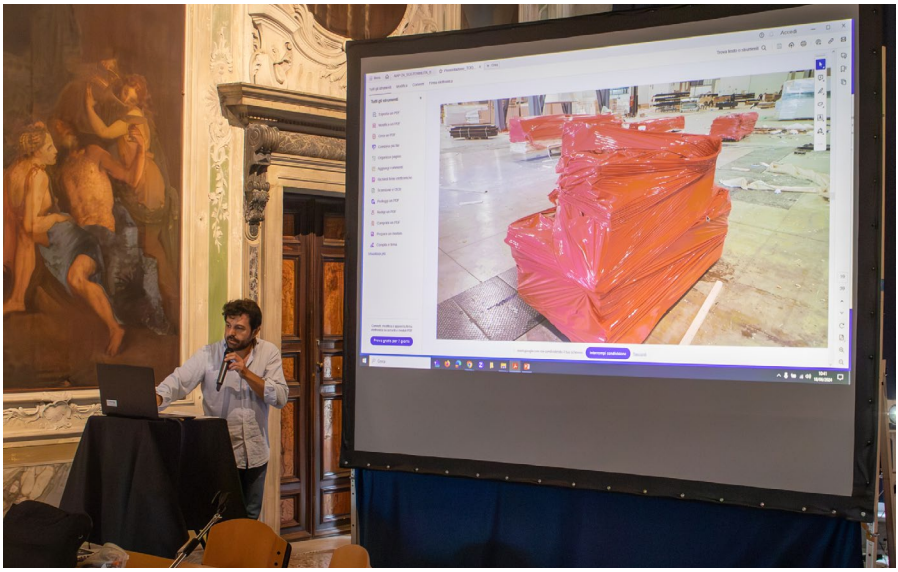


Fig. 6. Presentation of impacts in the exhibition supply chain during the first conference of the NSBVN Cluster - Sustainable Exhibit. Ca' Tron, Venice, 2024.

users and, unfortunately, in the discarded materials, abandoned devices, and scenic components destined for disposal.

It is worth focusing on the communicative potential of exhibitions, as it could become a key driver in promoting a new culture of sustainability: not being mere containers of works, but tools capable of also conveying their own content, they can raise public awareness and guide judgment. Sustainability, therefore, could become a message that the exhibition itself transmits.

There are already numerous projects moving in this direction: Documenta13 (Christov-Bakargiev, 2012) turned the exhibition into a site-specific experience, reducing ecological impact thanks to the reuse of local resources and improving social impact through the involvement of local communities. The "Climate Action for Curators" program, promoted by the Teiger Foundation, helps curators reduce the environmental footprint of exhibitions, demonstrating how sustainability can also represent a curatorial asset. Finally, the exhibition Seeing the Unseeable (2024) made environmental urgencies visible, demonstrating how art and the dissemination of data can act as tools for awareness.

This informative, formative, and educational component is fundamental for building a long-term sustainable transition; for this reason, increasingly, exhibitions

become communicative acts, integrating sustainability into the exhibition language, promoting a culture of responsibility among visitors, and aiming to involve them so that they become active participants in the ongoing transformation.

Measurement and Impact Assessment Tools

The climate crisis requires measurable responses and effective action strategies, not just theoretical and speculative constructs. Measuring environmental impact—through innovative tools and methodologies—thus becomes the benchmark for enabling sustainability to engage with an operational dimension and codified processes.

To assess the environmental impact of exhibitions, advanced measurement tools can be used, such as carbon calculators and life cycle assessments (LCA) of artifacts, which allow the estimation of the resources needed to create an installation and to foresee its impact once dismantled.

The Creative Climate Tool by Julie's Bicycle (2009) and the calculator from the Gallery Climate Coalition (2019) are among the most advanced tools used in the cultural sector, while toolkits such as the one proposed by CIMAM already provide actionable guidance to encourage the adoption of common sustainability standards.

The Design Museum in London has also applied an Impact Model to a temporary exhibition, demonstrating how the evaluation of the life cycle of an installation can significantly optimize resource management. The exhibition—titled The Waste Age: What Can Design Do? (2022)—tested analysis tools to drastically reduce its emissions and later reported the results. Specifically, through a detailed audit, the Design Museum implemented the reuse of existing materials, the use of biodegradable materials, and waste reduction. The project thus highlighted how crucial it is to rely on precise data and interdisciplinary collaborations to incorporate sustainability into curatorial choices. To date, the exhibition represents an exemplary case of applying Life Cycle Assessment (LCA) to temporary exhibitions.

Integrating these concrete tools into the design process is essential to elevate the sector as an archetype of a sustainable transition: they are fundamental for reducing waste and inefficiencies, exponentially increasing operators' awareness. Predicting (and thus knowing) the environmental impact of temporary exhibitions, in fact, is the strategic prerequisite for making sustainability a tangible goal and for guiding real change.

Legislation, Between Norm and Measure

To pursue the sustainable transition, it is essential not only to integrate new practices/tools into established design and exhibition practices, but also to create a regulatory framework that allows the systematic adoption of ecological principles in exhibition design. Legislation, in fact, is the indispensable support for giving form and substance to this change; it is the necessary framework to guide designers, curators, and sector operators toward more responsible and conscious practices.

It does not refer exclusively to the concept of rule, but also to that of measure: the norm becomes a tool to offer a standard of reference and a direction of action. Only through clear legislation, therefore, it is possible to transform sustainability from a mere option into a consolidated and shared practice.

Currently, temporary exhibitions - whether museum-based or trade-related - do not benefit from a specific regulatory framework and therefore do not have specific sustainability requirements to comply with.

Analyzing the international, European, and Italian legislative landscape, it becomes clear that the few laws issued are fragmented, excessively generalized, delve into aspects negligible for exhibitions, and lack both practical tools to adopt and monitoring methods.



Fig. 7. Reuse of Carlsberg kegs to create furniture, decorative structures and support structures. Museo della Scienza, Milan Design Week, 2021.

At the international level, environmental regulations and certifications are primarily oriented toward minimizing the impact of architecture and infrastructure, rather than temporary installations.
Standards such as ISO 20121 offer sustainable management models specific to events, while the SDGs of the 2030 Agenda establish global objectives to promote the adoption of responsible practices. Furthermore, certifications like LEED, BREEAM, and Green Star measure energy efficiency and the use of eco-compatible materials, but they are conceived for permanent structures, making their application in the field of exhibition design complex.
The European Union has developed more specific regulations related to design, but their application to exhibitions remains ambiguous. The "Circular Economy Action Plan" (CEAP 2015, 2019) and the "Ecodesign Directive" (or "Directive on Ecological Design") encourage the use of durable materials and promote reuse, while regulations like CPR 305/2011 and the UNI EN 15804 standard of 2021 establish environmental criteria for building products. Once again, these regulations are mainly designed for the construction sector and struggle to translate into suitable guidelines for exhibition design. Moreover, the heterogeneity of laws among different member states hinders the adoption of shared sustainable practices on a large scale.
Even in Italy, the main regulatory reference—the Minimum Environmental Criteria (CAM)—does not offer targeted indications for the exhibition sector. They are mandatory in public procurement but not binding in private negotiations, thus limiting their scope of application. Although not specifically designed for exhibitions, the CAM for Interior Furnishings (2022), Urban Furnishings (2023), and Events (2022) offer useful suggestions on durability, reuse, and certified materials: the encouragement to design disassemblable furniture, the promotion of circularity, and the responsible management of energy sketch a framework that, if applied to exhibitions, could significantly reduce their environmental impact. However, the lack of specific standards, the absence of economic incentives, and the inefficacy of control and monitoring tools also hinder the spread of fully sustainable practices in our country.
This fragmentation and inconsistency render the regulatory framework completely inadequate: current laws, confused and uncoordinated, end up hindering change rather than facilitating it. Moreover, the lack of specific regulations leaves it up to individual designers to use sustainable solutions, making the adoption of virtuous practices episodic.
Assuming a proactive perspective, the initiative promoted by the Università

IUAV di Venezia – Department of Design Cultures is worth highlighting: in 2024, it organized a conference followed by thematic working groups to connect stakeholders and build a platform for discussion and drafting of a specific CAM for Exhibition Design (NSBVN, 2024).
The goal is to define a specific regulation for the sector of temporary exhibitions, through which to guide design toward more eco-compatible and adaptable solutions over time. This is not about regulating in a restrictive sense, but about creating a clear, transversal, and shared model, which assigns specific responsibilities to the various actors involved in reuse and can be adopted as a reference by all sector professionals. The aim is, in fact, toward a flexible regulation, capable of embracing innovations without hindering experimentation.

Towards a Collaborative and Holistic Approach

Sustainability in temporary exhibitions requires a collaborative and holistic approach; divergences between curators, designers, suppliers, and exhibitors, slow down the adoption of virtuous practices, with the risk that sustainability may be perceived as a constraint rather than an opportunity, a cost rather than a resource. It is therefore essential to foster dialogue among all these professional figures in order to build shared strategies capable of reconciling creative, economic, and environmental needs.
It is also necessary to consider the different exhibition contexts: museum and trade fair installations share similar sustainability issues - from the management of materials after the event to the lack of clear guidelines - but they also present specific difficulties that require tailored strategies; while fairs have already initiated a process of standardization and reuse, the museum sector still struggles to find a balance between replicability and customization, favoring experimentation.
From an efficiency standpoint, accurate management of the design, procurement, and installation timelines also allows for the optimization of resources: good coordination between phases (as well as between actors) ensures that materials arrive at the site at the appropriate time, reducing waste and making the entire production process more streamlined.
Exemplary in this regard is the exhibition dedicated to Paolo Grassi (Palazzo Reale, Milan 2019; Teatro della Pergola, Florence 2019), designed by Alessandro Colombo and Paola Garbuglio using a modular compositional system developed by them in collaboration with Plotini Allestimenti: "ZeroK" is a frame-based system that uses lightweight and sustainable materials, easily transportable, mountable,

and dismountable in a continuous cycle (www.crossmetal.it).
The wooden grid system, aluminum joints, forex panels, and printed fabrics form flexible displays, which can be reconfigured as exhibition tables when needed; they reflect the sensitivity of the designers and the exhibition company to reuse issues, but above all demonstrate how a proposal that succeeds in aligning the (often conflicting) positions of designers, clients, and contractors can result in a virtuous solution for the entire sector.
On all these aspects—and particularly on the need for "integrated design"—Michela Rota has insisted, who, in the volume significantly titled "Musei per la sostenibilità integrata" (2019), emphasized the urgency of equipping museum directors and operators with professional "green management" tools, enabling them to become not just spectators, but active protagonists of change.
Though slowly and sometimes too sporadically, the sector is not at a standstill: in recent years, faced with urgent questions that politics has not yet been able to answer, sector stakeholders (gathered in trade associations, academies, institutional representatives) have taken action independently, trying to respond to the typical emergencies of temporary exhibitions.
Thus was born the inter-academic cluster of Sustainable Exhibit (2023), which represents a concrete and virtuous example of how collaboration among sector professionals can open new paths for change. The Cluster has, for the first time, brought all the key players in the supply chain to the same table, highlighting how sustainability cannot be addressed episodically, but systemically: the client influences design decisions, suppliers determine the availability of eco-compatible materials, and contractors must solve logistics within extremely tight timelines, which lead to choices of necessity rather than of opportunity (resulting in a high disposal rate rather than in the recovery of still potentially efficient structures). Everyone is responsible for the effectiveness of the final result. Change, therefore, cannot come from isolated action: sustainability is not a goal that can be achieved individually, but a path that requires a cohesive and collaborative system.

Conclusions

Given all that has been described so far, the goal of sustainability in exhibition design cannot depend on isolated choices, but must instead result from systemic conditions. From the analysis carried out, several key points can be identified that must be considered in the transition of the exhibition sector towards a sustainability paradigm: culture, collaboration, timing, life cycle, materials, regulation,

design, impact. Here, some priorities to be pursued are summarized:

- The dissemination of a culture of social and environmental responsibility through education and the involvement of all actors in the sector—first and foremost visitors—is essential to make sustainability a collective perspective.
- Collaboration among institutions, companies, suppliers, and designers supports the adoption of shared and coordinated strategies in terms of tools, timing, and consumption, resulting in savings on all levels. Collaborative design, moreover, plays a key role in creating networks for the sharing of resources, tools, and best practices.
- Preventive time planning allows for efficient organization of the various design and logistical phases, avoiding waste.
- The life cycle of exhibition setups must be regulated to ensure possibilities for disassembly, reuse, or recycling, enabling a conscious management of end-of-life. Programmed circularity allows the temporary not to be exhausted at the moment of use, but to transform into a resource for future projects.
- The selection of materials must be based on clear sustainability criteria and supported by certifications recognized at the European level.
- Regulation represents the framework to support change; it must offer clear, accessible, and consistent rules aligned with sustainability principles, tailored to the specifics of exhibition design. The concept of legislation must therefore evolve from a constraint to a lever for transformation.
- Design must translate the demands of reuse and recycling into three-dimensional forms, demonstrating how these do not compromise the aesthetic, narrative, or scenographic result of the proposal. From this perspective, composability (which can also take the form of modularity) emerges as a crucial design principle: exhibitions must be conceived to be disassembled and reused, with interchangeable parts adaptable to different spatial contexts.
- The management and measurement of impact make it possible to objectively evaluate the effectiveness of the strategies adopted; these should be continuously monitored along the way to allow for progressive adjustments if needed.

These strategies, if pursued in an integrated manner, can make exhibitions truly circular and sustainable, because - if their design is to have a limited time horizon - sustainability necessarily has long-term ambitions.

It must not be forgotten, in fact, that what is being proposed is a new value model, in which exhibitions will no longer be evaluated solely based on their aesthetics, communicative capacity, or immediate functionality, but precisely on their impact and legacy.



Fig. 8. Armchair "Sedimenti", part of a collection of furniture designed from drywall scraps.

References

Accurat (2019). The Room of Change. https://giorgialupi.com/the-room-of-change

Accurat. (2019). Broken Nature portrait #3: Accurat—The Room of Change. http://www.brokennature.org/broken-nature-portrait-3-accurat-the-room-of-change/

Agenda-2030-Onu-italia (2015). https://unric.org/it/wp-content/uploads/sites/3/2019/11/Agenda-2030-Onu-italia.pdf

Buckminster Fuller, R. (1981). Critical Path. New York: St Martins Press.

Certificazione ISO 20121 | Bureau Veritas Italia (2012). https://www.bureauveritas.it/needs/certificazione-eventi-sost-iso-20121

European Council and Council of the European Union. (2024). Economia circolare. Consilium. https://www.consilium.europa.eu/it/policies/circular-economy/

Christov-Bakargiev, C. (2012, September 9). dOCUMENTA (13)—Retrospective—Documenta. https://www.documenta.de/en/retrospective/documenta_13

Crippa, D., & Botta, L. (2024). La svolta ecologica dell'esporre: La dimensione museale al tempo della sostenibilità. AND Rivista Di Architetture, Città E Architetti, 46(2). In https://and-architettura.it/index.php/and/article/view/652

Hawkins, E. (2018). Warming Stripe. https://www.green.it/warming-stripes-il-cambiamento-climatico/

Julie's Bicycle. (2009). Creative Climate Tools | Julie's Bicycle | Sustainability Strategy Tools. Julie's Bicycle. https://juliesbicycle.com/our-work/creative-green/creative-climate-tools/

Klein, N. (2019). Il mondo in fiamme. Milan: Feltrinelli

Kolbert, E. (2014). La sesta estinzione. Vicenza: Neri Pozza.

Levitan, D. (2024). The Time Paradox of Climate Change. Atmos. https://atmos.earth/the-time-paradox-of-climate-change/

Madge, P. (1997). Ecological design: A new critique. Design Issues, 13(2), 44–54. https://doi.org/10.2307/1511881

Maldonado, T. (1981). La speranza progettuale. Ambiente e società, Turin: Einaudi.

Maldonado, T. (1992). Cultura, democrazia, ambiente. Saggi sul mutamento. Bologna: Feltrinelli.

Ministry of the Environment and Energy Security. (2023). Criteri ambientali minimi relativi a Arredo Urbano. https://punto3.it/criteri-ambientali-minimi-cam-nuovi-decreti-per-arredo-urbano-e-tessili/

Ministry of the Environment and Energy Security. (2022). Criteri ambientali minimi per l'organizzazione e realizzazione di eventi. https://gpp.mase.gov.it/adottati_i_criteri_ambientali_minimi_per_organizzazione_e_realizzazione_di_eventi

Ministry of Ecological Transition. (2022). Criteri ambientali minimi per arredi per interni. https://www.certifico.com/component/attachments/download/30555

"NSBVN – Non Si Butta Via Niente" (2024). First National Conference on Sustainable Exhibition Design promoted by the Università Iuav di Venezia and by the cluster of the Sustainable Exhibit, 17–18 June, Venice,

Ca' Tron site.

"NSBVN – Sustainable Exhibit" (2023). Inter-academic research group promoted by the Department of Project Cultures of the university. https://sites.google.com/iuav.it/nsbvn/gruppo-di-ricerca

Rota, M. (2019). Musei per la sostenibilità integrata. Milan: Editrice Bibliografica

Sudjic, D. (2009). The language of things: Understanding the world of desirable objects. W. W. Norton & Company.

Thackara, J. (2008). In the Bubble. Design per un futuro sostenibile. Turin: Allemandi.

Walker, S. (2006). Sustainable by Design. Earthscan

Wallace-Wells, D. (2020). La Terra inabitabile. Milan: Mondadori

https://www.agenziacoesione.gov.it/comunicazione/agenda-2030-per-lo-sviluppo-sostenibile/

https://www.artcenter.edu/about/exhibitions/seeing-the-unseeable-data-design-art.html

https://circularity.com/che-cose-il-piano-dazione-per-leconomia-circolare/

www.crossmetal.it; https://www.crossmetal.it/wp-content/uploads/IT_ZeroK.pdf

https://designmuseum.org/exhibitions/waste-age-what-can-design-do

https://www.ellenmacarthurfoundation.org/circular-examples/the-eus-circular-economy-action-plan

https://galleryclimatecoalition.org/

https://www.gazzettaufficiale.it/eli/gu/2023/03/22/69/sg/pdf

https://teigerfoundation.org/climate-action

https://ollum.it/blog/regolamento-ecodesign/

https://new-european-bauhaus.europa.eu/index_en

Bibliography

Arrigoni, A., Zucchinelli, M., Collatina, D., & Dotelli, G. (2018). Life cycle environmental benefits of a forward-thinking design phase for buildings: The case study of a temporary pavilion built for an international exhibition. Journal of Cleaner Production, 187, 974–983. https://doi.org/10.1016/j.jclepro.2018.03.230

Bertoli, R. (2022). «Waste Age: What Can Design Do?» at the Design Museum | Wallpaper. https://www.wallpaper.com/design/waste-age-exhibition-design-museum-london

Bhamra, T., & Hernandez, R. J. (2021). Thirty years of design for sustainability: An evolution of research, policy and practice. Design Science, 7, e2. https://doi.org/10.1017/dsj.2021.2

BREEAM. (1990). BREEAM | Sustainable Building Certification. https://breeam.com

CAN, Circular Arts Network. (n.d.). https://www.canarts.org.uk/

Chouliaraki Milner, D. (2024). A Glimpse At The Future If We Get Climate Action Right. Atmos. https://atmos.earth/a-glimpse-at-the-future-if-we-get-climate-action-right/

Comoglio, G. C. (2022). Quando la sostenibilità si chiamava "ecologia": Un percorso dalle pagine di Domus. https://www.domusweb.it/it/dall-archivio/gallery/2022/10/13/da-ecologia-a-sostenibilit-sulle-pagine-di-domus.html

Crippa, D. (ed.)(2023). Non Si Butta Via Niente. Milan: Maggioli.

Crippa, D. (ed.)(2024). NOWA. Milan: Maggioli.

Hahn, J. (2021). Design Museum conducts “first-ever” environmental audit for exhibition. https://www.dezeen.com/2021/10/27/waste-age-design-museum-urge-audit/

Jones, L. (2008). Environmentally Responsible Design: Green and Sustainable Design for Interior Designers. Hoboken: Wiley & Sons.

Kwok, A. G., & Grondzik, W. (2018). The Green Studio Handbook: Environmental Strategies for Schematic Design (3rd ed.). Routledge.

Material Cultures. (2021). Waste Age. Material Cultures. https://materialcultures.org/waste-age/

Materieunite. (2022). materieunite — Generative Circularity. https://materieunite.it/allestimenti/generative-circularity

European Parliament. (2021, February 3). Economia circolare: In che modo l’UE intende realizzarla entro il 2050. Topics | European Parliament. https://www.europarl.europa.eu/topics/it/article/20210128STO96607/economia-circolare-in-che-modo-l-ue-intende-realizzarla-entro-il-2050

Pop, I. L., Borza, A., Buiga, A., Ighian, D., & Toader, R. (2019). Achieving Cultural Sustainability in Museums: A Step Toward Sustainable Development. Sustainability, 11(4), 970. https://doi.org/10.3390/su11040970

Porcelli, G. (2024). Certificazione LEED e BREEAM: cosa sono e come si ottengono | TeamSystem Magazine. https://www.teamsystem.com/magazine/construction/cosa-sono-e-come-si-ottengono-le-certificazioni-leed-e-breeam/

Qureshi, A. (2023). Designing Eco-Systems Sustainable Exhibits: Strategies for Reducing Environmental Impact. Blue and Green Tomorrow. https://blueandgreentomorrow.com/sustainability/designing-eco-systems-sustainable-exhibits-strategies-for-reducing-environmental-impact/

Richardson, J. (2023). How To Design Museum Exhibitions With A Lower Environmental Impact. MuseumNext. https://www.museumnext.com/article/how-to-design-exhibitions-with-a-lower-environmental-impact/

Sutter, G. C. (2008). Promoting Sustainability: Audience and Curatorial Perspectives on The Human Factor. Curator: The Museum Journal, 51(2), 187–202. https://doi.org/10.1111/j.2151-6952.2008.tb00305.x

The Design Museum, & UKRI Arts & Humanities Research Council (AHRC). (2021). Future Observatory. https://futureobservatory.org

The Design Museum, & URGE. (2023). Design Museum Impact Guide Exhibitions.

The Global Association of the Exhibition Industry. (2021). UFI Report on Sustainability July 2021. https://www.ufi.org/wp-content/uploads/2021/07/UFI_report_on_Sustainability_July-2021.pdf

URGE. (2021). Tracking the Impact of Waste Age. URGE Collective. https://www.urgecollective.com/tracking-the-impact-of-waste-age/

Van Gulck, L., Wastiels, L., & Steeman, M. (2022). How to evaluate circularity through an LCA study based on the standards EN 15804 and EN 15978. The International Journal of Life Cycle Assessment, 27, 1–18.

Section 2

This section presents a carefully selected range of technical details drawn from significant exhibition projects which, from history to the present day, can play a meaningful role in shaping a path toward more sustainable setups - easily replicable and adaptable thanks to current digital fabrication technologies.
Each element has been analyzed to illustrate how materials, construction systems, and assembly techniques contribute both to the functional and expressive dimensions of the exhibition space.
Through the examination of these solutions, arranged in chronological order, this section of the book aims to provide a deeper understanding of the relationship between design, construction detail, and spatial quality, highlighting the role of technical innovation in building more sustainable exhibition projects. The QR codes included in each sheet allow users to download various construction details - redesigned with a digital fabrication approach - in open source.

The Re-Factor research

Reading Guide

D. Crippa | Università Iuav di Venezia
Department of Cultur del Progetto

B. Di Prete | Politecnico di Milano
Department of Design



Fig. 9. Samples of neo-materials, made starting from waste collected in the Bovisa and Isola districts of Milan.

The Re-Factor research

Reading Guide

The research program explored the vast cultural heritage of Italian exhibit design, both from a historical perspective and with a focus on the most contemporary proposals, with the aim of identifying (and developing) innovative solutions that can respond to pressing sustainability challenges. Starting from an analysis of historical exhibition designs and concluding with current best practices, the project examined the exhibit field through the lens of sustainability and with an eco-design logic.

The world of exhibition design must in fact change its design paradigms, requiring deep reflection that can lead to the routine use of new digital tools. These tools should facilitate the systematic application of joints and construction details suitable for future disassembly and, through this approach, enable more effective reuse of existing exhibit structures already available in the territory.

Specifically, the study analyzed and reported on exemplary case studies that leverage digital innovation for the sustainable management of exhibit installations, with particular attention to the possibility of replicating standardized solutions using new digital fabrication technologies. The focus is primarily technical, but the potential outcomes and impacts extend to economic, environmental, and social spheres.

Research Paradigms

Digital tools as enablers of sustainability

The research considered the role of digital tools in the transition toward more sustainable exhibit design, emphasizing how information technologies can optimize the life cycle of installations, fostering reuse and circular management through access to open-source solutions that are downloadable online and reproducible with local materials. This highlighted the potential of digital tools to reduce waste, improve sector efficiency, and integrate innovative processes for the responsible management of "the temporary."

Sharing as an act of responsibility

The research also explored technical solutions to enhance the reuse of museum exhibition elements already available on certain digital sharing platforms—items that represent a significant sample of unused exhibit heritage currently stored in national museums.

It investigated how online sharing could offer a sustainable solution for the reuse of typical exhibit materials, eliminating the need to start new production processes and thus reducing environmental impact. Through sharing platforms, both large and small organizations can exchange resources in an inclusive and accessible way, increasing the value, visibility, and versatility of their assets.

Activities and Results

Operationally, the research program—which contributes to the ongoing scientific debate, embracing the challenge of digital transition in service of ecological transition—focused on a dual track of analysis and development: on one hand, identifying exemplary construction and installation practices to be shared open-source for designers; on the other, proposing hypotheses for flexible, customizable setups that enhance the value of already documented exhibit assets by revealing their potential.

This dual-action strategy was articulated in two main tasks:

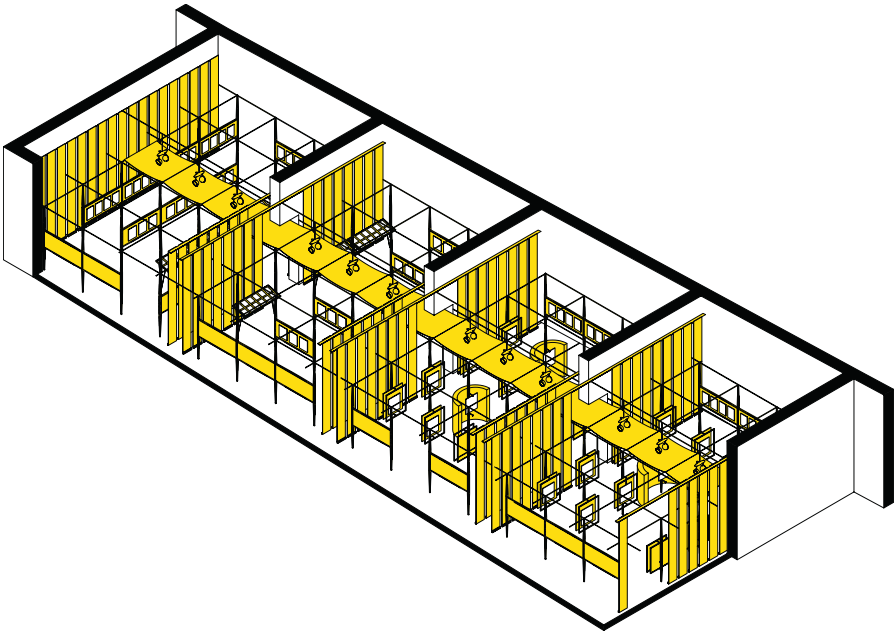
1. Pursuing sustainability by interpreting it as the replicability of exhibit elements, made possible through the use of digital fabrication tools.
2. Pursuing sustainability by interpreting it as the sharing of exhibit devices and materials, made possible through online platforms such as NSBVN – Non Si Butta Via Niente ("Nothing Goes to Waste").

The specific outcome is a catalog of 35 construction details derived from the case studies, redrawn so they can be fabricated using digital tools and made available open-source. These are useful in enabling highly flexible and reversible exhibit solutions.

The broader outcome of this dual-track research was the development of knowledge made available to Italian cultural, museum, exhibition, and trade fair institutions—most importantly, the creation of tools (cultural and design-based, methodological and operational) to support designers in working more consciously and to spread a new culture of sustainable exhibition design.

sheet

Scipione
Brera Art Gallery, Milan



Franco Albini
1941

Suspension and transparency

In March 1941, the Pinacoteca di Brera in Milan hosted Scipione, il bianco e il nero (Scipione: Black and White), an exhibition dedicated to the Roman painter Gino Bonichi—better known as Scipione—organized by the Centro di Azione per le Arti. This exhibition marked a pivotal moment in Franco Albini's career as an exhibition designer, confirming his position as one of the most radical and visionary figures in modern museography. Following the success of Mostra dell'Antica oreficeria italiana, Albini was presented with a more intimate and emotionally charged subject. Scipione's tormented sensuality and baroque, dreamlike imagery required a different curatorial language—one capable of conveying intensity, darkness, and psychological tension.

Rather than resorting to neutral, static display formats, Albini constructed an immersive environment designed to amplify the expressive power of Scipione's work. The spatial design did not aim for emotional detachment but rather for direct confrontation: the viewer was placed within an atmosphere dense with symbolism and shadow, evocative of the artist's own visions. In Albini's own terms, the exhibition became a space for "humanity unbound, liberated in art," where curatorial language elevated itself to emotional resonance.

The exhibition's layout reflected this conceptual shift. Albini devised a system of suspended supports that transformed the gallery space into a dynamic and theatrical setting. A modular grid of steel cables, fixed to the perimeter walls at a height of three meters, supported spindle-shaped wooden uprights. These acted as flexible vertical elements from which artworks were hung, not against walls, but within space. This structure dissolved the conventional boundaries between art and architecture, introducing a new fluidity to the act of viewing.

Each work was displayed using a method specifically tailored to its material and meaning. Paintings were mounted against fabric backdrops, while drawings were presented on sheets of glass or on inclined planes protected by transparent coverings. More contemporary drawings were shown on angled surfaces that invited

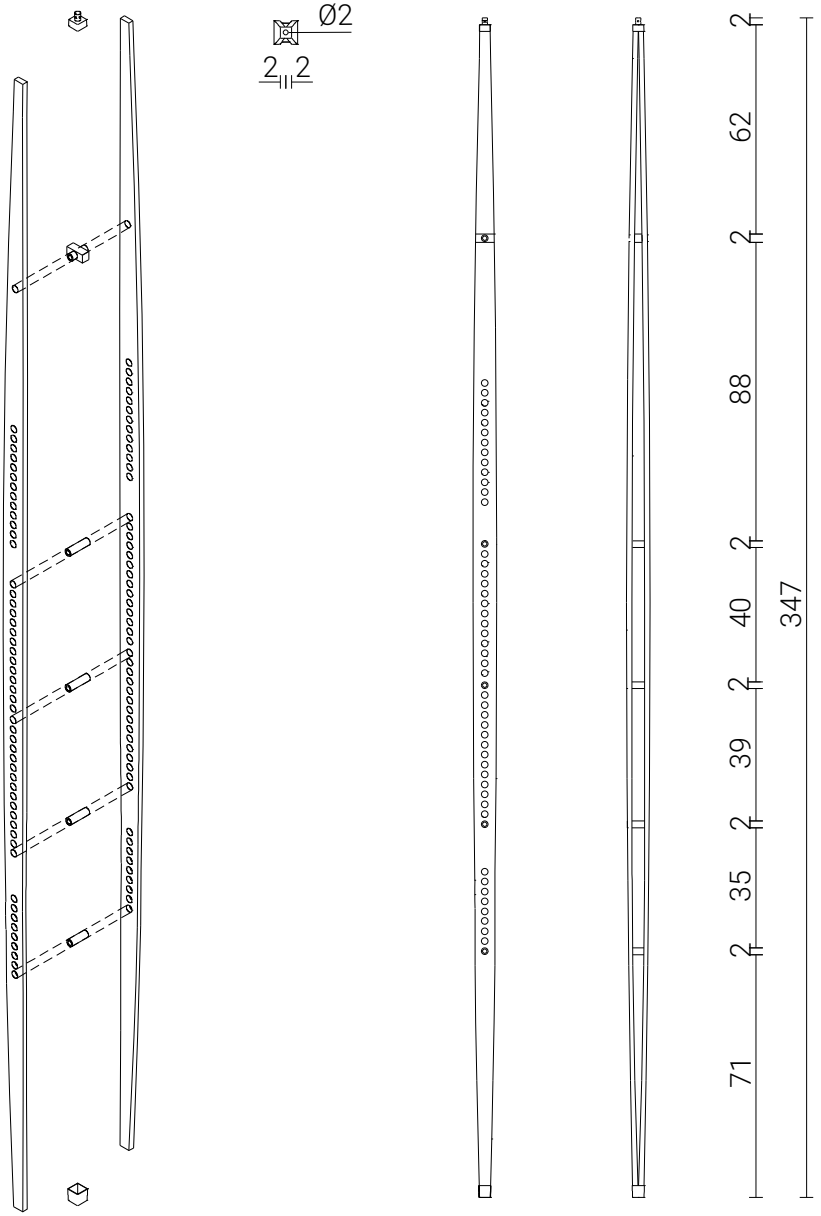


Fig. 10. Construction detail - Supporting structure of the display stand | Axonometric exploded view and quoted projections.

careful observation. The installation made strategic use of exposed brick backdrops for certain works, fostering chromatic dialogues between the painting and the architectural surface.

Albini's mastery lay in balancing aesthetic clarity with structural functionality. Adjustable cylindrical joints connected the uprights to the cables, allowing the configuration to adapt precisely to the needs of each artwork. This modularity allowed for future reconfigurations, embodying Albini's principle of reversibility—a notion essential to his modernist ethic. The steel and glass elements were employed not for their technological allure, but for their lightness, transparency, and ability to recede. The result was an exhibition where the artworks seemed to float in space, free of frames, pedestals, or walls.

Equally important was the lighting concept. A paper ribbon—functioning as a diffused light source—was suspended across the four rooms, along with large swaths of wallpaper material that softened the light and enveloped the space in an ethereal glow. Light became a dramaturgical element, orchestrated to echo the chiaroscuro central to Scipione's visual language. Albini's sensitivity to the artist's poetic contrast of light and darkness found architectural expression through shadow play and the subtle modulation of tones within the gallery.

The installation also established a physical and emotional rhythm. Instead of walking through rooms that merely presented a sequence of artworks, the visitor became part of a scenographic progression. The materials themselves—steel, paper, wood, and glass—spoke quietly but firmly, never upstaging the artwork, yet contributing to a sense of cohesion and narrative flow.

Albini's exhibition for Scipione thus exemplifies how architecture and display can fuse into a single expressive medium. It showed that exhibition design can be more than a neutral frame—it can be a poetic structure that resonates with the artworks and amplifies their emotional depth. The show did not merely present paintings; it staged them as actors in a spatial drama, crafting an immersive environment where perception, materiality, and emotion interwove. It was, in every sense, an early manifesto of modern Italian exhibition design.

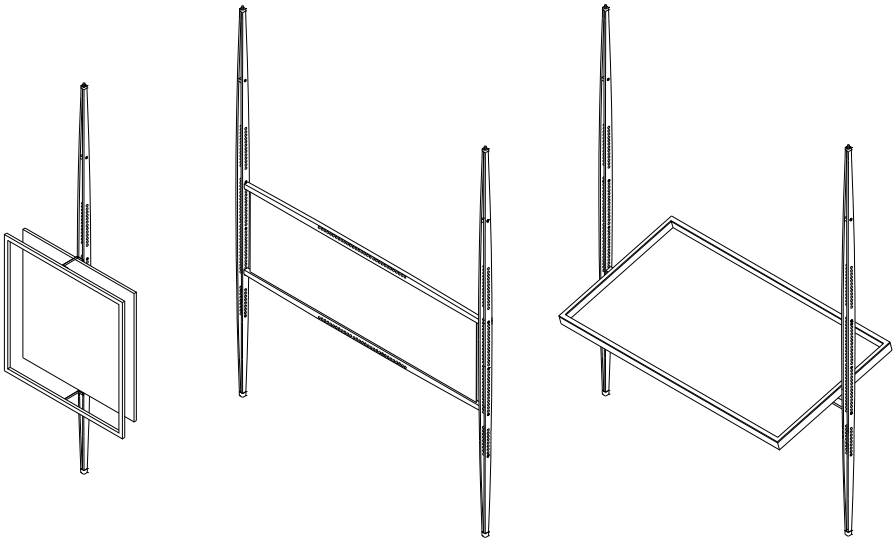


Fig. 11. Construction detail - Display unit configurations | Axonometric views.

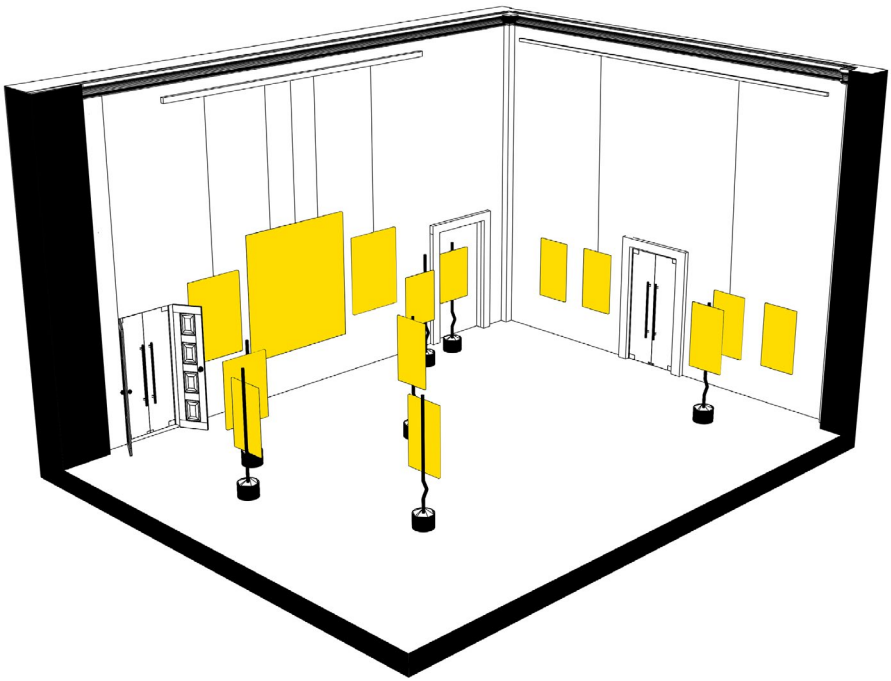
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/scipione-albini-S7MDn3

sheet

Permanent Exhibition
Civic Galleries of Palazzo Bianco, Genoa



Franco Albini
1949

new spatial meaning

Franco Albini's museum installation at Palazzo Bianco in Genoa, completed in the early 1950s, represents a turning point in postwar Italian exhibition design. Collaborating closely with art historian Caterina Marcenaro, Albini introduced a radical and modern rethinking of the relationship between artwork, space, and viewer. Moving beyond traditional curatorial approaches, he conceived the museum as a dynamic and immersive environment, aligning with Giulio Carlo Argan's vision of the museum as a space of active engagement rather than passive display.

Albini's intervention was both architectural and narrative. Rather than presenting artworks against neutral white walls, he integrated them into a spatial script where every element—walls, thresholds, volumes—became part of a choreographed experience. The historical context of the 17th-century palazzo was not erased but enhanced, as architectural features interacted with the curatorial vision.

At the heart of the installation was a technical system that utilized industrial components—steel tubes, suspension wires, rotating joints—not as hidden supports but as visible, expressive elements. Paintings were suspended mid-air or rotated slowly, engaging the viewer physically and emotionally. These devices encouraged curiosity and contemplation rather than passive observation. Albini's attention to detail was remarkable: motors were silent and concealed; suspension systems were adjustable and respectful of both artworks and building fabric. His approach emphasized modularity and reversibility, allowing the installation to evolve over time.

Light was another critical tool in Albini's design. He used the natural illumination of the palazzo's large windows to create an atmospheric interplay of shadows and highlights, complemented by discreet artificial lighting. This approach enhanced the material qualities of Renaissance and Baroque works, emphasizing surface and texture. The result was a cinematic journey through space and narrative, where the viewer experienced not a static gallery but a living, evolving display.

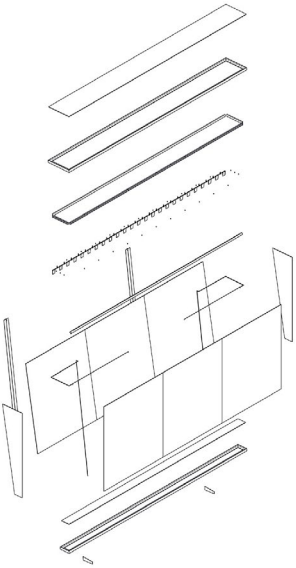


Fig. 12. Construction detail - Display structure | Axonometric exploded view.

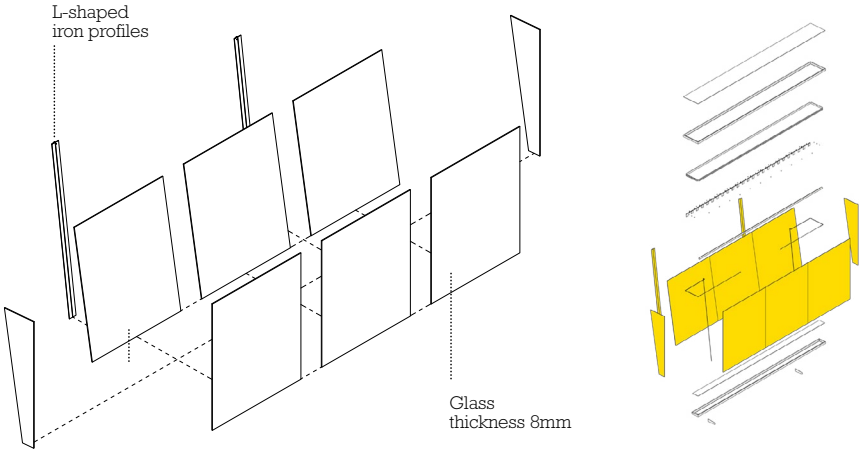


Fig. 13. Construction detail - Backlit display panels| Axonometric exploded view.

Spatial drama was central to the experience. Albini avoided linear, uniform hanging and instead positioned works on pedestals, in vitrines, or suspended in air. Sometimes the back of a piece was presented first, prompting the viewer to circle it and engage more mindfully. In one notable example, Albini displayed Giovanni Bellini's Christ Risen and Stefano da Verona's Madonna of the Rose Garden using custom rosewood easels with brass and iron fittings. These iconic structures allowed the paintings to stand away from the walls and interact with both architecture and light, creating dialogue across time and style.

Albini's installation set a precedent that still informs contemporary curators and designers. His work demonstrated that exhibition design is not merely a backdrop but an active agent in interpretation. The use of industrial materials introduced a modern aesthetic language that respected historical context while renewing it. The palazzo itself became part of the story—more than a frame, it was a participant in the artwork's narrative.

Ultimately, Albini's work anticipated the museum's evolving role as a space for education, emotional engagement, and cultural dialogue. His design showed how architecture can inform without overwhelming, invite without imposing, and balance clarity with poetry. Today, the Palazzo Bianco installation remains a foundational reference in exhibition design, exemplifying how the quiet orchestration of movement, light, and space can shape profound museum experiences.

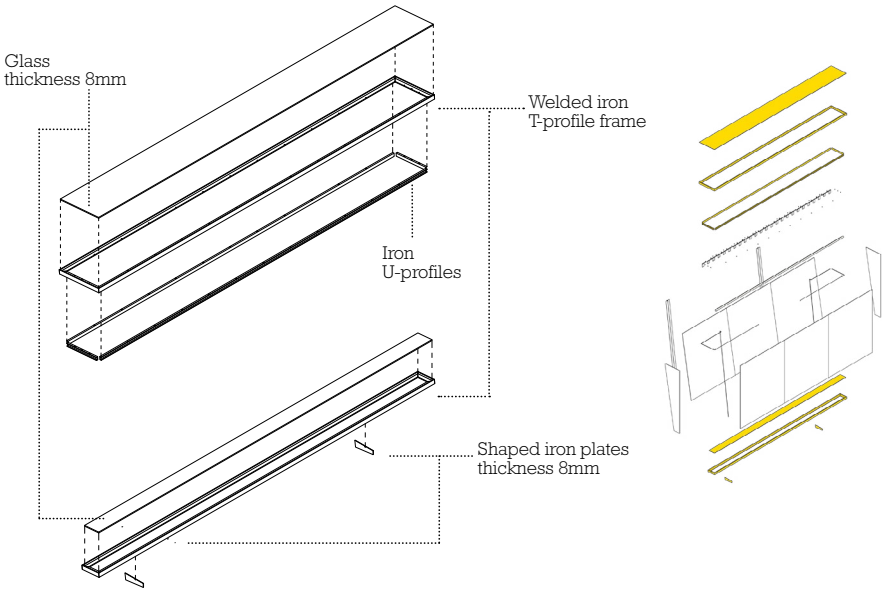


Fig. 14. Construction detail - Structural components | Axonometric exploded view.

QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/gallerie-comunali-di-palazzo-bianco-albini-vI30XW

sheet

New Italian Art
Liljevalchs Konsthall, Stockholm



Franco Albini
1953

Architecture of lightness

In 1953, the Liljevalchs Konsthall in Stockholm hosted La Nuova Arte Italiana, an exhibition curated to present fifty years of Italian visual culture. Conceived as a diplomatic and cultural initiative, the exhibition formed part of a broader strategy to reassert Italy's identity as a nation simultaneously modern and deeply rooted in its artistic and artisanal heritage. The event showcased a panorama of the country's creative output—ranging from fine art and decorative arts to architecture—and aimed to reframe Italy's cultural image for a post-war international audience.

The architect entrusted with designing this important exhibition was Franco Albini, one of the most innovative and forward-thinking Italian designers of the 20th century. Albini's contribution went far beyond a simple arrangement of artworks: he developed an entirely new approach to exhibition architecture, one that reflected the values of transparency, lightness, and modularity. His design transformed the static act of viewing into a dynamic and sensorially rich experience.

At the heart of the exhibition design was Albini's signature use of suspended tarletan fabric—a semi-transparent, lightweight textile that he employed to visually lower the height of the gallery spaces, soften the natural light, and create a sense of enveloping atmosphere. These draped surfaces established a delicate architectural rhythm, guiding visitors through an immersive pathway that seemed to float rather than rest upon the ground.

The spatial composition was organized through a modular and reconfigurable framework. Steel antennae—thin, vertical structural elements—were joined via horizontal metal bars, creating a flexible scaffolding system. These served not only to delineate space, but also to support glass vitrines, circular tables, and hanging textile panels, forming semi-transparent enclosures and zones of visual focus. The result was a seamless interplay between solidity and openness, materiality and void.

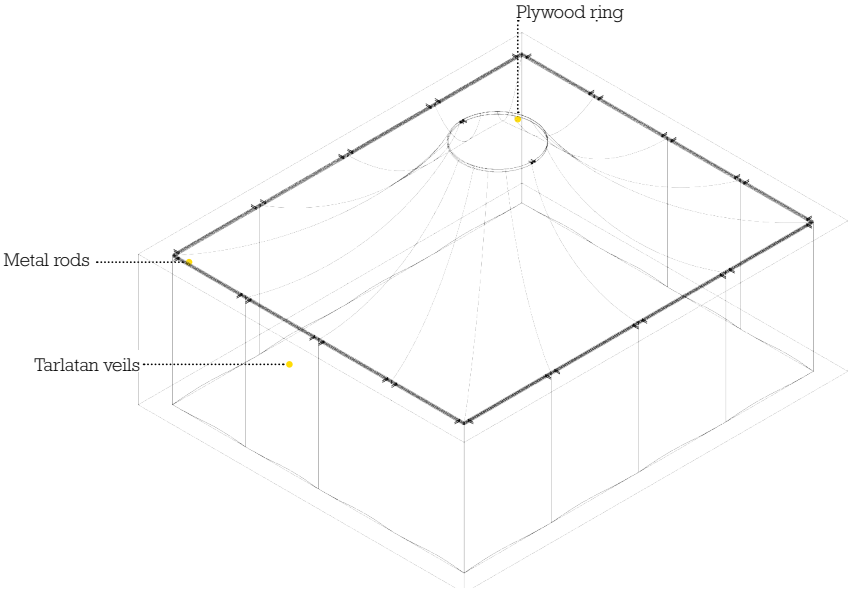


Fig. 15. Set-up module | Axonometric view.

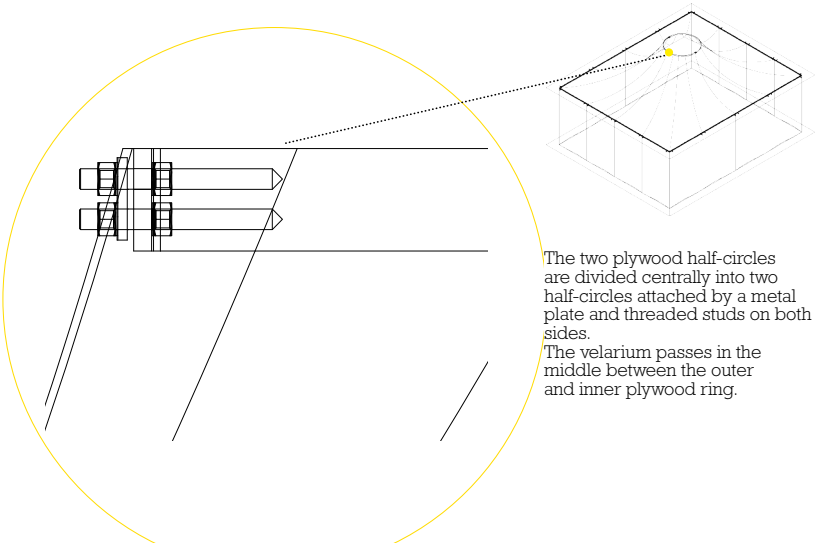


Fig. 16. Constructive detail - Joints for fastening the outfitting curtains.

A pivotal structural element was the plywood ring, designed to support the suspended fabrics and introduce a consistent visual geometry across the installation. This circular component acted both as a spatial anchor and a design motif, harmonizing the flow of the exhibition and reinforcing its conceptual unity.

The technical sophistication of Albini's system was concealed beneath its apparent simplicity. The suspended structure made use of metal joinery, including steel pins and anchor plates, to ensure structural integrity. Threaded rods and anchoring brackets allowed for quick assembly and disassembly, while the self-supporting steel framework guaranteed both stability and adaptability. The system was conceived for potential reuse, aligning with Albini's broader philosophy of economy, rationality, and elegance in design.

Yet, the allusion to lightness and dematerialization came at a cost. The use of tarletan, while effective in creating a soft atmospheric quality, posed challenges in terms of durability and maintenance. Its fragility meant that it required careful handling and frequent replacement, particularly where overlapping layers intensified wear. The interplay of fabric layers also necessitated precise alignment and adjustment, which increased the demands during both the assembly and upkeep of the installation.

Still, these challenges were outweighed by the installation's poetic success. Albini's spatial composition offered a vision of modernity that was neither cold nor mechanistic, but humane, refined, and deeply sensitive to the history and future of Italian culture. The suspended architecture encouraged viewers to move slowly and attentively, to pause and reflect, and to perceive the works on display within an atmosphere of contemplative serenity.

From a technical and conceptual standpoint, Albini's work on La Nuova Arte Italiana remains a milestone in the history of exhibition design. It exemplifies how spatial composition, material choice, and construction logic can converge to support not only a narrative but an aesthetic and emotional experience. Albini's light structures did not dominate the space—they revealed it, acting as a medium through which Italian artistic identity could be perceived in both its historic continuity and its modern innovation.

In hindsight, this exhibition anticipated many of the values that today underpin sustainable and experiential exhibition design. Through his modular system, minimal material palette, and commitment to sensory engagement, Albini created a model of what exhibitions could be: more than just displays, but immersive environments where architecture and content merge in perfect balance.

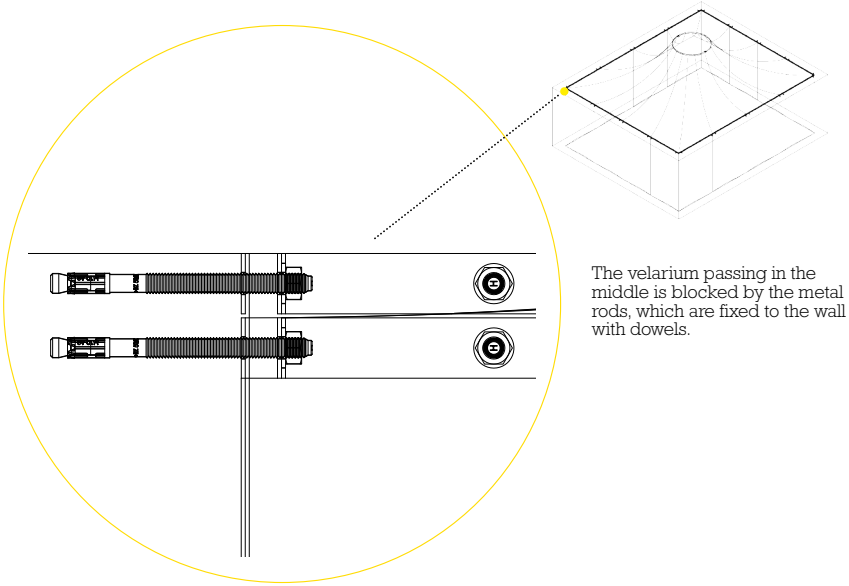


Fig. 17. Constructive detail - Joints for the attachment of the outfitting curtains.

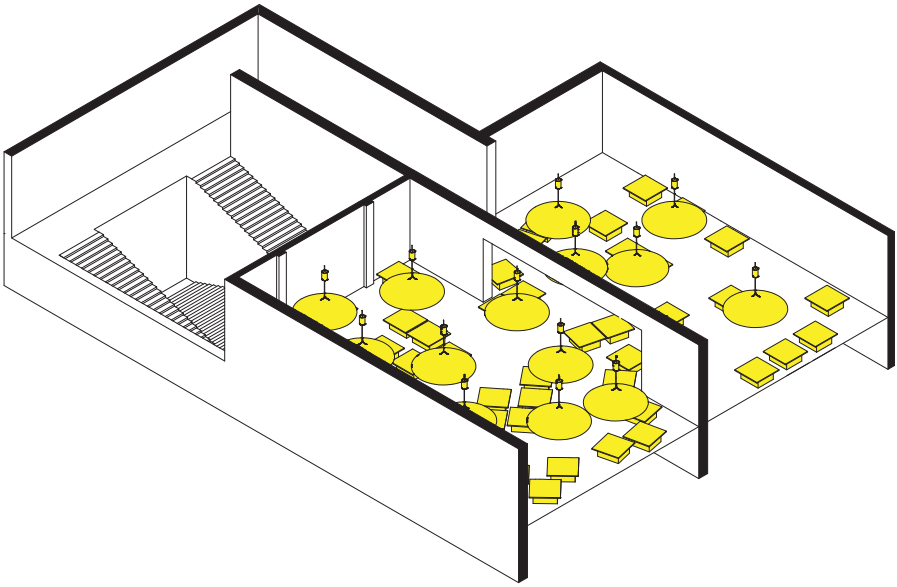
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/la-nuova-arte-italiana-franco-albini-6IpC1D

sheet 4

Industrial Design Section
Triennale di Milano, Milan



Achille & Pier Giacomo Castiglioni
1954

functional and intelligent approach

The X Triennale di Milano, held in 1954 at the Palazzo dell'Arte, marked a turning point in the cultural and professional recognition of design in Italy. Among the most significant contributions was the Mostra dell'Industrial Design, a groundbreaking exhibition curated by a group of designers, prominently featuring Achille and Pier Giacomo Castiglioni. The exhibition, which won the Gran Premio della Triennale, sought not only to display objects but to articulate a new idea of design itself—as a discipline founded on method, logic, and purpose, rather than on style or decoration.

At the heart of the exhibition was the figure of the designer as autonomous professional, distinct from the roles of artist or technician. This vision was reflected in the structure and communication of the show itself: a minimalist, rigorous layout designed to promote clarity, legibility, and the functionality of every detail. The Castiglioni brothers, alongside collaborators such as Enzo Mari and Bruno Munari, created an installation that was not only efficient but also deeply instructive—a didactic platform that exposed visitors to the processes, values, and potential of good design.

The exhibition presented over 150 selected industrial products, ranging from domestic appliances and office tools to prototypes and engineering solutions. These objects were not displayed in isolation but embedded in a narrative context. Each item was accompanied by technical drawings, production information, and visual documentation that communicated both the form and function of the design. This communicative richness helped demystify the industrial process and bring the public closer to the realities of manufacturing and innovation.

A central architectural element of the exhibition was a system of modular wooden tables, designed to be simple, flexible, and sustainable. Built in two heights to accommodate different object scales, these tables were conceived as reusable components—anticipating contemporary concerns with circular design and material efficiency. Each table was composed of a base made of three interlocking elements

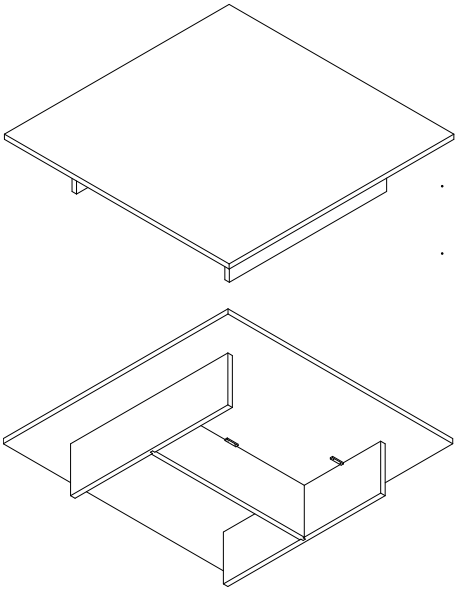


Fig. 18. Construction detail - Display tables | Axonometric views.

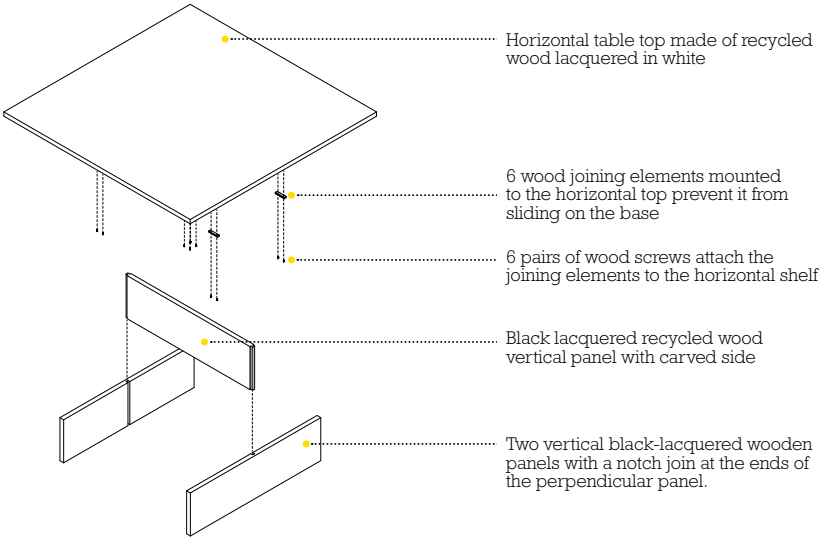


Fig. 19. Constructive detail - Main components of display tables | Axonometric exploded view.

connected via mechanical joints and topped with a horizontal panel serving as the display surface. The use of untreated wood and neutral finishes echoed the ethos of the exhibition: nothing superfluous, nothing merely decorative.

The information accompanying each object was printed on white paper sheets, laid directly onto the display surface or mounted on supporting boards. Digital printing was employed for individual labels and object data, while silkscreen printing was used for larger graphics and signage. This dual strategy ensured visual consistency while remaining economical and resource-conscious. The exhibition's communication strategy thus became an extension of the design thinking it celebrated—accessible, low-impact, and functionally elegant.

One of the most innovative features of the exhibition was its lighting system, meticulously studied to highlight the objects without overwhelming them. Carefully positioned directional lighting guided the viewer's eye along a logical, pedagogical path, transforming the exhibition into a coherent, immersive experience. The lighting also emphasized the volumetric presence of each object, giving equal dignity to a telephone, a coffee grinder, or a typewriter—all objects were treated not as design icons, but as solutions to human needs.

This curatorial and architectural clarity was essential to the exhibition's success. The modular tables, clean lines, and rigorous visual language avoided any sense of spectacle. Instead, they proposed a new ethic of exhibition design—one based on transparency, pedagogy, and an unwavering respect for both the object and the audience. The project represented a collective manifesto: a call for responsible design rooted in usability, reproducibility, and social value.

In retrospect, the Mostra dell'Industrial Design at the X Triennale was not only a celebration of product excellence but also a didactic prototype for future exhibitions. It demonstrated how an exhibition can function as an educational tool, a political statement, and a spatial narrative. Most importantly, it confirmed the Castiglioni brothers' commitment to design as a method—an approach in which even the simplest joint or label contributes to a broader intellectual structure.

This holistic vision, where form, function, communication, and sustainability are interdependent, remains deeply relevant. As contemporary designers grapple with ecological constraints and new digital paradigms, the 1954 exhibition offers a timeless lesson: that good design begins with thoughtful construction, and that the language of objects is always a story of systems, relationships, and context.

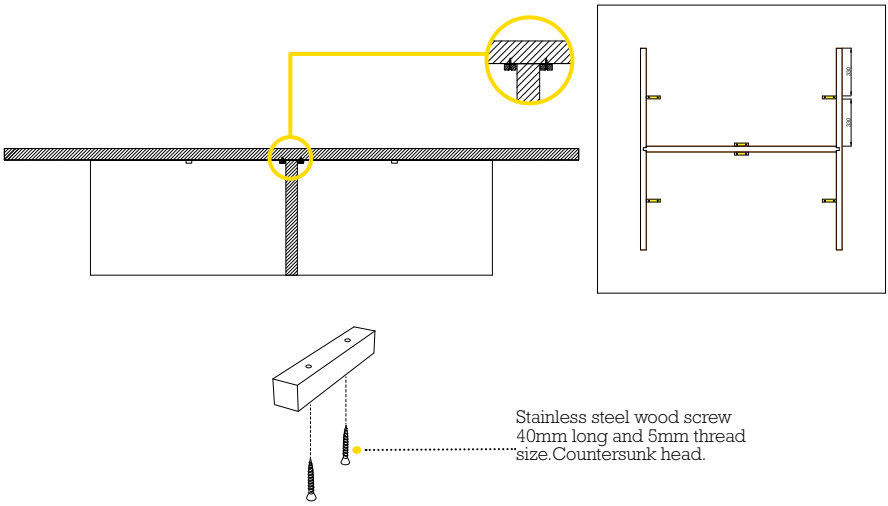


Fig. 20. Construction detail - Structure joints | Sections and axonometric exploded view.

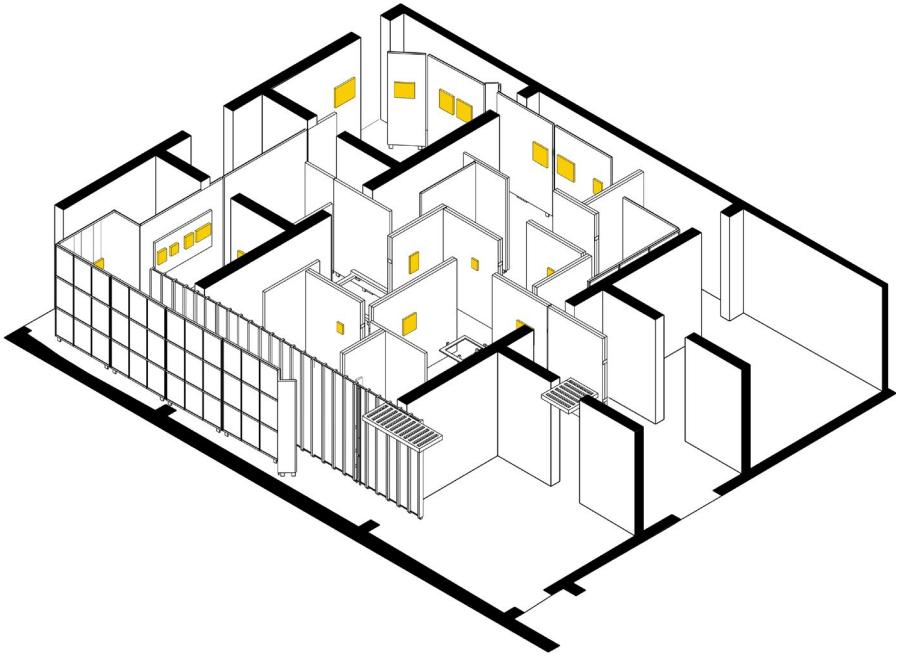
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/sezione-industrial-design-castiglioni-FR7sum

sheet

Piet Mondrian
National Gallery of Modern Art, Rome



Carlo Scarpa
1956

Modularity, lightness and geometric rigor

In 1956, the Galleria Nazionale d'Arte Moderna in Rome hosted the first major Italian retrospective of Piet Mondrian after World War II. This exhibition, curated by Palma Bucarelli and designed by Carlo Scarpa, marked a pivotal moment for the presentation of modern art in Italy, highlighting the Dutch painter's formal evolution from naturalism to abstraction. Scarpa's design for the show was particularly notable not only for its visual harmony with Mondrian's aesthetic principles but also for its innovative use of lightweight, modular, and transportable display systems, which allowed the exhibition to later travel to the Palazzo Reale in Milan.

The exhibition was divided into six clearly articulated sections, which followed the chronological and stylistic development of Mondrian's work. From his early figurative landscapes to the hallmark geometric compositions of the De Stijl period, the layout proposed a linear yet layered journey through the painter's transformation. The architectural language of the display mirrored Mondrian's own approach to composition: clarity, rhythm, and balance.

Scarpa's use of modular panels, covered in bleached raw canvas, referenced the grid-like logic of Mondrian's later paintings. The neutral textile surface created a subtle contrast that foregrounded the colors and lines of each artwork, without overshadowing them. These panels were designed not merely as backdrops but as dynamic compositional elements in their own right, evoking the structured spatiality that underpins De Stijl philosophy. The result was a display that was both didactic and sensorial—inviting viewers to enter into the compositional logic of Mondrian's universe.

The modularity of the panels served a dual function. Practically, they could be disassembled and transported easily, facilitating the mobility of the show. Conceptually, they reinforced the exhibition's theme of order and structure. Every component in Scarpa's layout was considered with precision, from the rhythm of panel spacing to the lighting design, which emphasized the clarity and weightles-

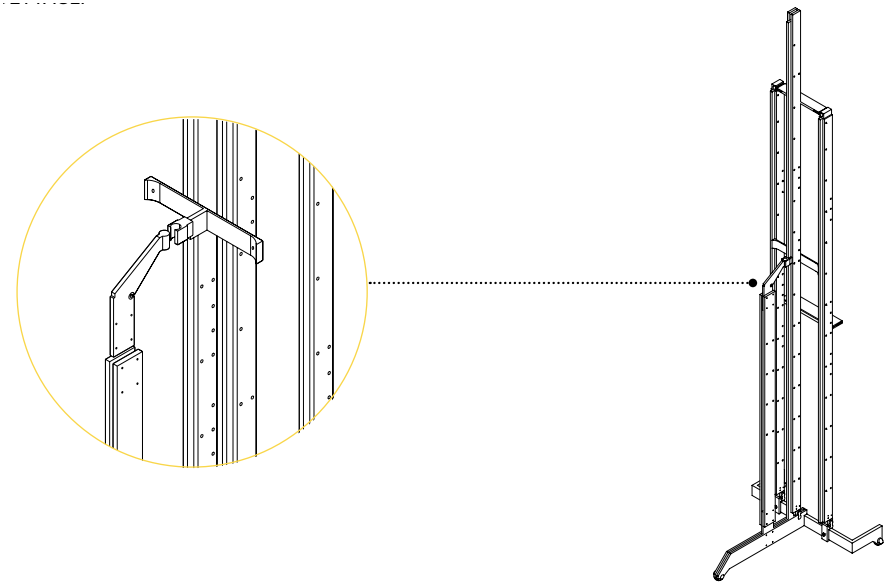


Fig. 21. Construction detail - Main elements of the display unit | Axonometric view.

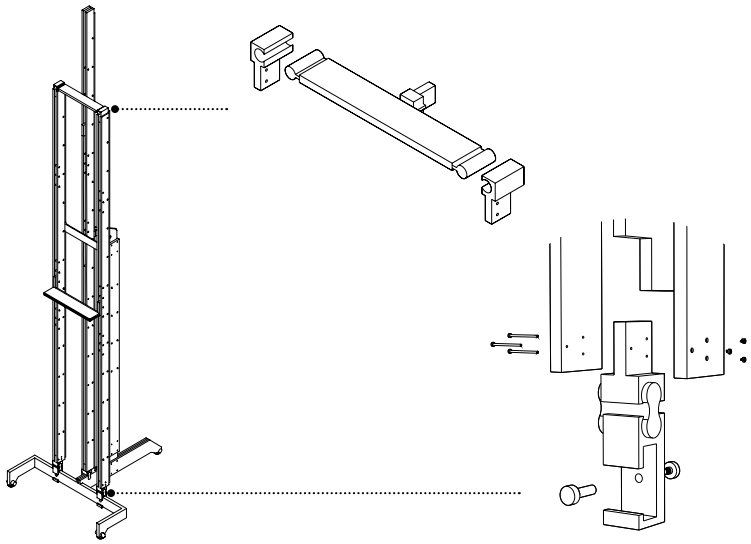


Fig. 22. Construction detail - Main elements of the display unit | Axonometric exploded view.

sness of the works without introducing glare or visual interference.
Importantly, Scarpa's design did not attempt to overpower the content. Rather, it created an architectural setting that enhanced the viewer's engagement with the paintings. The use of restraint—both material and spatial—was essential. By resisting the temptation to "decorate" or impose an aesthetic of its own, the design succeeded in creating an environment of contemplation and clarity. Visitors were guided not just physically through the six sections but intellectually, through the evolution of modern abstract thought.
The exhibition also highlighted Scarpa's deep understanding of how spatial dynamics affect the reception of art. His layout did not merely position works along walls but integrated them into a cohesive, three-dimensional environment. This allowed for the construction of visual dialogues between different periods of Mondrian's output and offered viewers multiple vantage points from which to engage with the work.
Moreover, the exhibition played a key role in promoting abstract art to a wider Italian public during a time when it was still viewed with skepticism by many. Scarpa's modernist, architectural approach served not just to house Mondrian's work but to contextualize it within a broader intellectual and visual tradition, giving abstract painting a dignified stage that spoke to its philosophical and aesthetic rigor.
Ultimately, Scarpa's design for the Mondrian retrospective can be seen as a form of translation—translating visual language into spatial organization, translating an artist's conceptual concerns into curatorial strategy. His ability to create an architecture of thought, as much as of form, positions this exhibition as a landmark not only in the display of modern art but in the history of exhibition design.

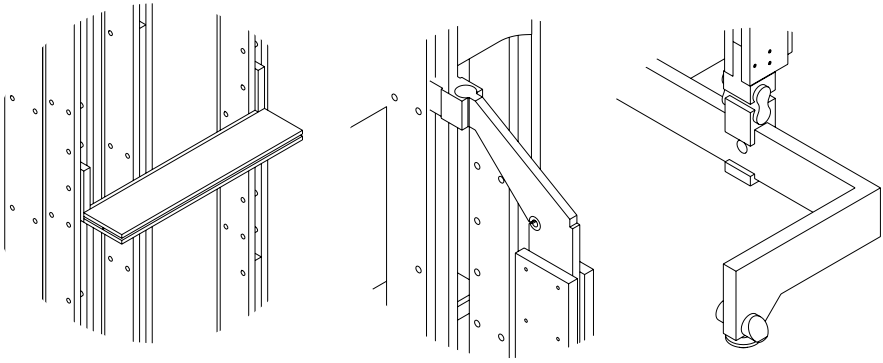


Fig. 23. Construction detail - Structural joints of the display unit | Axonometric views.

QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/piet-mondrian-scarpa-7x9zHH

detail that becomes architecture

While the 1956 retrospective on Piet Mondrian, curated by Palma Bucarelli and designed by Carlo Scarpa, remains significant for its curatorial innovation and refined spatial design, the technical solutions embedded in the exhibition's architecture demand particular attention. Among these, the reuse of Scarpa's iconic easels — originally developed for the Museo Correr in Venice — played a pivotal role in shaping the visitor experience.

Scarpa's easels were not mere functional devices for supporting artworks; rather, they became integral components of the exhibition's conceptual language. Each easel was meticulously designed using a refined system of joints and modularity, reflecting the rationalist geometry and visual economy of De Stijl aesthetics. The choice to employ these freestanding supports — rather than traditional wall hanging — allowed for flexible placement, engagement with architectural elements, and a more nuanced manipulation of lighting and viewing angles.

Constructed from palisander wood and iron, the easels were composed of three vertical wooden rods — two lateral elements (200 × 6 cm) and one central element (247 × 6 cm) — topped by a small brass-fitted shelf and anchored below by a custom-fabricated iron tripod. A fourth rear rod (114 × 6 cm) provided stabilization. Each rod was assembled from three palisander strips joined by small dowels, placed at regular intervals of 15 cm. These dowels also served as the sockets for modular shelving elements, allowing artworks of various dimensions to be mounted at different heights.

This system's engineering was both elegant and robust. While visually light, it provided strong physical support and stability, crucial in a museum context. Scarpa's obsessive attention to detail is evident in the seamless integration of visible joints, the grain orientation of the wood, and the way each component articulated with its counterpart — a harmony of structure, form, and craft.

In the context of the Mondrian exhibition, the easels were positioned with theatrical intent. In some rooms, paintings were presented with their backs facing the

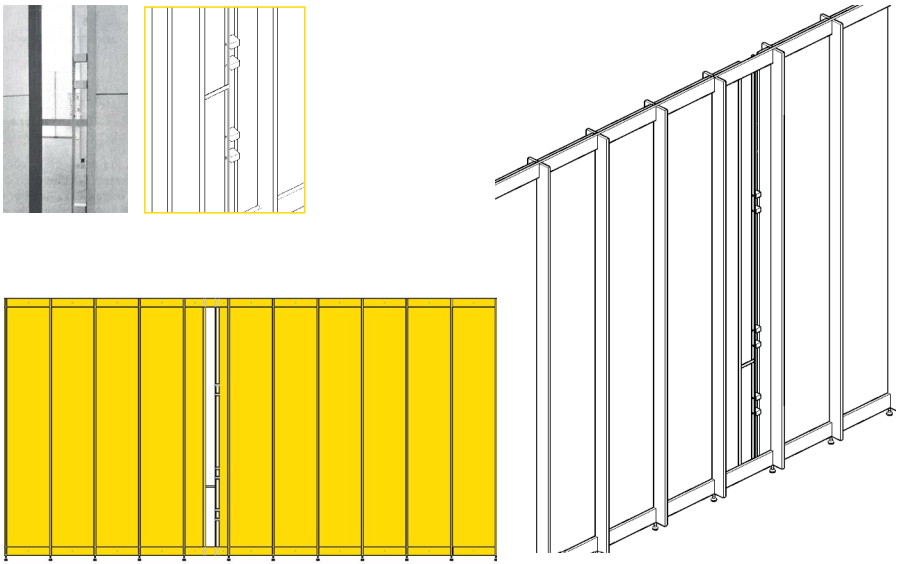


Fig. 24. Exhibit partition wall | Axonometric and elevation views.

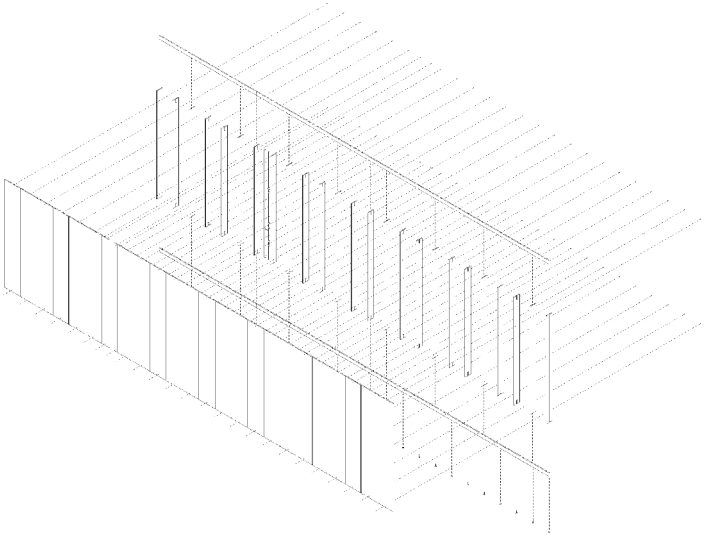


Fig. 25. Exhibit partition wall | Axonometric exploded view.

viewer, encouraging a slower and more deliberate encounter with the object. This inversion of the expected gaze forced the audience to walk around the support, to experience the painting as both image and artifact. In other settings, Scarpa carefully aligned the easels perpendicular to natural light sources, creating a soft backlight that emphasized the chromatic restraint and compositional rigor of Mondrian's canvases.

In the fourth room on the first floor, for instance, visitors were subtly guided to the southwest corner of the gallery to experience a visual dialogue between Bellini's Christ Resurrected and Stefano da Verona's Madonna of the Rose Garden — an intentional gesture by Scarpa, despite the exhibition's modernist focus. The spatial choreography of the easels — their position, height, and the gaps between them — was designed to foster silence, slowness, and a contemplative rhythm within the exhibition.

More than any decorative element or scenographic intervention, these easels conveyed Scarpa's broader vision: that exhibition design should mediate between artwork, viewer, and space. Through his system, he constructed a vocabulary of supports that physically and metaphorically elevated the works on display. He understood that even the smallest technical choices — the tilt of a plane, the depth of a joint, the warmth of the material — could shape how art is perceived, remembered, and felt.

Thus, the Mondrian retrospective becomes not only a case study in curatorial narrative, but also an exemplary model of how the syntax of exhibition furniture can echo and enhance the language of the art it supports. Scarpa's easels are architecture in miniature — quiet interlocutors in a visual dialogue between modernism and museography, between Mondrian's two-dimensional grids and the three-dimensional rhythms of space.

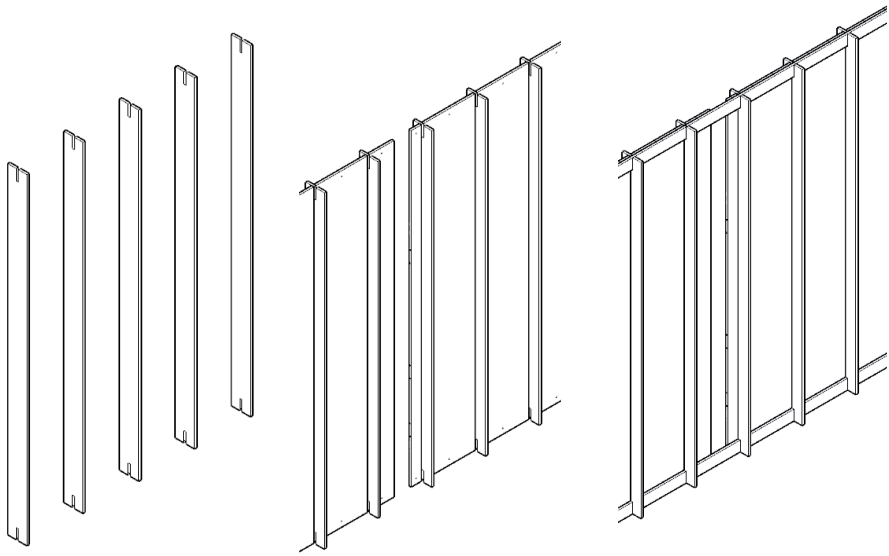


Fig. 26. Construction detail - Main components of the exhibit partition wall | Axonometric views.

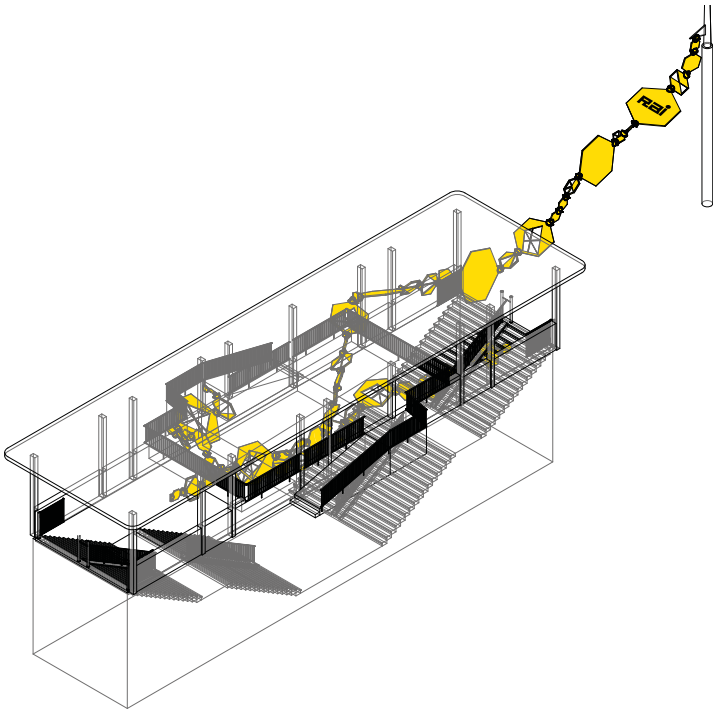
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/piet-mondrian-scarpa-7x9zHH

sheet

RAI Pavilion
34th Milan Fair, Milan



Achille & Pier Giacomo Castiglioni
1956

Modularity and interaction

In 1956, the Italian public broadcasting company RAI (Radiotelevisione Italiana) decided to significantly enhance its presence at the Fiera Campionaria di Milano. Departing from its earlier ephemeral appearances, the company acquired a permanent pavilion space near the area known as "Porta Agricoltura," intending to create a dedicated architectural environment to showcase its growing range of television and radio programming.

The industrial, rectangular building they acquired was an unremarkable structure. However, under the direction of Achille and Pier Giacomo Castiglioni, this ordinary space was transformed into a vibrant and innovative exhibition environment. Tasked with designing a dynamic and educational setting, the Castiglioni brothers responded with one of their most memorable and playful temporary exhibition designs—an environment that encouraged interaction and challenged conventional notions of display and viewer engagement.

The central idea of the project was a modular and kinetic structure made of hexagonal wooden panels of varying dimensions. These panels were not merely decorative or structural; they were the primary medium through which RAI's public-facing narrative was communicated. Adorned with vivid graphic designs by Heinz Waibl and Giancarlo Iliprandi—two of the most influential graphic designers in post-war Italy—each panel displayed elements of the RAI programming schedule. The graphics combined modernist typography, vibrant color fields, and illustrative storytelling to represent genres, themes, and broadcasting innovations. These panels were distributed along both the ground and upper floors of the exhibition space, forming a rhythmic sequence that visually wrapped around the visitors as they moved through the building. In this way, the installation functioned as a spatial storyboard: an architectural environment where design and information merged seamlessly.

The technical heart of the project—and perhaps its most significant innovation—was a single metallic joint system that connected the panels. This joint was both

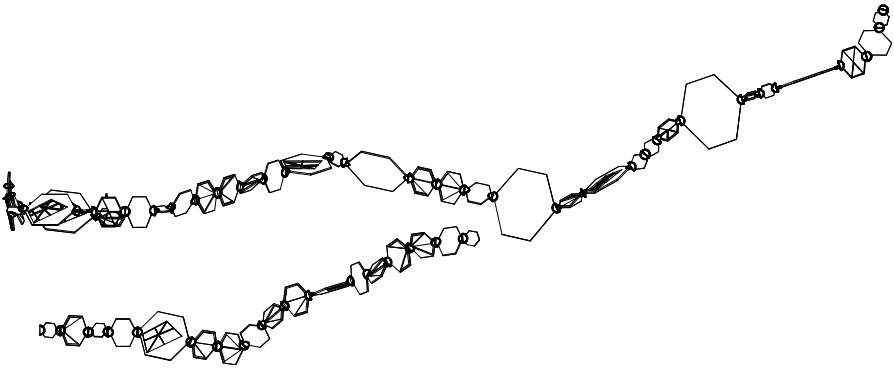


Fig. 27. Construction detail - Main components of the outfitting element | Axonometric view.

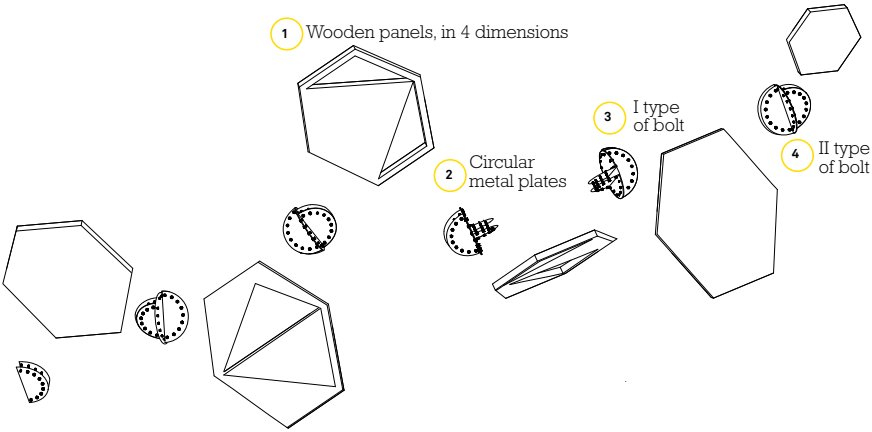


Fig. 28. Construction detail - Abacus of exhibition components.

minimal and flexible, allowing the panels to rotate at fixed angles of 30, 40, or 60 degrees. The joints also enabled some panels to be transformed into display surfaces or tabletops. This feature was not merely an engineering trick; it expressed a fundamental tenet of the Castiglioni design ethos: making the object perform more than one function through the elegance of a singular, intelligent solution.

The joint became a point of interaction for the public. Visitors were encouraged to touch, move, and rotate the panels—effectively becoming participants in the display rather than passive observers. The act of interaction was not only functional but conceptual: it emphasized the plasticity of communication, the adaptability of media, and the transformation of space through human engagement. The exhibition thus prefigured many contemporary concerns around interactivity in museum design and experiential communication.

From a construction standpoint, the design represented a remarkable example of modular thinking. The use of a single joint to control multiple configurations speaks to a philosophy of economy in means—a preference for achieving the maximum visual and experiential effect with the minimum number of elements. The entire system was conceived to be lightweight, demountable, and reusable. Components were pre-fabricated off-site and assembled in situ with remarkable ease, thanks to the simple and robust construction logic behind the metallic joints and wooden panel units.

The modular nature of the system allowed the designers to adapt to the spatial constraints of the building without sacrificing the unity of the visual concept. The floor plan remained open and navigable, while the suspended and freestanding panels created focal points, sightlines, and moments of engagement across the exhibition.

The RAI Pavilion of 1956 is often cited as a precursor to many of the principles that would define interactive exhibition design in the decades to follow. It combined clarity of communication with material economy, aesthetic intelligence with structural logic, and did so in a way that was deeply tied to the cultural optimism of 1950s Italy. It was not just a space for communication but a platform for exploration and public imagination.

The design is also a significant artifact in the broader legacy of the Castiglioni brothers, whose work across architecture, industrial design, and exhibition design consistently blurred the lines between utility and play, structure and storytelling. The 1956 pavilion encapsulates this approach perfectly: it was a playground for ideas, executed with precision and charm.

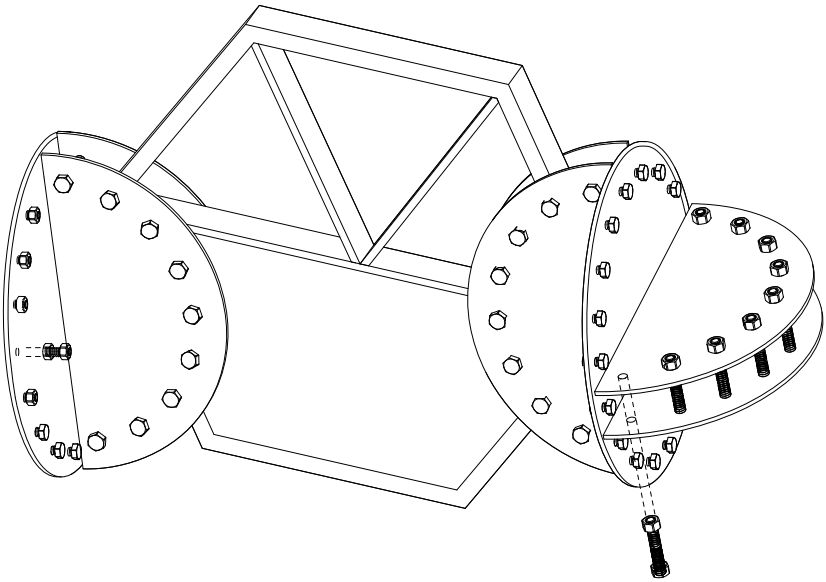


Fig. 29. Construction detail - Joints between components | Axonometric view.

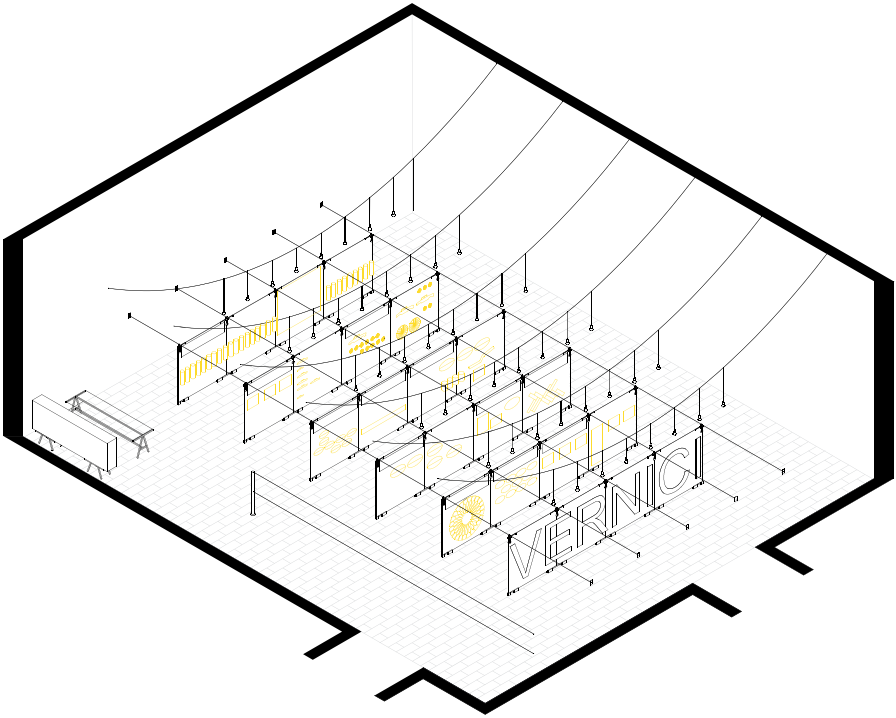
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/padiglione-rai-1956-castiglioni-Q-q6Agw

sheet

Montecatini Pavilion, Paint Hall
37th Milan Fair, Milan



Achille & Pier Giacomo Castiglioni
1959

Transparency, color and technical precision

In 1959, for the XXXVII edition of the Fiera Campionaria di Milano, Achille and Pier Giacomo Castiglioni were commissioned by Montecatini to design an exhibition space dedicated to Duco, the company's innovative line of paints. The resulting Sala delle Vernici (Paint Hall) was not just a commercial showcase—it was a spatial manifesto. With its radical transparency, meticulous construction, and thoughtful integration of graphic design, the installation represented a milestone in temporary exhibition design, demonstrating how technical precision and visual clarity could be merged to extraordinary effect.

Conceived as a minimal and immersive environment, the installation revolved around six large display panels composed of tempered glass plates, each measuring 2×2 meters with a thickness of 10–12 mm. These panels were mounted vertically on a light and discreet structural system, composed of elegant bases anchored to the floor and a network of steel cables suspended from the ceiling and connected to the walls using precision-engineered metal tensioners and fixing plates.

This subtle structural choreography created a spatial rhythm of weightless glass planes, through which vibrant painted samples appeared to float. The visual focus of the exhibition was entirely on color—saturated, luminous, and omnipresent—enhanced by six lines of 500-watt catenary lamps strung diagonally across the space. The lighting was meticulously calibrated to amplify the brilliance and depth of the Duco finishes, transforming the display into a chromatic spectacle.

Max Huber, one of Italy's most influential graphic designers, collaborated on the project, developing a graphic language that communicated both the versatility and the modern appeal of Duco paints. His compositions—bold, geometric, and color-intensive—matched the spirit of the space, contributing to its overall dynamism.

The design of the space itself was immaterial and silent. White walls and a white ceiling reflected and diffused light, reinforcing the perception of an ethereal, nearly dematerialized environment. In this controlled abstraction, color became

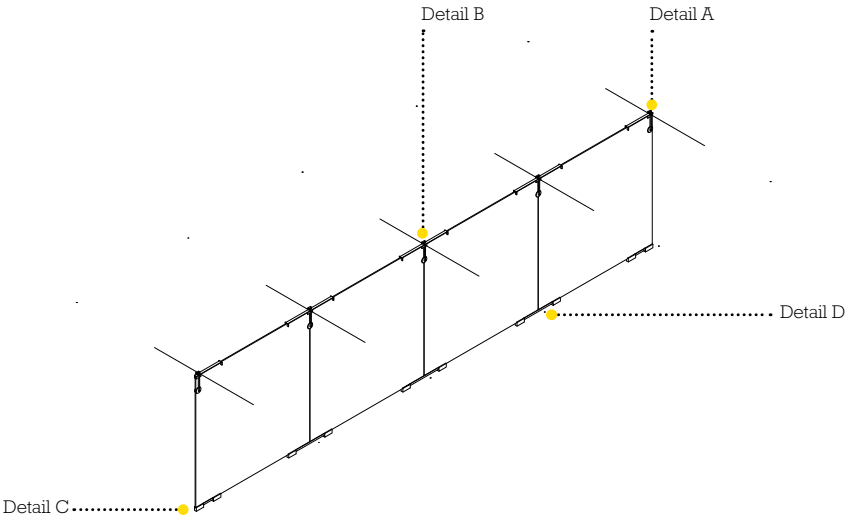


Fig. 30. Construction detail - Exhibition wall of the exhibit | Axonometric view.

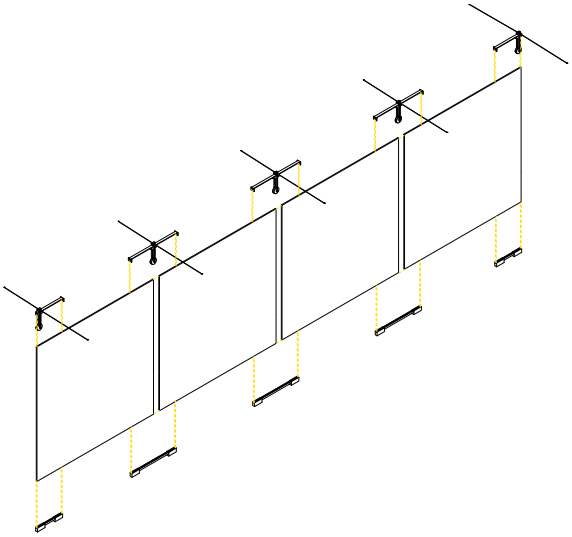


Fig. 31. Construction detail - Exhibit wall of the exhibit | Axonometric exploded view.

not only the content but the very atmosphere of the exhibition. The layout encouraged a continuous flow of visitors, subtly guided by a low, linear partition toward the exit. This small but strategic architectural gesture ensured a coherent experience without the need for explicit signage.

A key aspect of the project lies in its structural detailing. The Castiglioni brothers did not seek to conceal the technical elements of the installation. On the contrary, they celebrated them. The junctions, brackets, and cables were not hidden but exposed and integrated into the aesthetic language of the exhibition, reinforcing its honesty and technical sophistication.

The tempered glass panels were securely fastened to metal plates with engineered tensioners to ensure both stability and visual delicacy. The load-bearing system was designed to withstand vibrations and dynamic stresses while maintaining an appearance of effortlessness. The tensioned cable network bore the structural loads invisibly, creating an optical illusion of floating elements in space. These details exemplify the Castiglionis' philosophy: every component, no matter how utilitarian, had to contribute both functionally and formally to the architectural whole.

Additionally, the Sala delle Vernici included an informational area for staff to interact with visitors, enriching the exhibition with an educational and dialogical dimension. It provided a tactile and intellectual complement to the visual experience, underlining the materiality and technical innovation of Duco products while allowing for direct engagement with the public.

This project is a prime example of how architecture and exhibition design can transcend mere display, becoming a sensory and intellectual exploration of space and material. The Sala delle Vernici demonstrated how temporary exhibitions could function as laboratories for architectural experimentation, where lightness, order, and color converge in a language that is as rigorous as it is poetic.

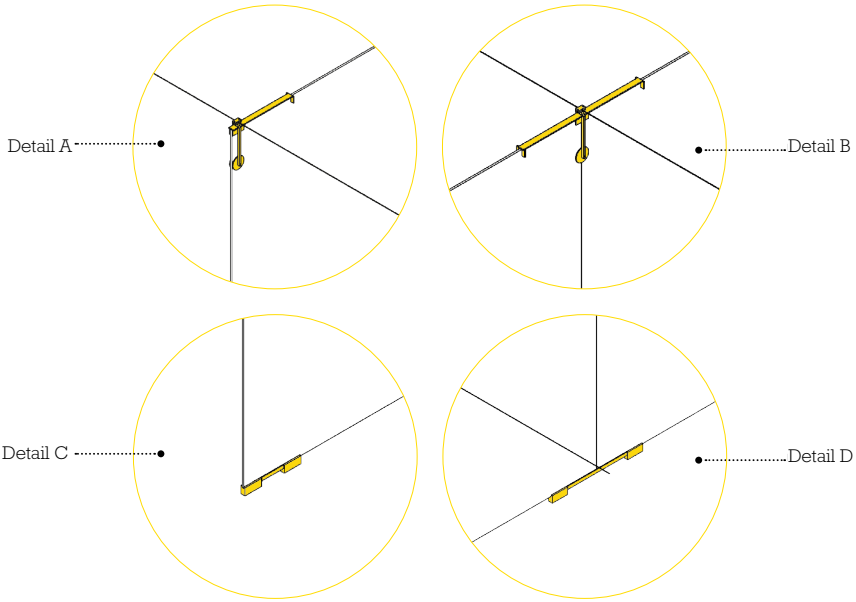


Fig. 32. Construction detail - Wall joints | Axonometric views.

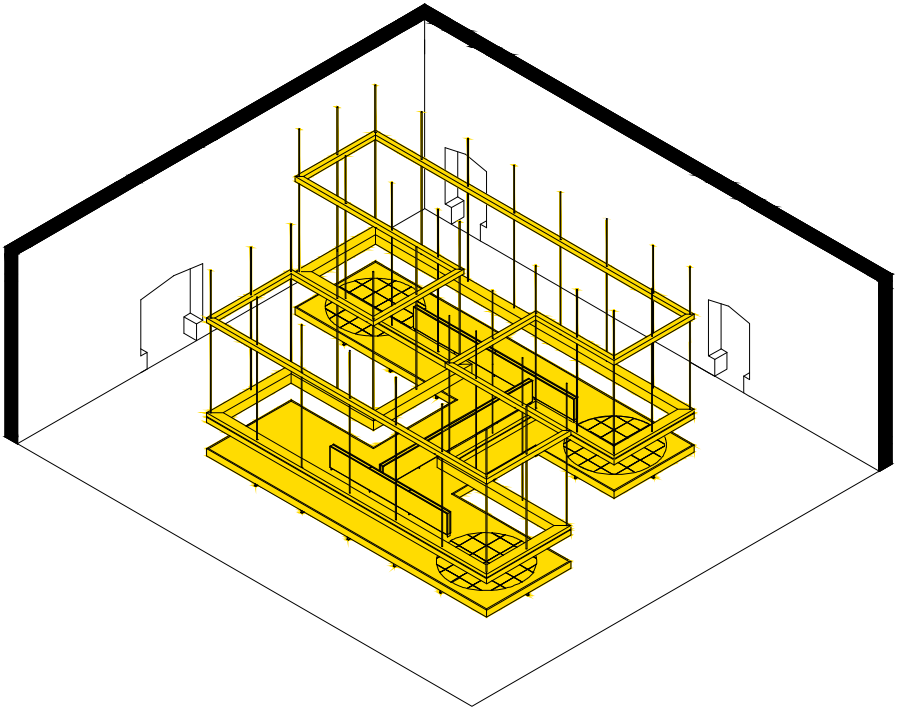
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/padiglione-montecatini-castiglioni-8bctvv

sheet

Montecatini in Southern Italy
Montecatini Pavilion, Milan Fair, Milan



Franco Albini, Franca Helg
1961

Order and fluidity for an open system

In 1961, at the Fiera Campionaria di Milano, architects Franco Albini and Franca Helg designed the exhibition La Montecatini nel sud d'Italia, a landmark example of industrial exhibition design that merged rationalist principles with expressive spatial choreography. Hosted within the Montecatini pavilion, the installation aimed to communicate the industrial expansion and infrastructural efforts of Montecatini—one of Italy's largest chemical and engineering firms—through a language that was both technical and accessible.

The exhibition introduced a refined modular system based on the repetition of an "H" form, deployed horizontally and articulated across three levels. This structural rhythm created a coherent spatial matrix that guided the display of materials while dissolving any notion of a fixed or privileged viewpoint. Visitors were invited to engage with the space through a fluid, non-hierarchical experience that enabled a multiplicity of perspectives.

At the ground level, the lower arms of the "H" supported industrial models, illuminated plexiglass graphics, and photographic panels. These elements highlighted the scope and specificity of Montecatini's operations in Southern Italy, providing both technical and territorial narratives. The central level featured a horizontal black metal band containing spot lighting systems—functioning as both lighting infrastructure and spatial demarcation. The top level consisted of another metal band used to bounce diffused light off the white ceiling, creating an ambient, indirect illumination that unified the space with a sense of airiness and balance.

One of the most distinctive aspects of the installation was the use of red steel tension rods that suspended the metal bands with surgical precision. These thin structural elements not only provided stability but also introduced a strong graphic character into the space. The sharp contrast between the black bands, red rods, and white ceiling amplified the visual clarity and formal rigor of the installation.

The material palette—metal profiles, plexiglass, and backlit photographs—was

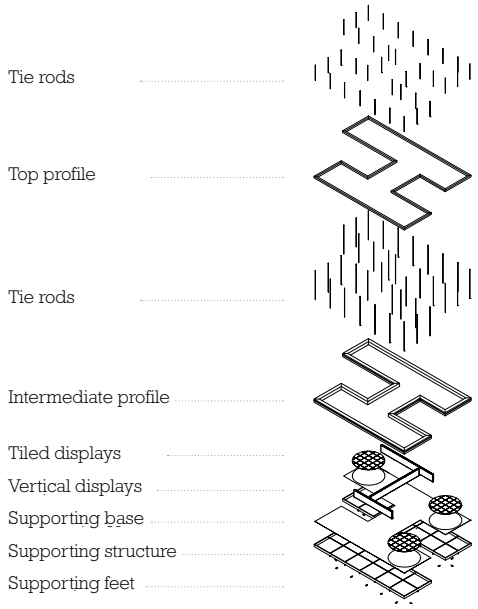


Fig. 33. Main structure of the layout | Axonometric exploded view.

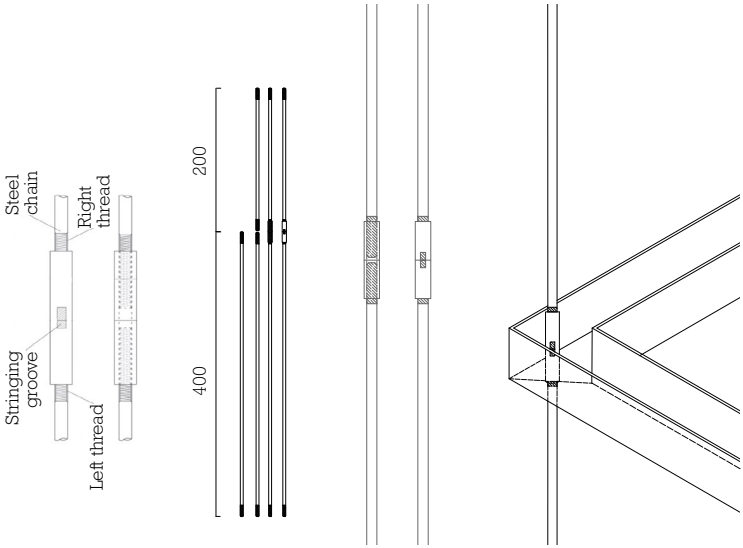


Fig. 34. Construction detail - Tie rods of the structure| Axonometric view and dimensioned elevations.

chosen to resonate with the industrial identity of Montecatini. However, Albini and Helg did not merely stage an industrial showcase. They orchestrated a democratic and elegant environment, where each exhibit component—whether a machine model or a diagram—was treated with equal visual dignity. The strict horizontal logic of the spatial layout reinforced this equality, enabling a balanced and legible presentation of information.

The technical sophistication of the display was underscored by the simplicity of its modular construction: C-section steel profiles, threaded rods with couplers and locknuts, and prefabricated paneling elements. These ensured both structural stability and ease of assembly, reflecting Albini and Helg's commitment to efficient yet expressive construction. A gridded ceiling design further contributed to visual order, housing lighting fixtures and hiding mechanical components without interrupting the spatial language of the exhibit.

This exhibition was more than a communication platform for an industrial giant—it was a manifesto for a new kind of spatial narrative, one that prioritized clarity, inclusiveness, and elegance. The architectural solution combined functionality, aesthetics, and logic in ways that continue to inspire contemporary exhibition design.

Studying La Montecatini nel sud d'Italia offers valuable insights into the architectural strategies that make exhibitions not just containers of content, but active, participatory experiences. The exhibition foregrounded the importance of structural legibility, visual equilibrium, and strategic use of light, all of which were guided by Albini and Helg's broader design ethics—rooted in modernism, but sensitive to the sensory and symbolic dimension of space.

The project reminds us that even in corporate or industrial contexts, architecture can speak a refined, democratic language—transforming technical content into spatial poetry.

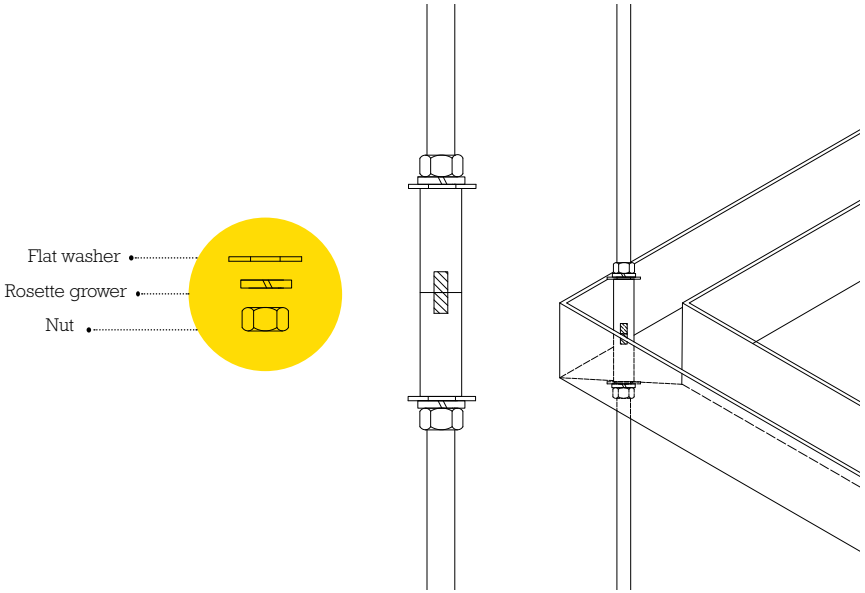


Fig. 35. Construction detail - Joints and components of the tie rods | Axonometric and elevation views.

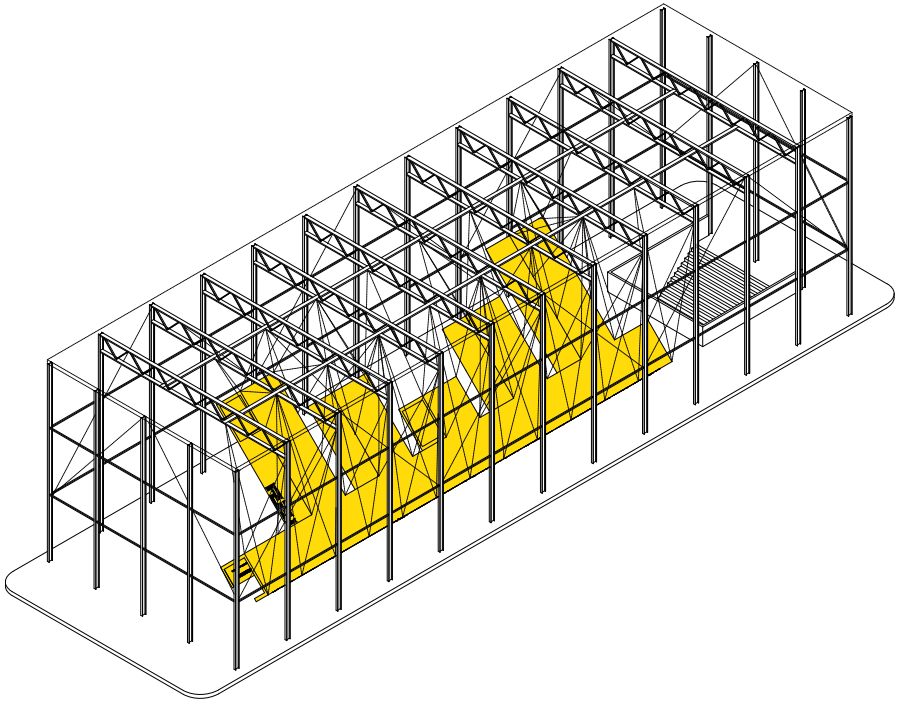
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/stand-montecatini-albini-tQctnj

sheet

RAI Pavilion
43rd Milan Fair, Milan



Achille & Pier Giacomo Castiglioni
1965

An immersive architecture

In 1965, Achille and Pier Giacomo Castiglioni collaborated with Enzo Mari to create an iconic exhibition structure for RAI (Radiotelevisione Italiana) at the XLIII Fiera Campionaria di Milano. The pavilion, titled "Collegamenti perfetti e complessi mezzi tecnici portano in casa gli avvenimenti di ogni giorno" ("Perfect Connections and Complex Technical Means Bring Daily Events into the Home"), was conceived as an immersive, modular, and flexible system. It is a landmark example of how spatial narrative, structural intelligence, and visitor engagement could converge in a single architectural gesture.

The conceptual heart of the installation was a long, suspended horizontal channel—essentially a giant truss—measuring approximately 36 by 11 meters. From this channel, five vertical cylindrical volumes or "cannocchiali" (telescopes) rose at different heights, each representing a stage in the process of television broadcasting: from production to transmission, reception, and public fruition. Visitors entered the structure and followed a mandatory linear path, experiencing a choreographed journey through sound, light, and form. The natural light filtering from the open tops of the "cannocchiali" added a sensorial, almost sacred quality to the progression. A continuous audio backdrop reinforced the immersive dimension of the exhibit.

Structurally, the pavilion rested on a trilitic modular steel frame system with a corrugated metal roof, reaching heights of up to 10 meters. The frame allowed for optional enclosing panels to be installed, although the original 1965 edition remained partially open. The truss was suspended using steel cables anchored to the pavilion's frame, creating a floating sensation that emphasized its lightweight and adaptable construction. The installation was fabricated by Ferroedil Moraschina and Impresa Mari with a reported budget of 20 million lire.

The use of modularity and repetition in the truss and telescopic units embodied the Castiglioni brothers' commitment to rational, reconfigurable design. The structure was not only visually compelling but also demonstrated a sophistica-

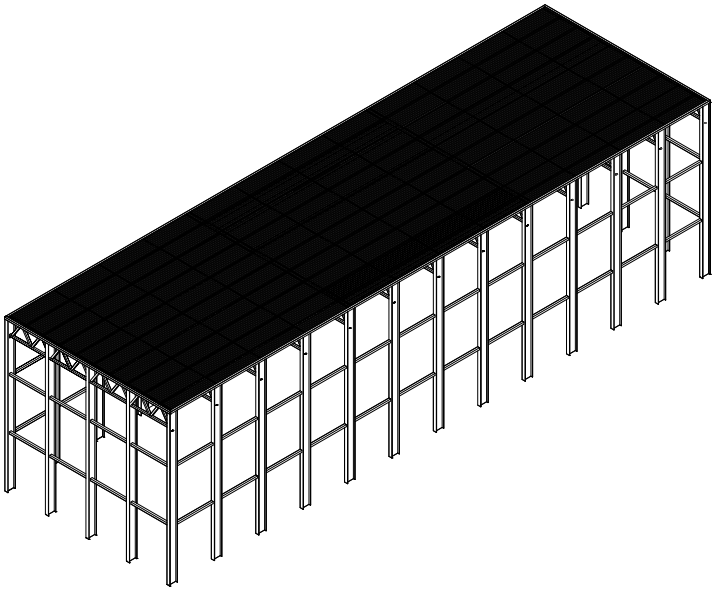


Fig. 36. Supporting structure of the exhibit | Axonometric view.

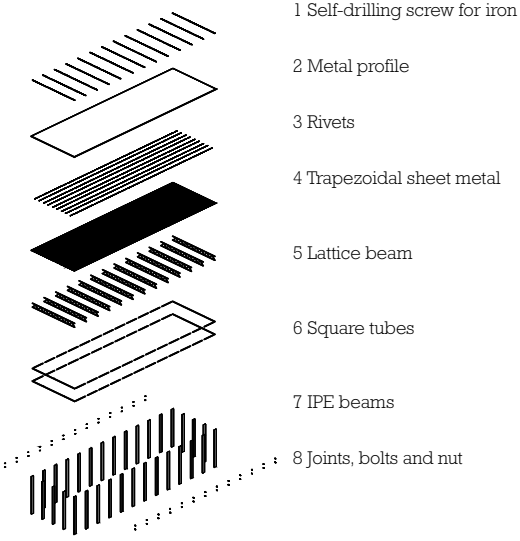


Fig. 37. Supporting structure of the exhibit | Axonometric exploded view.

ted understanding of temporary architecture's demands—ease of assembly, disassembly, and reuse. These traits remain essential for contemporary sustainable exhibition design.

The design invited the audience to become an integral part of the space: as they walked through, their presence altered the visual and acoustic dynamics of the environment. This inversion of the traditional spectator role made the pavilion not just a container for content but an active, performative space—what Achille Castiglioni once referred to as a "millepiedi" (millipede), referencing the procession-like flow of bodies through the suspended tunnel.

Enzo Mari's graphic contributions—especially typographic treatments and signage—provided a conceptual and visual coherence to the narrative, bridging the architectural and communicative elements. His role, though less often discussed than that of the Castiglioni brothers, was vital to the success of the project, reinforcing the idea that exhibition design is a collaborative, interdisciplinary endeavor.

The RAI Pavilion at the 1965 Milan Fair stands as a significant precursor to contemporary interactive and experiential exhibitions. Its innovation lies not in technological spectacle but in its ability to use basic architectural elements—steel frames, cable suspension, controlled pathways, and natural light—to produce a meaningful, democratic, and educational space. In a time before digital media and immersive projections, this installation managed to communicate complexity through clarity, and interactivity through structure.

Ultimately, the RAI Pavilion remains a masterclass in temporary architecture. It demonstrates how thoughtful spatial design can turn abstract content into embodied experience, and how modular systems can elevate functional requirements into poetic, lasting impressions.

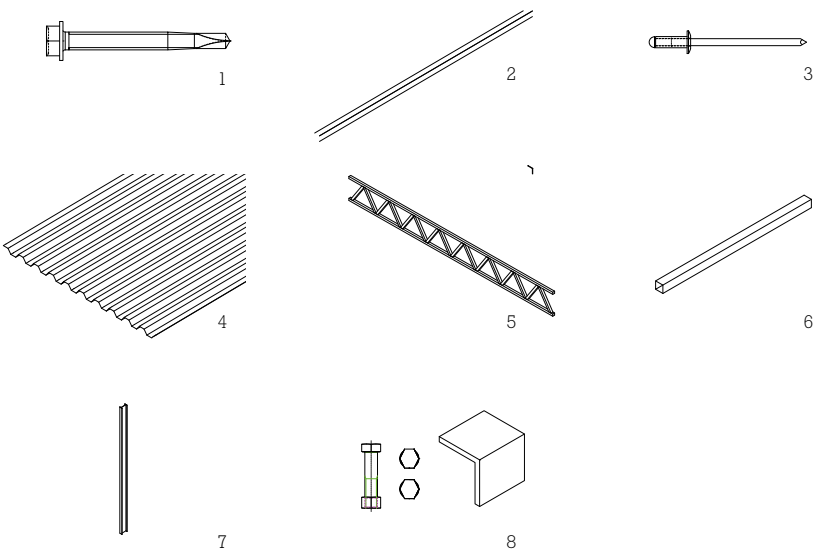


Fig. 38. Construction detail - Joints and components of the structure | Elevations and axonometric views.

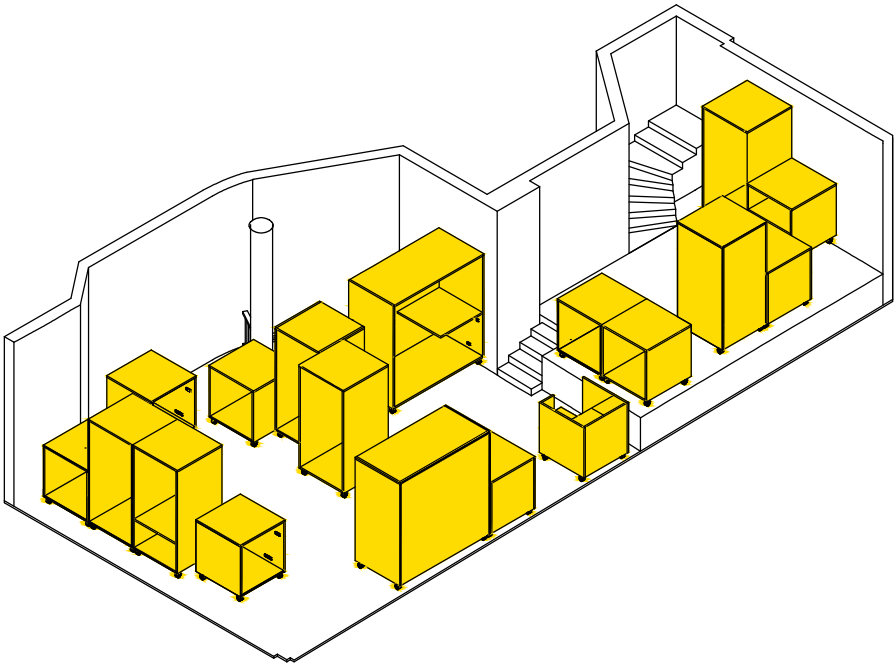
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/padiglione-rai-1965-apg-castiglioni-vXs8mh

sheet 1 0

Showroom Flos
Milan



Achille & Pier Giacomo Castiglioni
1968

Space and light in motion

Achille and Pier Giacomo Castiglioni stand as two of the most influential figures in 20th-century Italian design, not only for their iconic products but also for their groundbreaking contributions to exhibition and showroom design. Their work in the field of lighting display, in particular, offers a masterful example of how a space can be conceived as an active medium to enhance the perception of an object, transforming the act of observation into an immersive, dynamic experience.

One of their most significant innovations in exhibition design was the elimination of traditional display cases, which often isolated the object and limited the viewer's ability to engage with it fully. In their place, the Castiglioni brothers introduced independent modular structures that emphasized the sculptural qualities of lighting objects while allowing the light itself to become an active protagonist in the space.

The heart of their design strategy lay in the creation of an environment defined by soft penumbra: walls and ceilings were covered in dark brown fabric, a chromatic and textural backdrop designed to mute spatial distractions and focus the visitor's attention entirely on the objects on display. Against this subdued architectural setting, mobile white display volumes, crafted in durable plastic laminate, emerged as luminous islands within the space. Mounted on wheels and wired directly to the ceiling grid, these modular display units could be arranged singly or in flexible groupings, isolating each lamp as a freestanding visual event.

This scenographic approach did more than merely enhance the aesthetic appeal of the lamps — it allowed the viewer to engage with each object both as a functional product and as a sculptural artifact, under real lighting conditions. The mobile nature of the display units encouraged curators and visitors alike to reconsider the spatial relationships between the objects, opening the door to endless reconfigurations and eliminating the rigidity that usually characterizes conventional exhibitions.

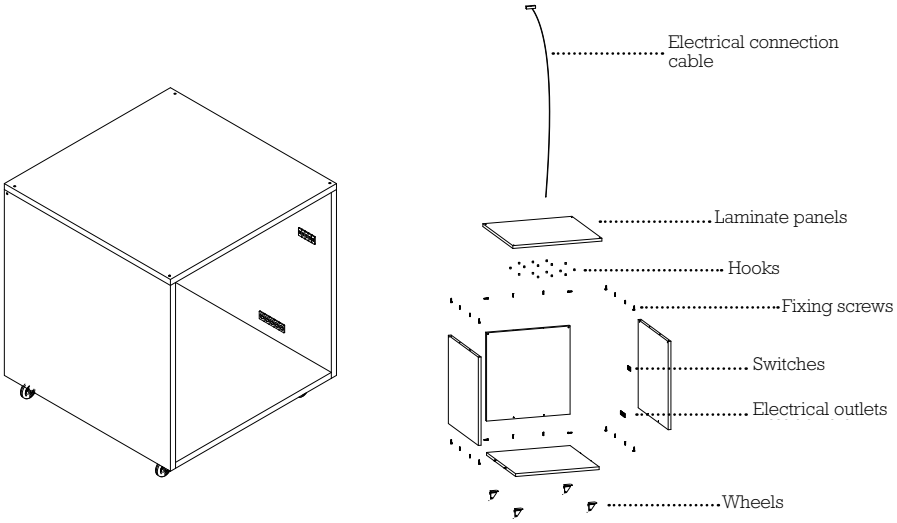


Fig. 39. Construction detail - Supporting structure of the display stand | Axonometry and axonometric exploded view.

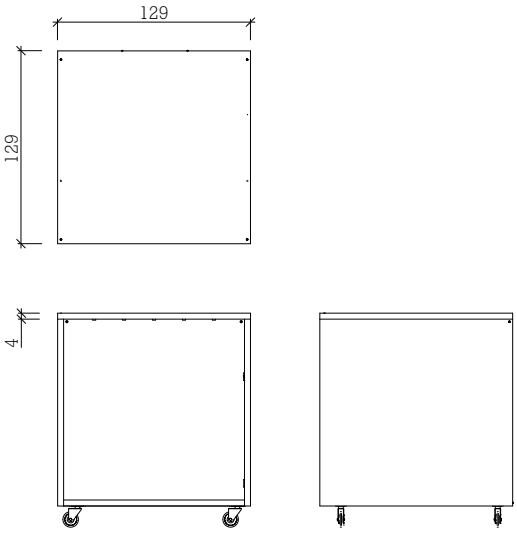


Fig. 40. Construction detail - Supporting structure of the display unit | Floor plan and dimensioned elevations.

The showroom environment designed by the Castiglionis functioned much like a theatrical stage, where light became both the subject and the medium of the display. The movable "display boxes" operated like small, self-contained theaters, where light could be manipulated and tested in real time, echoing the dynamics of a live performance. This fluid system enabled curators to create a continuously evolving geometric landscape, tailored to the specific narrative or functional qualities of the lamps on display.

Beyond its visual and experiential strengths, this flexible system also offered practical advantages. The precise control over lighting conditions, combined with the capacity to isolate and test each lamp in real-world scenarios, enabled visitors to assess the products not just as aesthetic objects but as functional solutions. At the same time, the reconfigurable nature of the setup minimized the need for extensive structural interventions, reducing waste and encouraging the reuse of materials, foreshadowing concerns around sustainability long before these became central to contemporary design discourse.

By seamlessly integrating technical precision, spatial innovation, and an acute sensitivity to the role of light in shaping perception, the Castiglionis' lighting display installations stand as enduring models of exhibition design. Their work reveals how thoughtful staging can transform commercial display into an experience of discovery, where the boundaries between product, architecture, and user begin to dissolve, and light itself is elevated from functional necessity to design language.

Display Stand A	Display B	Display C	Display D
129x129 cm 1 pc.	129x129 cm 6 pcs.	258×129 cm 10 pcs.	258×258 cm 10 pcs.

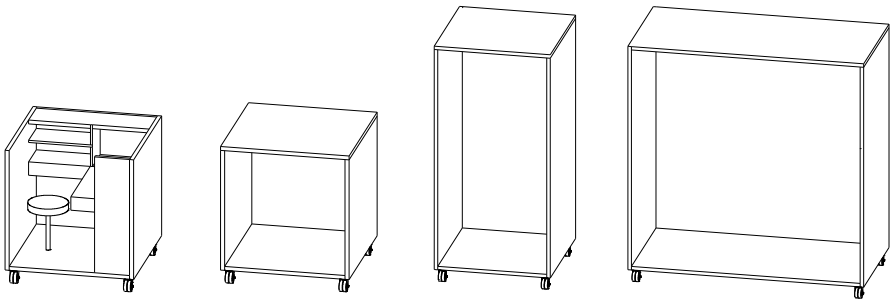


Fig. 41. Construction detail - Abacus of display units | Axonometric views

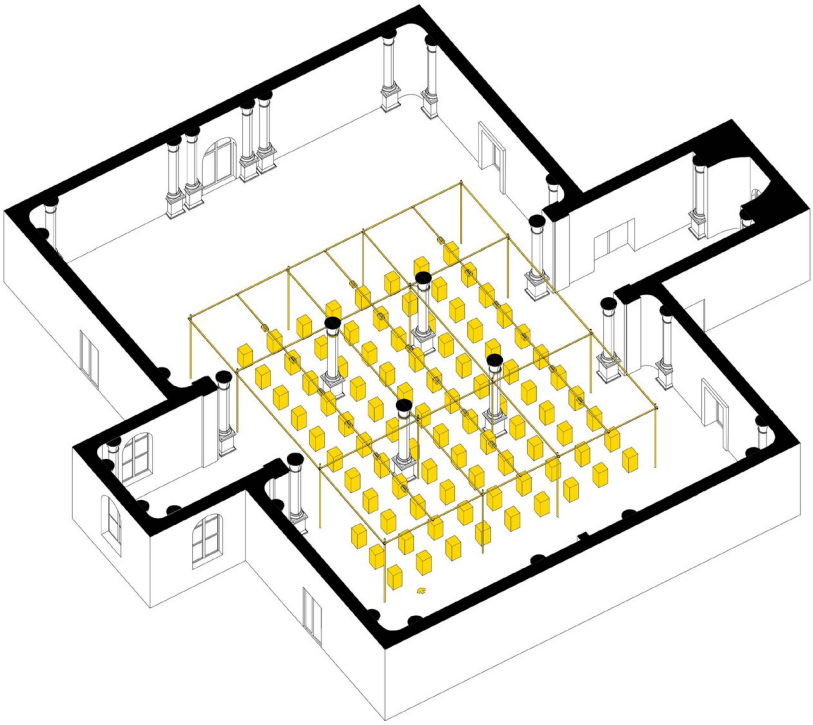
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/showroom-flos-castiglioni-ZfYOS8

sheet 11

Concrete Poetry Exhibition
Ca' Giustinian, Venice



AG Fronzoni
1969

The structural lightness in the setting up

In 1969, the historic Sala delle Colonne at Ca' Giustinian — now home to the Venice Biennale headquarters — hosted the exhibition Concrete Poetry, an international survey dedicated to one of the most radical linguistic and artistic experiments of the 20th century. Curated by Dietrich Malhow and Arrigo Lora-Totino, the exhibition mapped the evolving landscape of concrete, visual, and phonetic poetry, offering visitors a glimpse into a creative field where the form, arrangement, and visual force of words outweighed their traditional semantic function.
In contrast to the ornate classical architecture of Ca' Giustinian, the exhibition layout, designed by Italian designer and theorist A.G. Fronzoni, embraced an extreme formal essentiality. The project offered a masterful example of how rational design can coexist with a highly decorative architectural context without either element overshadowing the other. Fronzoni's approach was not merely about minimalism for its own sake but rather about cultivating clarity, allowing the works themselves — 145 visual plates displayed across 91 modular stands — to fully capture the viewer's attention.
The exhibition layout encouraged an immersive reading of the visual compositions, drawing attention to their geometric rigor, typographical experimentation, and the tension between silence and sound embedded in their graphic design. Fronzoni's subtle design strategy thus worked in perfect synergy with the poetic themes on display: reduction, rhythm, abstraction.
At the technical heart of this sophisticated yet understated spatial composition was the use of the Innocenti tube-joint system, a modular scaffolding framework originally designed in the 1930s by Italian engineer Ferdinando Innocenti. Commonly employed in construction sites for temporary scaffolding structures, this system was reinterpreted by Fronzoni as an exhibition exoskeleton — an elegant and economical skeleton capable of supporting the visual content without visual interference.
The core of the system consists of cylindrical steel tubes joined through a me-

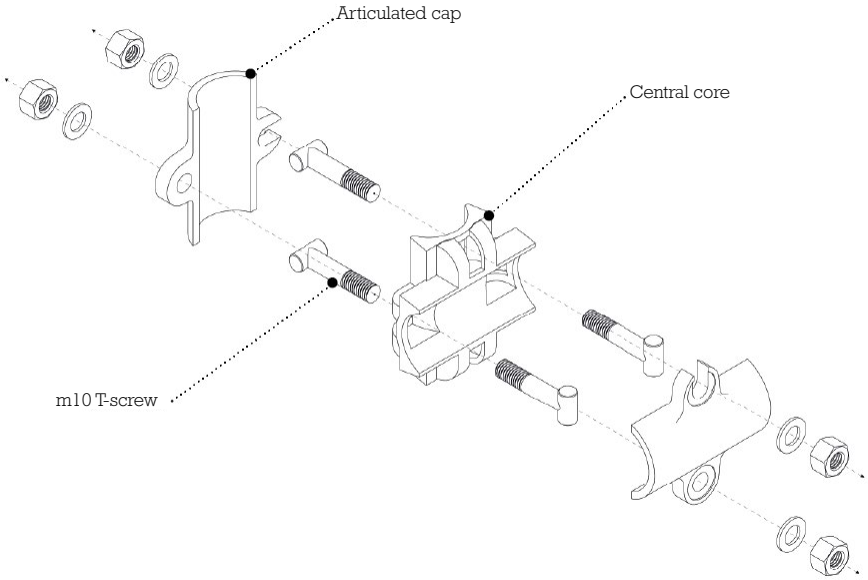


Fig. 42. Construction detail - Orthogonal joint Dalmine Innocenti | Axonometric exploded view.

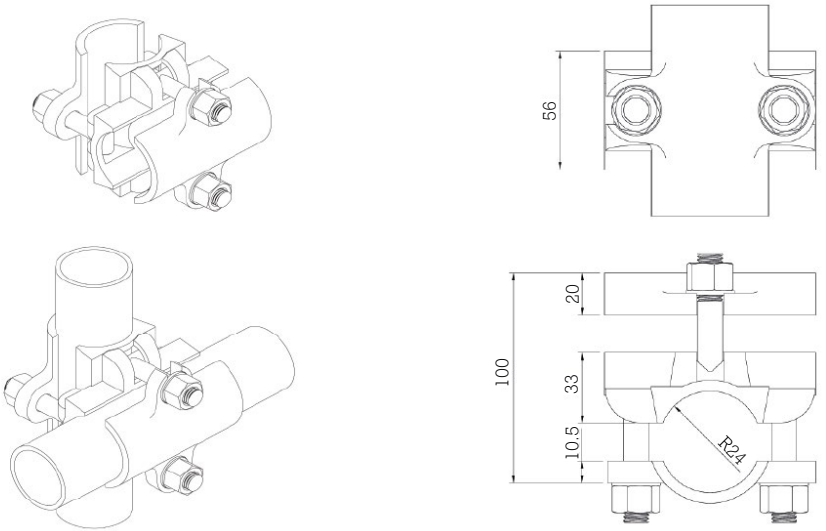


Fig. 43. Construction detail - Orthogonal joint Dalmine Innocenti | Axonometric views and quoted projections.

chanical connector known as the "Innocenti joint," composed of two rotatable "caps" and a central clamping body. When tightened, this connection locks the orthogonal tubes together via friction, ensuring both stability and flexibility. The system's intuitive assembly and disassembly processes allowed for an extremely efficient setup, and more importantly, ensured that the structure could be reused indefinitely — an approach deeply aligned with both economic restraint and environmental awareness, well ahead of its time.

The adaptability of the Innocenti system extended beyond the exhibition world, finding applications across diverse sectors including architecture, industrial production, and even DIY construction. Today, similar modular systems remain widely available in the hardware market, from large retail chains like Leroy Merlin, Tecnomat, and Brico, to specialist producers such as Casotti, Socome, IBE Group, and Gruppo Sif — evidence of the enduring relevance of this versatile structural logic.

Fronzoni's use of the Innocenti system at Ca' Giustinian stands as a textbook example of how technical ingenuity and creative vision can intersect to produce an installation that is at once economical, sustainable, and poetically aligned with its content. The resulting spatial arrangement was not merely a container for the artworks but part of the narrative experience, reinforcing the fundamental design principle that true innovation often lies in rethinking ordinary materials and methods.

Beyond its visual restraint, the Concrete Poetry exhibition — both in its curatorial content and its spatial articulation — offered visitors an exploration of language stripped to its core components: shape, rhythm, and space. Fronzoni's scenography, much like the concrete poems it housed, emphasized the power of reduction, turning the exhibition space into an active partner in the viewer's aesthetic experience.

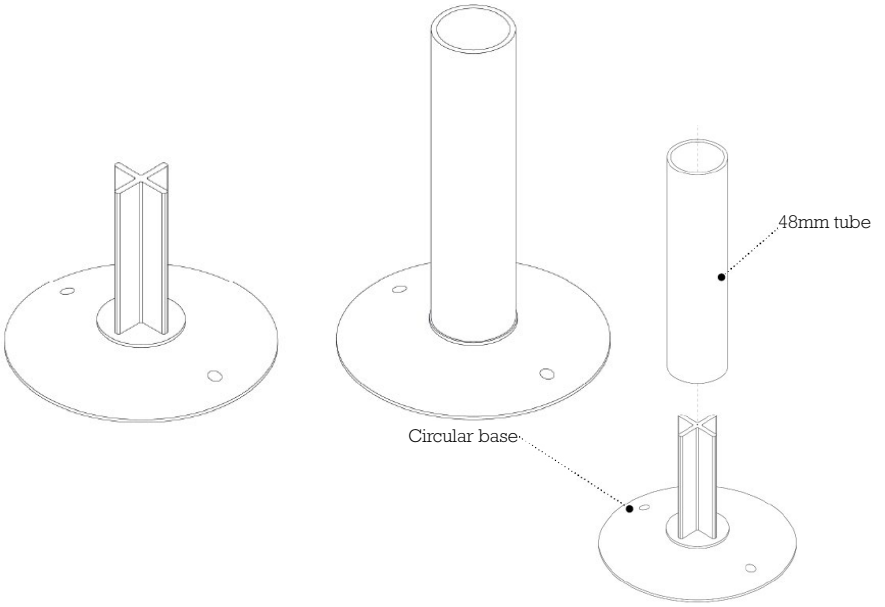


Fig. 44. Construction detail - Circular base Dalmine Innocenti | Axonometric views and exploded views.

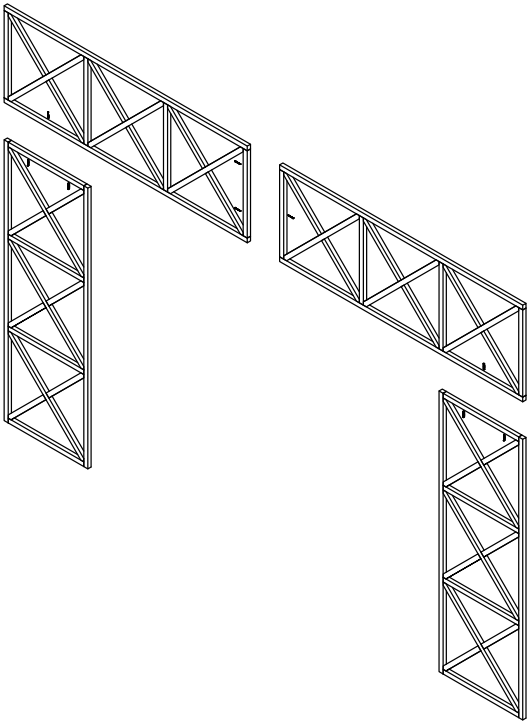
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/ag-fronzoni-poesia-concreta-cYfoyy

sheet 12

Theatre in the Weimar Republic
Palazzo delle Esposizioni, Rome



Maurizio Di Puolo
1978

Reuse as a design tool

The exhibition Theatre in the Weimar Republic offered not only an exploration of the aesthetic and political dimensions of German theatre during the interwar years but also an inspiring example of how exhibition design can be employed to echo and enhance curatorial narratives. Staged as part of a broader cultural program dedicated to 20th-century European avant-garde movements, the exhibition was conceived to highlight the tensions, innovations, and radical artistic experiments that shaped the theatrical landscape of the Weimar period.

One of the most distinctive aspects of this exhibition was its scenographic approach, which masterfully balanced economy of means with strong visual symbolism. Even before crossing the exhibition threshold, visitors were confronted by a striking and evocative gesture: a large red flag, visible from outside the venue, unfurled across the entrance. Far from being a neutral decorative element, the flag embodied the utopian ideals, political struggles, and collective aspirations that defined the era under investigation. Once inside, the fabric's saturated color bathed the space in a warm, diffuse light, creating an immersive atmosphere that invited reflection on the social and cultural ferment of the Weimar years. The choice of this single, charged symbol demonstrated the power of scenographic design to establish an emotional and intellectual context for an exhibition.

The technical heart of the installation lay, however, in the innovative use of modular wooden barriers, originally designed as crowd-control fences and recovered from the municipal storage yards of Rome. Rather than commissioning custom display walls, the design team repurposed these humble, utilitarian objects into an adaptable spatial system capable of organizing the exhibition's content in a clear and economical way. The wooden modules, assembled using simple mechanical joints, could be easily repositioned and reconfigured according to the specific needs of each section, ensuring both flexibility and consistency throughout the display.

This design strategy not only reduced material waste and production costs but

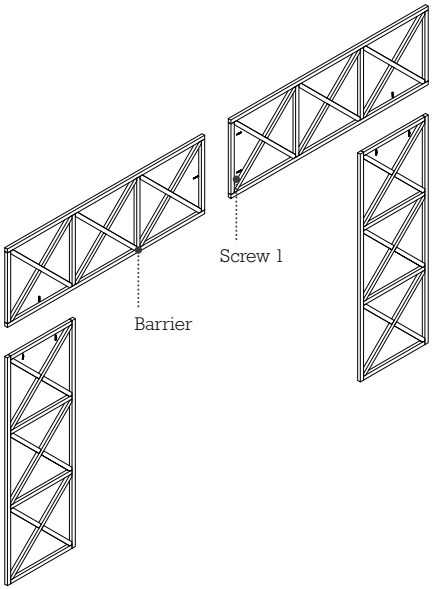


Fig. 45. Construction detail - Outfitting structure | Axonometric view.

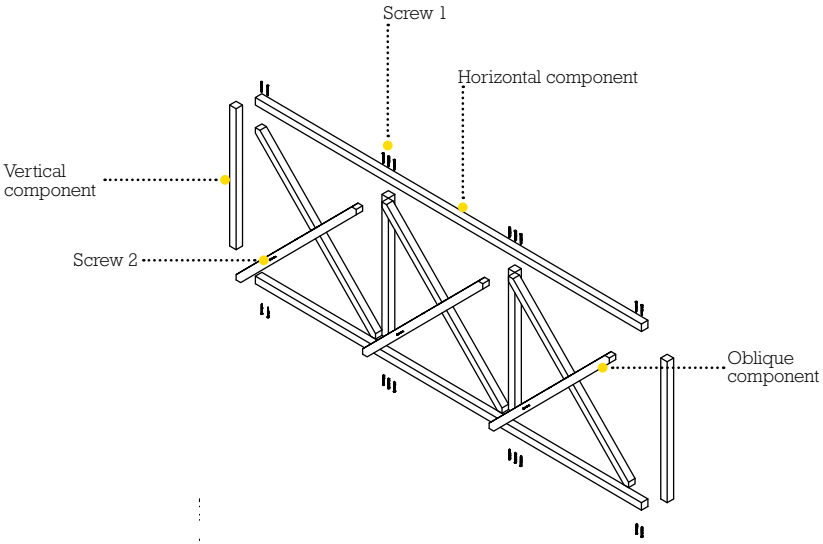


Fig. 46. Construction detail - Main components of the outfitting structure | Axonometric exploded view.

also embodied a conscious reflection on the ethics of reuse and the life cycle of design objects. The choice to incorporate repurposed materials echoed the exhibition's intellectual core, which was deeply concerned with questions of cultural reconstruction, ideological transformation, and the social role of theatre in moments of crisis.

Beyond the exhibition displays, the project expanded its scope with a complementary film series devoted to German Expressionist cinema—a multidisciplinary addition that enriched the narrative and provided visitors with multiple points of entry into the Weimar cultural imagination. This combination of visual, spatial, and cinematic media transformed the exhibition into a dynamic learning environment, demonstrating the value of integrated design and curatorial thinking.

A close analysis of this project also underscored the importance of technical detailing in exhibition design. The wooden barriers, though simple in form, relied on intelligent joint systems that balanced structural stability with ease of assembly and disassembly. This experience illustrated the transformative potential of approaching materials not as fixed entities, but as elements open to redefinition and reinterpretation through design. In doing so, the exhibition offered an important lesson in how sustainable practices can emerge not only from material choices but also from strategic thinking about systems, connections, and reuse.

Ultimately, Theatre in the Weimar Republic succeeded in aligning its scenography and technical solutions with the broader themes of the exhibition: political engagement, aesthetic experimentation, and the ongoing negotiation between past and future. It stands as an example of how a pragmatic, experimental, and ethically attentive design approach can produce spaces that are both visually compelling and intellectually resonant.

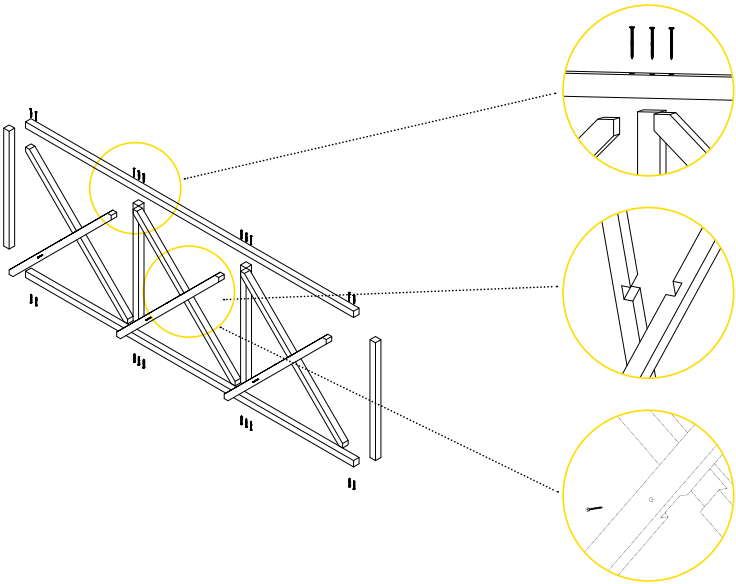


Fig. 47. Construction detail - Main joints constituting the module of the structure | Axonometric Exploded views.

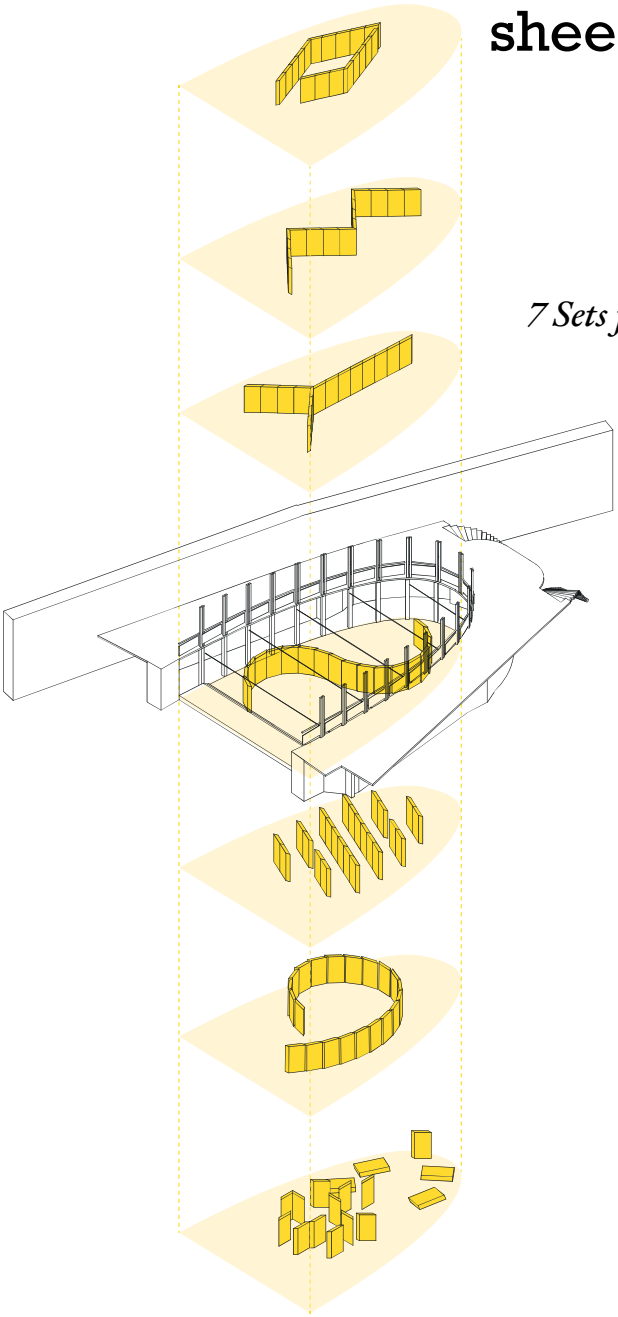
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/teatro-di-weimar-di-puolo-QekLiO

sheet 13

7 Sets for Teatro del Falcone
Genoa



AG Fronzoni
1979

sustainable modularity

Between 1979 and 1981, Italian designer AG Fronzoni left a lasting imprint on exhibition design with a series of installations at the Teatro del Falcone, a historical space housed within Genoa's Palazzo Reale. These exhibitions, commissioned under tight financial constraints, stand today as masterful demonstrations of how architectural intelligence, formal discipline, and resource-conscious thinking can converge into an essential and highly flexible exhibition system.

Fronzoni, a major figure in Italian rationalist design, approached each project at the Teatro del Falcone with a rigorously minimalist attitude, rooted in the belief that design should strip away the superfluous in favor of clarity, coherence, and meaning. In this context, he devised an innovative system based on modular trapezoidal panels, capable of redefining the exhibition space with remarkable adaptability.

These modular elements were designed for maximum versatility. The panels could be arranged both vertically and horizontally, either as independent display supports or in combinations that created partitions, backdrops, or sculptural compositions, depending on the narrative and spatial demands of the exhibition. This approach allowed Fronzoni to deliver unique spatial experiences for each show, without the need for designing new structures from scratch, thus significantly reducing waste and promoting longevity in the use of materials.

What distinguished Fronzoni's methodology was his commitment to a design process that was as intellectually sustainable as it was materially efficient. Far beyond temporary decoration, his system offered a structural logic that ensured elements could be disassembled, reconfigured, and reused across multiple exhibitions. This strategy of adaptability prefigured many of the sustainability principles that have since become central to contemporary exhibit design discourse.

Fronzoni's design extended beyond spatial organization to include graphic identity. For each exhibition, he developed posters and promotional materials, which were characterized by the same formal rigor and typographic clarity that defined

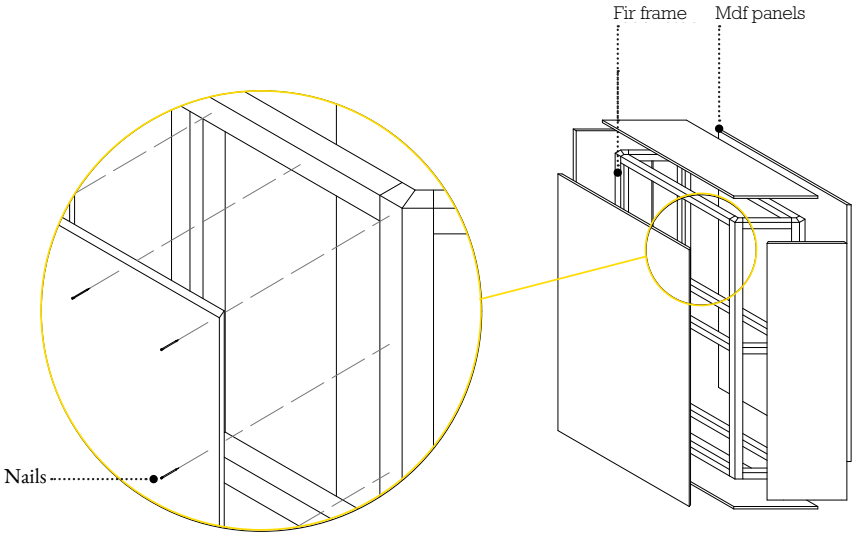


Fig. 48. Construction detail - MDF panels forming a box structure attached to the inner frame by nails | Axonometric exploded view.

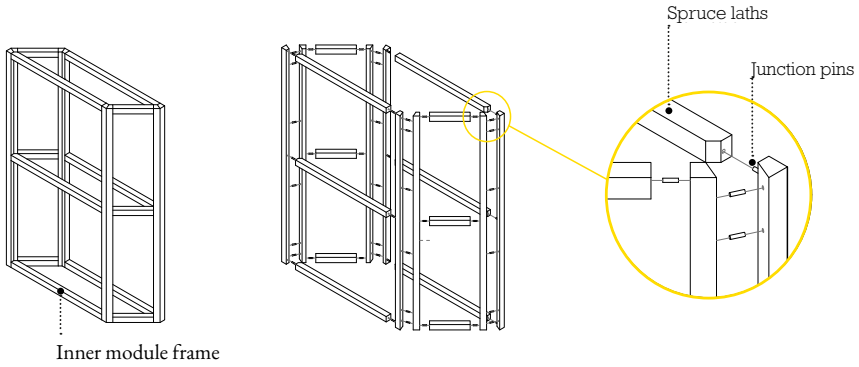


Fig. 49. Construction detail - Inner frame held firmly in place by dowel pins and wood glue | Axonometry and axonometric exploded view.

his spatial compositions. These works, now considered icons of 20th-century Italian graphic design, reveal how his minimalist sensibility operated across scales—from room layouts to printed surfaces.

His installations at Teatro del Falcone underscore a powerful design lesson: exhibition design is not merely the background for displayed objects, but rather a dynamic system that actively shapes the visitor's experience. Fronzoni's minimalist language, paired with his pioneering use of modularity and flexibility, offered an intelligent and sustainable answer to the common constraints of exhibition-making: limited budgets, changing contents, and the need for aesthetic coherence.

By relying on simple, reusable modules and focusing on the fundamental qualities of space—proportion, rhythm, light, and material—Fronzoni created exhibitions that were at once understated and deeply effective. His work at Teatro del Falcone remains a reference point for designers interested in balancing functional demands with formal precision, while also advocating for an environmentally responsible approach to temporary architecture.

Ultimately, Fronzoni's exhibitions were not static arrangements, but living systems: adaptable, rational, and profoundly modern.

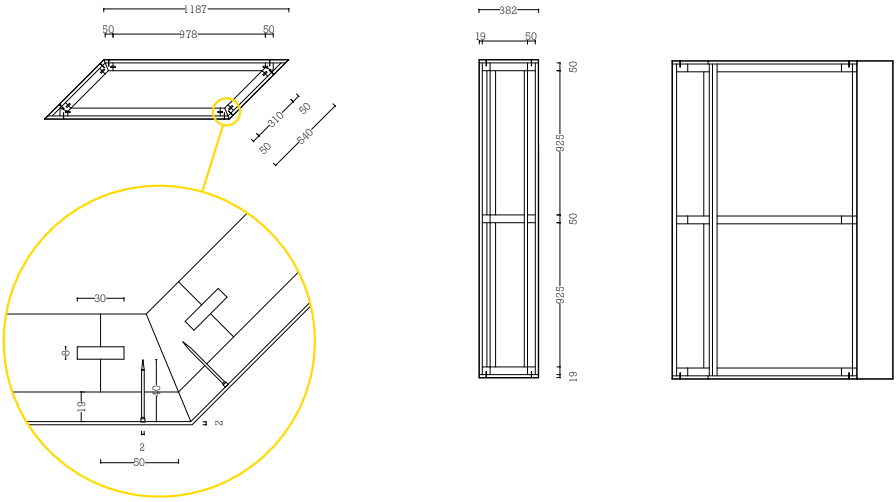


Fig. 50. Construction detail - Internal panel joints | Axonometric view and dimensioned sections.

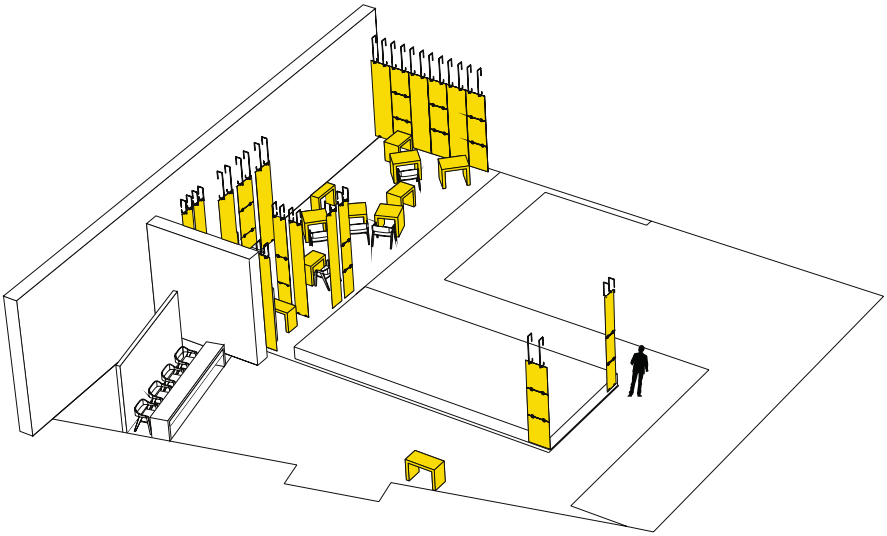
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/ag-fronzoni-sette-allestimenti-1P5UV8

sheet 44

Italian Pavilion - TELECOM
Geneva



Achille Castiglioni
1979

Modular design and functionality

In 1979, Italy took part in the Telecom exhibition in Geneva, one of the leading European platforms for the telecommunications industry, designed to foster dialogue and innovation between public and private enterprises. For this occasion, the Italian pavilion was entrusted to Achille Castiglioni, a master of design known for his sharp wit and structural elegance. Castiglioni's approach to the project was a lucid and precise response to a complex set of demands: the need for a unified yet flexible environment capable of representing the diversity of 33 Italian companies, while addressing strict technical constraints.

The pavilion's spatial solution was based on a suspended modular system, a grid of square modules (2 x 2 meters) that became the backbone of both the architectural logic and the visitor experience. Positioned 4.1 meters above the floor, the grid was composed of BTicino electrical conduits, and anchored to the building's ceiling via a lightweight tensile structure. This structural framework was not only a technical infrastructure—integrating electrical and telephone networks—but also an active spatial organizer. It supported the exhibits, lighting systems, educational panels, and even the signage, producing an image of floating and coordinated harmony.

Visitors entered the pavilion through a striking triangular portal, cut into a vibrant, polychrome metal wall. From the main atrium of the fair, this entrance immediately conveyed a sense of both rational order and playful formal invention, setting the tone for what awaited inside. Upon entering, visitors were welcomed by a large backlit panel designed by the renowned graphic designer Max Huber, which visualized Italy's international telecommunications network—a clear statement of the country's strategic positioning in global communication flows.

The suspended grid system allowed for a variety of spatial configurations within a single architectural logic. Light, fireproof fabric partitions hung from the structure to define semi-private exhibition areas without blocking the visual continuity of the space. Meanwhile, other panels, constructed from anodized aluminum

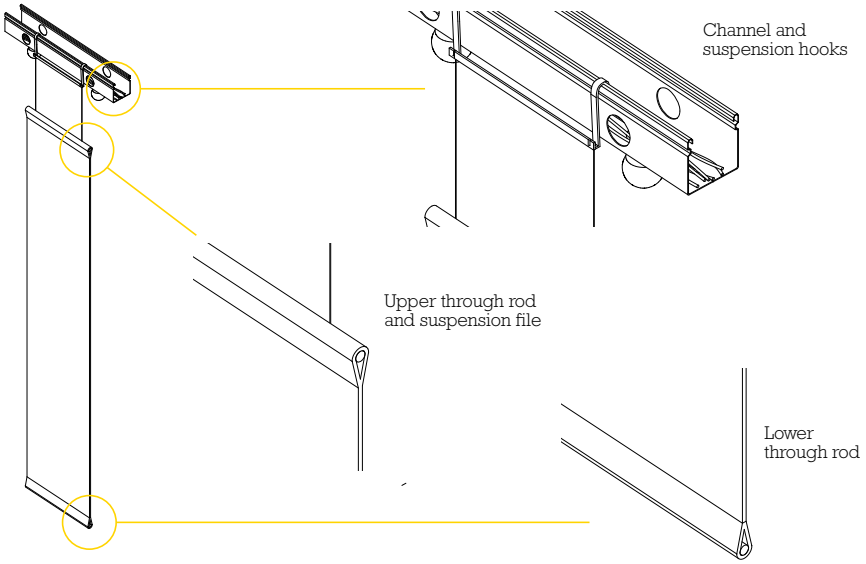


Fig. 51. Construction detail - Single display element and hanging systems | Axonometric views.

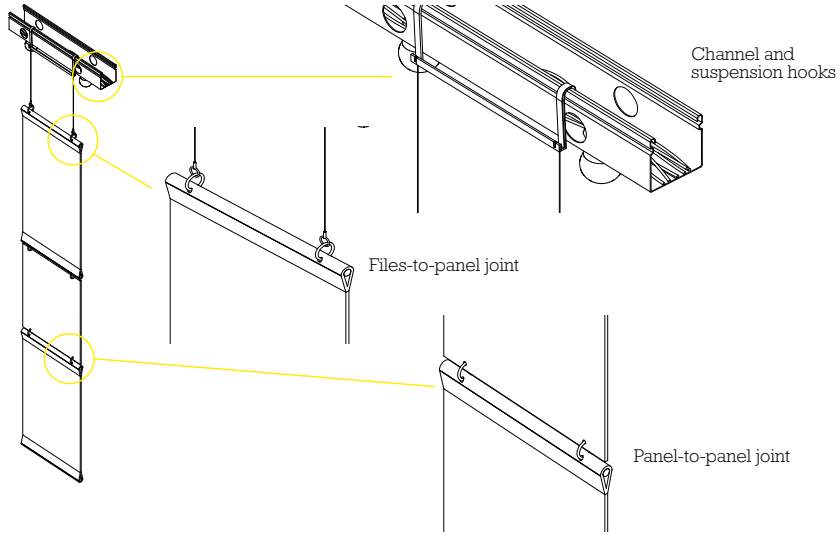


Fig. 52. Construction detail - Modular display element and hanging systems | Axonometric views.

sheets, served both as didactic displays and as support surfaces for photographic documentation. Company names, screen-printed on transparent mesh panels, seemed to hover weightlessly in mid-air, reinforcing the sensation of lightness and clarity.

The rigor of the modular system offered significant advantages: quick assembly and disassembly, maximum spatial flexibility, and a visual coherence that turned potential technical chaos into a legible, unified experience. Castiglioni's solution transcended mere functionalism; it elegantly demonstrated how technical constraints could act as creative catalysts, giving rise to a design that remains timelessly modern.

The Telecom 1979 pavilion stands out not only as an example of advanced exhibition design but also as a manifesto of Castiglioni's design philosophy: the idea that intelligent systems, when paired with aesthetic precision, can create environments that are both functional and poetic. The project succeeded in its primary mission—to allow Italian companies to present their technological advancements within a coherent and stimulating setting—while also offering visitors a clear and engaging spatial narrative. The modular structure, with its emphasis on suspension and lightness, not only optimized the exhibition's technical and logistical management but also created an inviting space for exploration, dialogue, and discovery.

In essence, the Italian Pavilion at Telecom 1979 exemplified a visionary approach to exhibition design, where structural elegance met technical necessity, and where the architecture itself became an active player in communicating innovation.

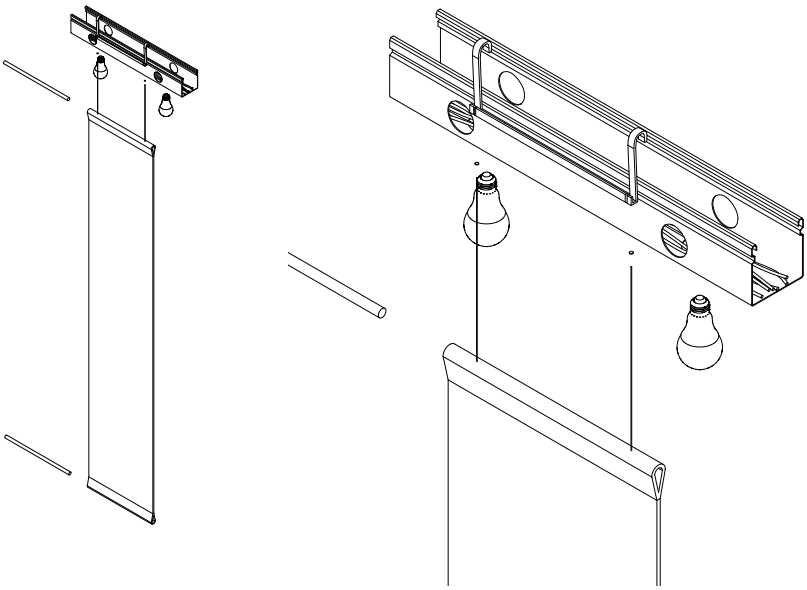


Fig. 53. Construction detail - Illuminated display element and hanging systems | Axonometric views.

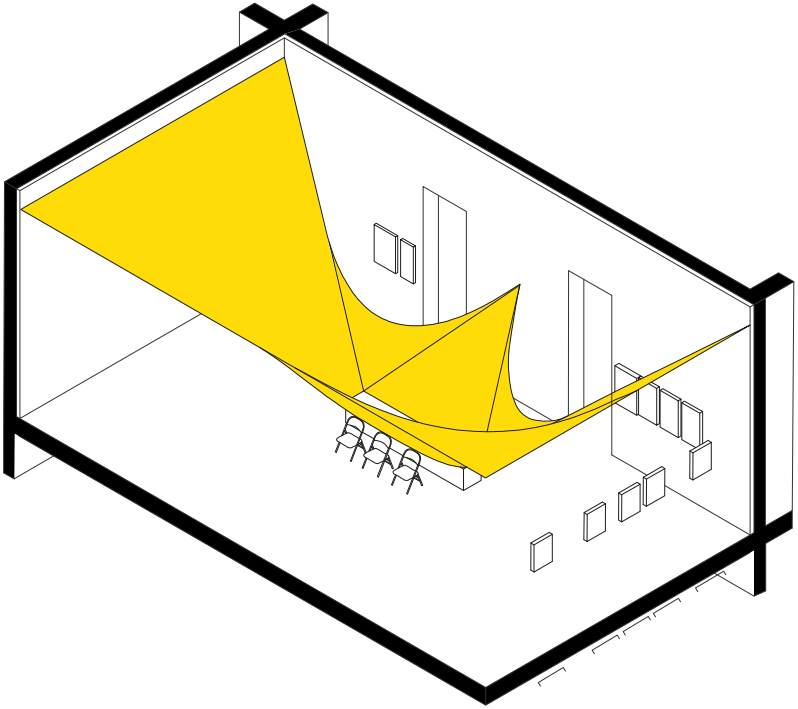
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/padiglione-italia-castiglioni-7Przrb

sheet 15

The Other Half of the Avant-garde
Palazzo Reale, Milan



Achille Castiglioni
1980

Rigor, functionality and visual poetry

In 1980, the halls of Palazzo Reale in Milan hosted The Other Half of the Avant-Garde, an exhibition curated by art critic Lea Vergine and designed by renowned Italian architect and designer Achille Castiglioni. This groundbreaking show marked a pivotal moment in the reexamination of early 20th-century art history, shedding light on 111 female artists who had long been overlooked in the dominant narratives of the avant-garde movements. The exhibition was not only an act of historical recovery but also a masterclass in exhibition design, where spatial clarity, democratic display, and visual harmony combined to deliver an experience as powerful as the content it revealed.

Castiglioni's approach to the exhibition was rooted in both intellectual rigor and understated elegance. Every artist, regardless of renown or medium, was granted an identical amount of visual space through the uniform design of showcases and display structures. This choice was an explicit rejection of hierarchies and a conscious attempt to offer an equitable narrative framework for the rediscovered artists.

One of the most distinctive features of the exhibition was the use of white sail-like veils, stretched between floor and ceiling using metal profiles and adjustable screw joints. These elements did more than subdivide the exhibition halls: they softened and reflected both natural and artificial light, generating a calm and luminous atmosphere. Their presence transformed the war-damaged spaces of Palazzo Reale—still bearing traces of World War II bombings—into an orderly, almost weightless sequence of rooms, where visitors were invited to focus on the art without distraction.

To ensure a clear and intuitive flow through the exhibition, Castiglioni introduced taut cords suspended between the rows of display cases. These linear guides subtly oriented visitor movement, fostering an instinctive path through the artworks. In some rooms, large triangular partitions, built from light white-clad honeycomb panels, added further spatial dynamism, breaking the monotony of

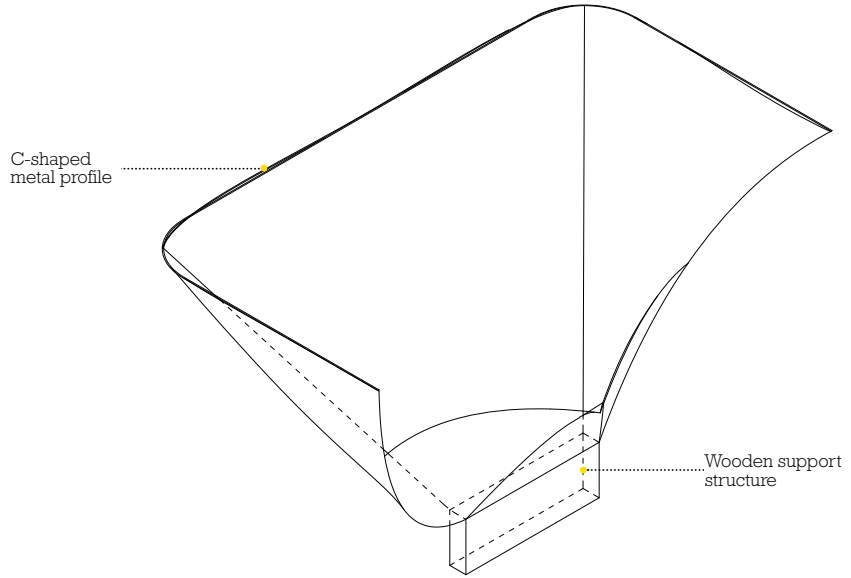


Fig. 54. Construction detail - Central outfitting element | Axonometric view.

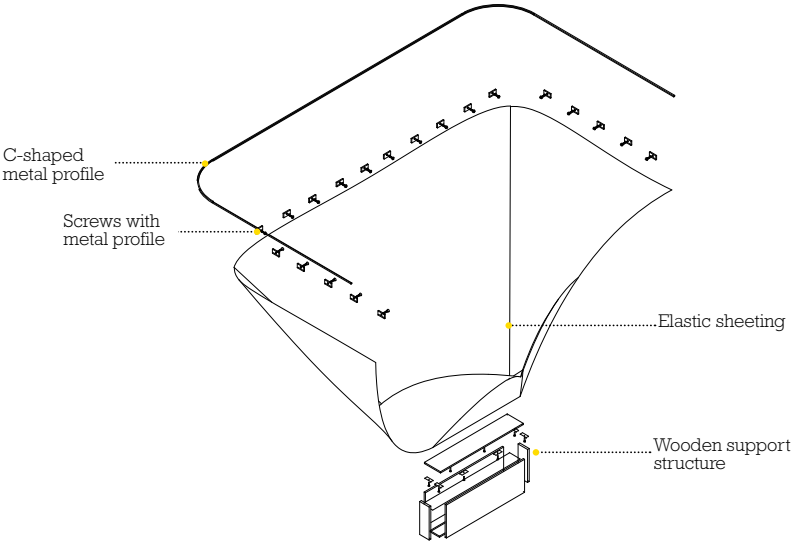


Fig. 55. Construction detail - Main components of the central outfitting element | Axonometric exploded view.

the traditional room layout without overwhelming the delicate scale of the works on display.

Equally pragmatic was Castiglioni's decision to work with the existing conditions of the building rather than imposing radical interventions. The gray carpet already present on the 1,500 square meters of flooring was seamlessly integrated into the design concept, and damaged ceilings and walls were masked using temporary plasterboard shells and large neutral-colored tarps, rather than fully concealed. This approach revealed the designer's sensitivity not only to the architectural context but also to the economical and practical realities of exhibition-making.

The structural system used for the suspended panels, supported by elastically tensioned cables, offered both visual lightness and practical stability, subtly subdividing the space without creating barriers. Even the graphic communication was carefully balanced: round signage mounted on slender stands and elegantly tilted labels allowed visitors to engage with contextual information without disrupting the visual rhythm of the display.

In its simplicity, Castiglioni's design achieved an extraordinary synthesis of functionality, narrative clarity, and understated beauty. His ability to resolve complex spatial problems with light, adaptable solutions demonstrated the kind of intelligence and restraint that defines excellent exhibition design. The Other Half of the Avant-Garde was, and remains, a brilliant example of how design can honor both the artworks and their historical context—without excess, but with great depth.

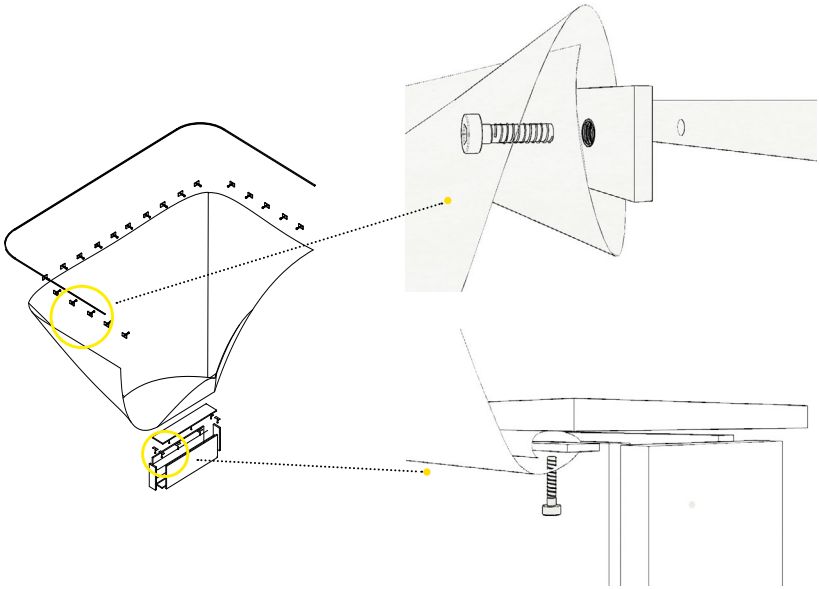


Fig. 56. Constructive detail - Joints for attachment of the outfitting curtains | Axonometric views.

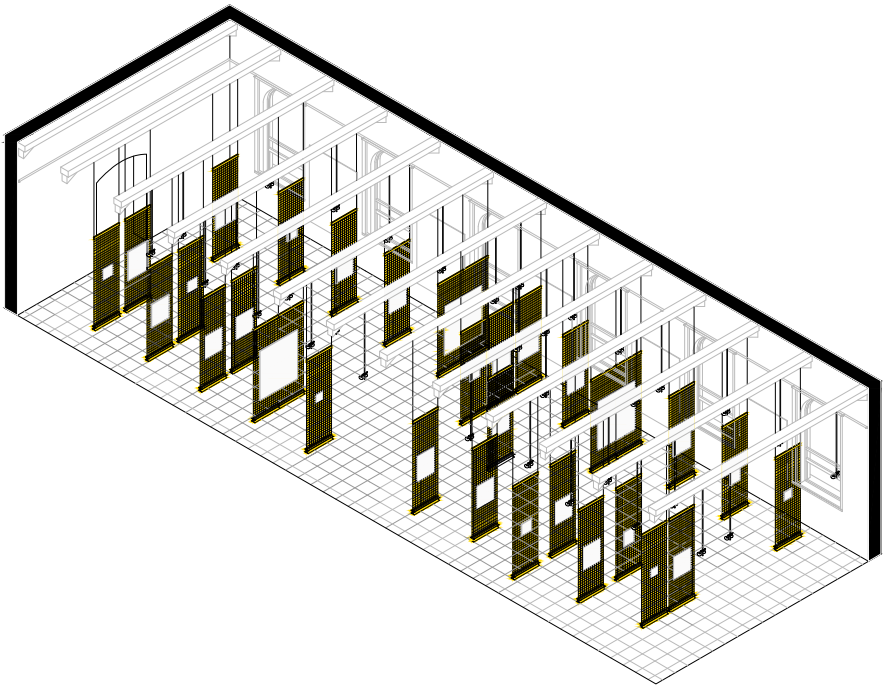
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/laltra-meta-dellavanguardia-castiglioni-qdRYsZ

sheet 16

Temporary Exhibitions Hall
Castello Sforzesco Art Gallery, Milan



Franco Albini, Franca Helg
1980

Lightness as a method

In 1972, the City of Milan launched an ambitious renovation plan for the Pinacoteca del Castello Sforzesco, aiming to redefine the museum's spatial and exhibition strategies ahead of its reopening in 1980. The project was entrusted to architects Marco Albini, Franca Helg, and Antonio Piva, whose approach masterfully balanced respect for the historic architecture with the need for a contemporary and versatile display system. The resulting design created an environment where conservation, flexibility, and visitor engagement could seamlessly coexist.

At the heart of the exhibition design was an innovative system of welded wire mesh panels, suspended from ceiling-mounted rails. This technical solution allowed the museum's layout to remain in constant transformation, accommodating the rotation of artworks and the creation of new exhibition narratives without requiring invasive or permanent structural changes. The lightweight, semi-transparent panels were designed to divide and shape the space without interrupting its visual continuity, allowing visitors to fully perceive the depth of the rooms and the grandeur of the castle's original architecture.

This spatial transparency not only preserved the dialogue between the artworks and their architectural setting but also maintained visual connections with the exterior landscape, visible through the large windows of the Castello Sforzesco. The modular panels could be easily repositioned or rotated along the ceiling tracks, offering an adaptable framework that evolved with each new curatorial approach.

From a technical standpoint, the wire mesh system represented an intelligent balance between robustness and visual discretion. The grid-like structure allowed for secure and precise mounting of artworks while providing enough distance from the masonry walls to ensure proper air circulation — a critical factor for the conservation of paintings and delicate materials. The system also facilitated precise alignment, allowing artworks to be oriented in relation to both natural and artificial lighting, which could be adjusted according to conservation requirements and curatorial intentions.

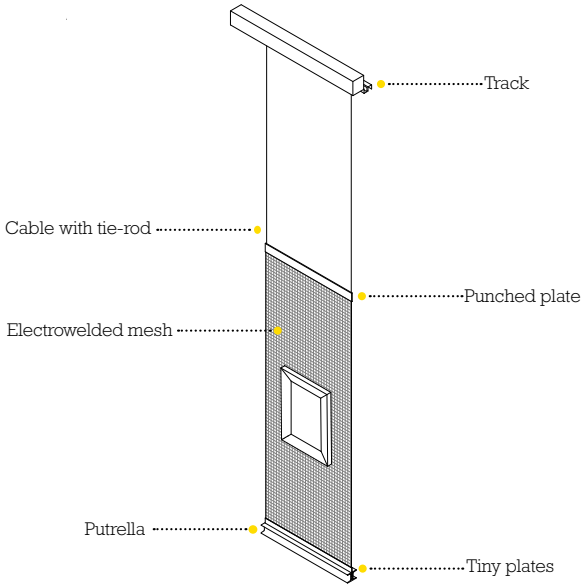


Fig. 57. Construction detail - Suspended display of the exhibit | Axonometric view.

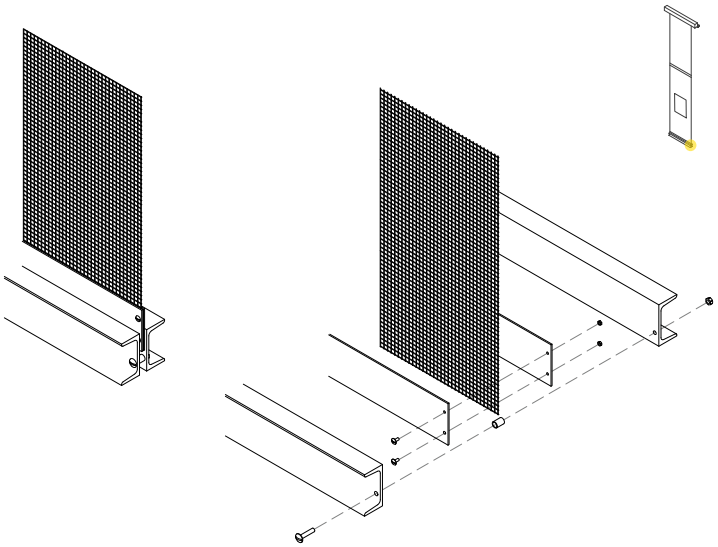


Fig. 58. Construction detail - Suspended display of the exhibit: bottom stop | Exploded and axonometric view.

A particularly notable application of this design strategy was in the museum's Sala XXV, a space dedicated to temporary exhibitions. Here, the wire mesh panels, running parallel to the original wooden ceiling beams, created a highly flexible and responsive environment. The panels acted not only as structural supports for the artworks but also as spatial modulators, enabling curators to adjust the configuration of the gallery in accordance with the demands of each exhibition.
The lighting design further complemented this flexibility: artificial lights were carefully calibrated to harmonize with natural daylight, which entered the room through large windows softened by fiberglass curtains designed to modulate light intensity. This interplay between artificial and natural illumination created an evocative and immersive atmosphere, enhancing the visual and emotional impact of the artworks on display.
At the time of the reopening, the Pinacoteca featured an impressive display of 180 paintings from the Flemish and Dutch schools of the 17th and 18th centuries, curated under the direction of Mercedes Garberi. This collection, among the most prestigious in Italy for this genre, found an ideal setting within the newly designed spaces, where the synergy between architectural integrity, technical innovation, and curatorial vision shaped a unique and enriching visitor experience.
The project by Albini, Helg, and Piva stands as a pioneering example of how exhibition design can respect historical contexts while providing modern museums with the adaptability required to respond to evolving conservation standards and display needs. The suspended mesh system not only offered technical efficiency and spatial flexibility but also subtly reinforced the dialogue between art and architecture — a timeless conversation at the heart of the museum experience.

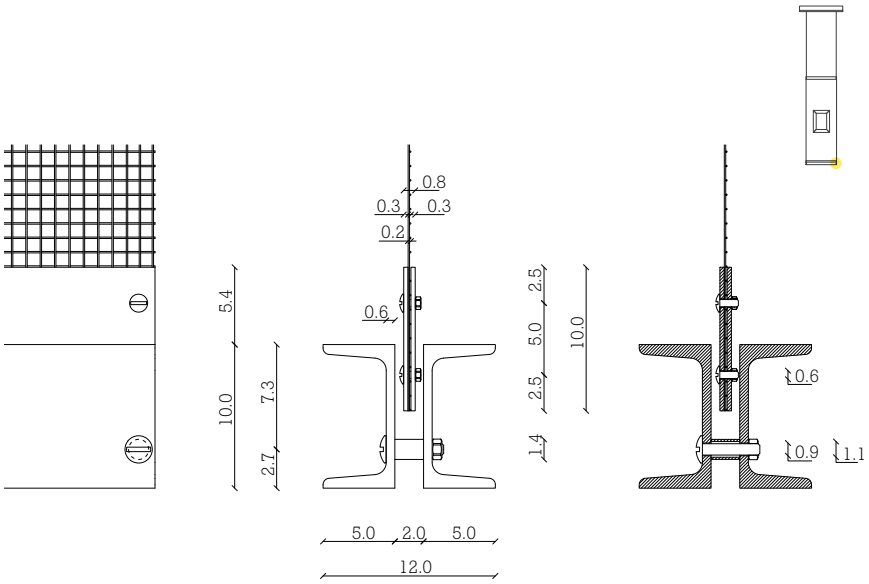


Fig. 59. Construction detail - Structural joint of the display unit | Quoted elevations and section.

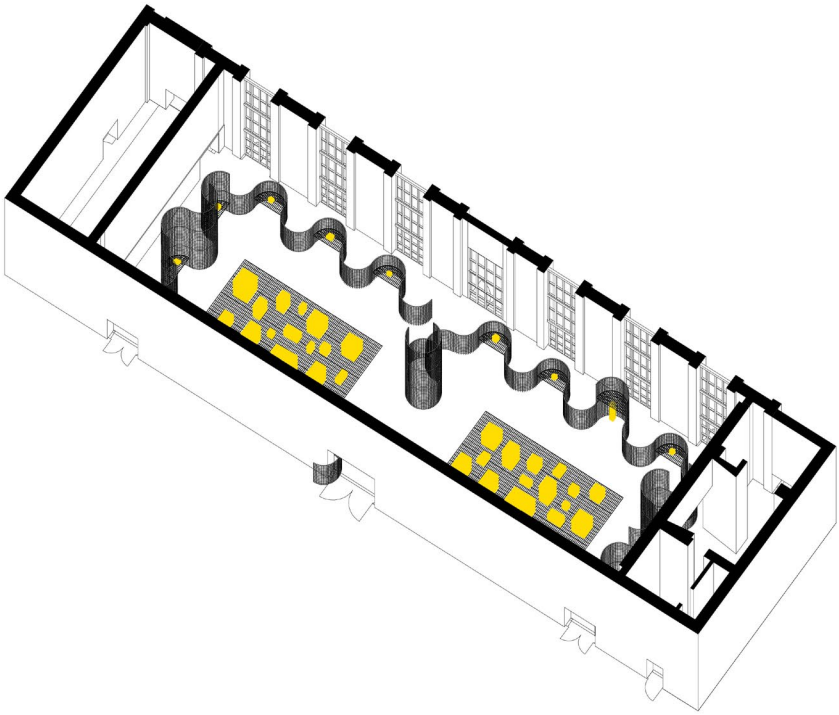
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/pinacoteca-di-castello-sforzesco-franco-albini-JuYjCh

sheet 17

100 Objects of Italian Design
Triennale di Milano, Milan



Piero Polato
1999

Modularity, functionality and new possibilities

The traveling exhibition 100 Objects of Italian Design, presented between 1999 and 2000, stands as a significant cultural event dedicated to celebrating the excellence, creativity, and identity of Italian design. Organized by the Triennale di Milano and curated by Piero Polato, the exhibition offered a meticulous selection of iconic objects from the institution's permanent collection. These artifacts not only traced the evolution of Italian industrial design over the 20th century but also reflected its capacity to blend everyday functionality with aesthetic and emotional resonance.

In its inaugural setting within the Salone d'Onore of the Palazzo dell'Arte, the exhibition was distinguished by a scenographic concept that combined simplicity, modularity, and spatial clarity. Polato's design sought to establish a coherent visual language capable of guiding visitors through a fluid and intuitive narrative, while at the same time offering robust technical solutions for object display. The goal was to create a space where the objects themselves could emerge as protagonists, framed by a neutral but technically expressive structural system.

At the core of the exhibition's design was the Systempiù Orsogril—a modular construction system developed in collaboration with the renowned Italian manufacturer specializing in electro-welded steel grids. The installation combined curved and linear grid panels, assembled using bolts and grid locks, which defined the physical and visual rhythm of the space. This alternation of geometric forms allowed for the creation of suspended surfaces, offering a wide range of display solutions suitable for objects of varying dimensions and typologies.

The choice of galvanized steel as the primary material not only guaranteed strength and durability but also established a visual coherence with the exhibition's industrial and minimalist aesthetic. The sinuous curvature of the grid panels softened the material's innate rigidity, producing a dynamic and inviting pathway through the exhibition. Visitors were naturally led through the objects on display, with the curved surfaces subtly encouraging circulation and engagement.

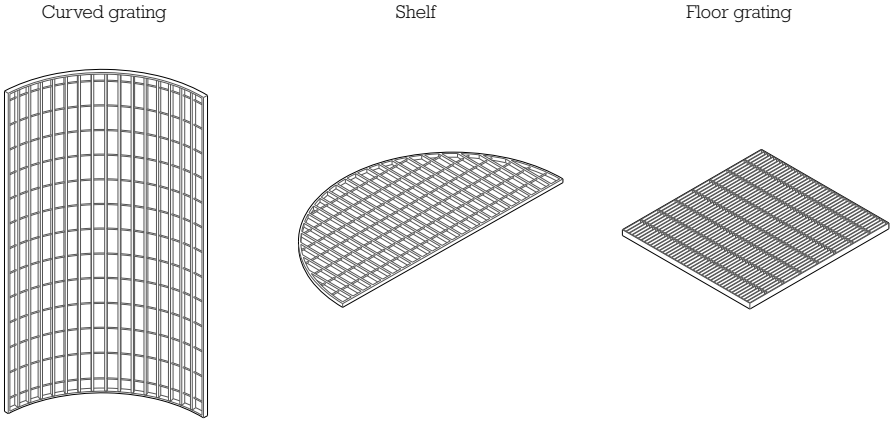


Fig. 60. Construction detail - Modules of the display structures | Axonometric views.

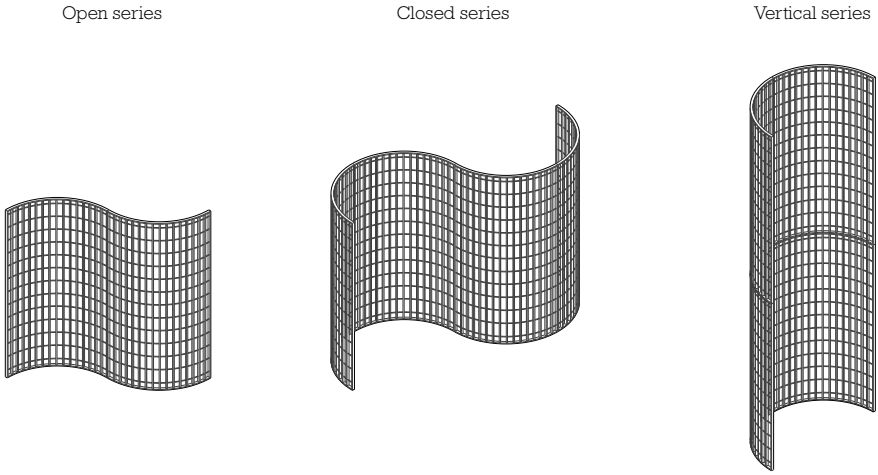


Fig. 61. Construction detail - Compositions of exhibition structure modules | Axonometric views.

From a technical and functional standpoint, the Systempiù Orsogril demonstrated a high degree of flexibility. Its modular nature allowed for the adaptation of the structure to different architectural contexts across the various cities where the exhibition traveled, highlighting its scalability and potential for reuse. However, the design was not without its limitations. The extensive use of mechanical fastenings such as bolts and locks, although ensuring structural stability, limited the speed and ease of assembly and disassembly, reducing the system's overall efficiency in terms of reconfiguration and sustainability.

Furthermore, the exhibition highlighted the potential for future development of the Orsogril system beyond its initial application. The curved steel modules, if reinterpreted or reoriented—by rotating along the vertical axis or combining into new sequences—could serve as multi-directional supports, enabling alternative ways to suspend or display objects. Such an evolution would enhance the system's versatility and adaptability, aligning more closely with contemporary principles of circular design and sustainability.

Ultimately, Polato's exhibition design for 100 Objects of Italian Design achieved an elegant synthesis of form and function. It offered a structural metaphor for the continuous dialogue between the industrial and the artisanal, the technical and the poetic, which has long defined the Italian design identity. The architectural clarity of the system reinforced the narrative of the exhibition itself: that design is not simply about objects, but about the spaces and systems that give them meaning.

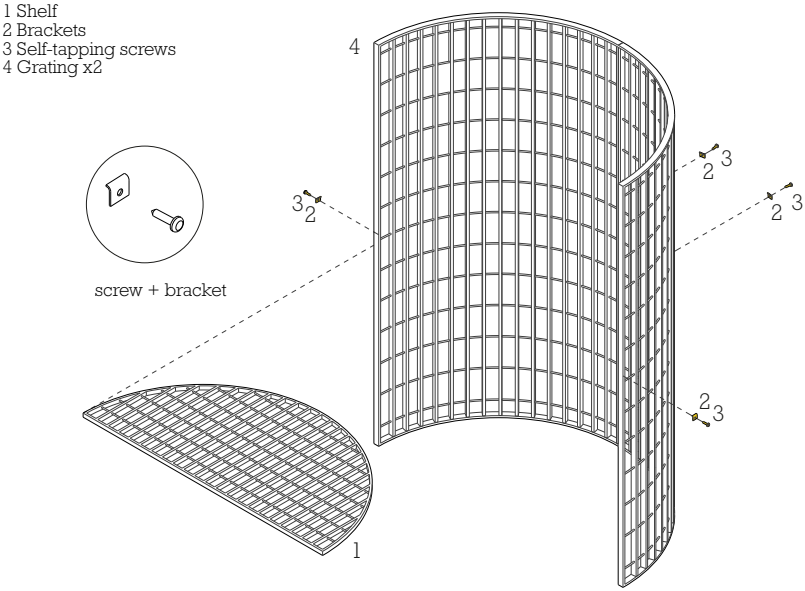


Fig. 62. Construction detail - Main components of the exhibition modules | Axonometric exploded view.

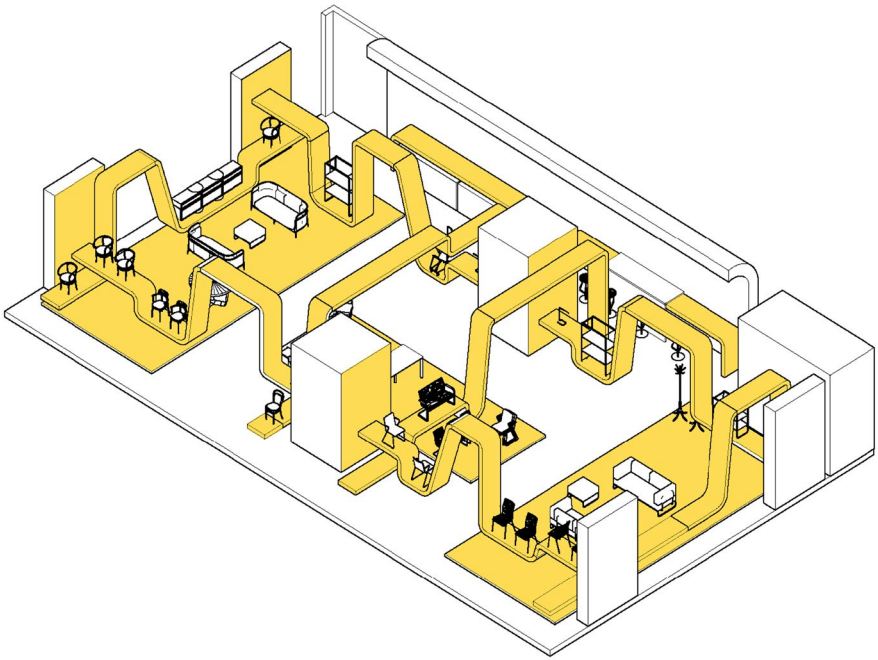
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/100-oggetti-di-design-polato-airR-Cg

sheet 16

Stand Thonet '04
Salone del Mobile, Milan



Migliore+Servetto
2004

The white exhibition tape

In 2004, the renowned Italian design studio Migliore+Servetto conceived an exhibition installation for Gebrüder Thonet Vienna that masterfully balanced visual impact with the brand's long-standing heritage of craftsmanship and innovation. The installation, presented at the Salone del Mobile in Milan — the world's leading stage for contemporary furniture and design — was both a spatial narrative and a material manifesto, showcasing how exhibition design can elevate the experience of a product while expressing corporate identity.

The central design element of the installation was the so-called white display ribbon — a fluid and sculptural structure that seamlessly wove through the exhibition space. Functioning as both a scenographic statement and a technical support system, the ribbon shaped the visitor's journey through Thonet's collections, offering a dynamic and immersive encounter with the products.

This continuous architectural gesture was carefully engineered using slender strips of poplar plywood, later finished with a curved multiflex covering. The combination of these materials allowed the ribbon to achieve an elegant lightness and structural strength, while its sinuous shape defined a rhythmic sequence of spaces that alternated between openness and enclosure. Chairs, tables, and other signature Thonet pieces were positioned along this suspended white line, appearing as if levitating in a dialogue between solid forms and negative space.

The exhibition design achieved a fine balance between spatial clarity and sculptural expressiveness. The white display ribbon not only marked the boundaries of the booth but also subtly directed the flow of visitors, inviting them into a curated exploration of the Thonet collections. This approach allowed for a measured and controlled viewing experience, enhancing the perception of each object on display and emphasizing their formal and material qualities.

To enrich the spatial composition, advertising totems were integrated into the installation. These vertical elements punctuated the ribbon's meandering path, offering visual anchors that balanced the horizontal flow of the structure. The

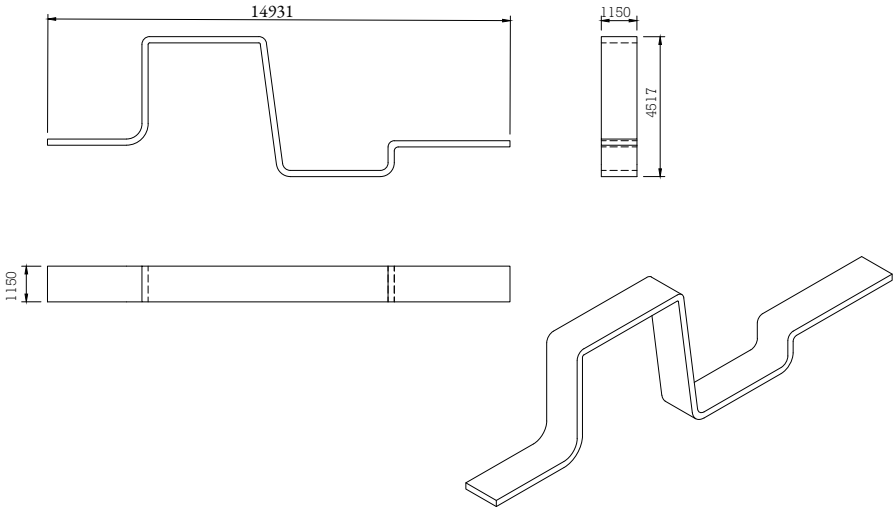


Fig. 63. Constructive detail - Ribbon display of the setup | Axonometric views and dimensioned projections.

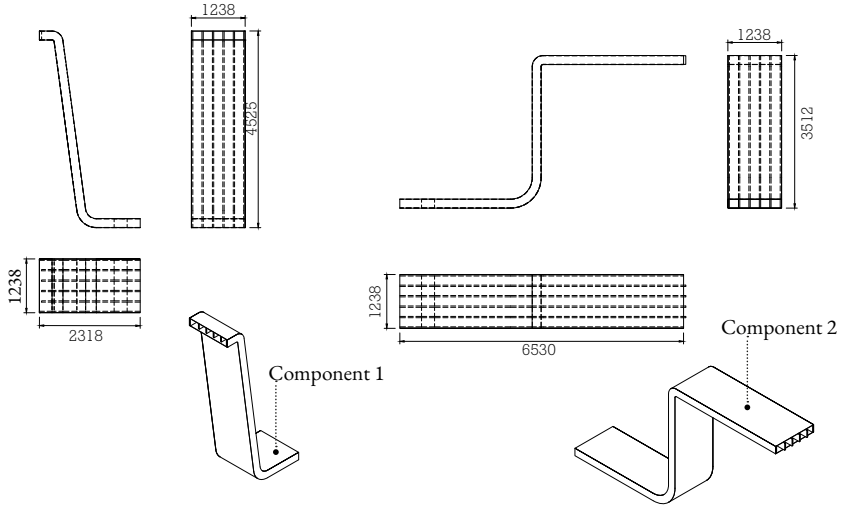


Fig. 64. Constructive detail - Structural display components| Axonometric views and dimensioned projections.

carefully calibrated lighting design played an equally crucial role, accentuating the dialogue between the pristine white surfaces and the warm materiality of the wooden furniture. The result was an environment that conveyed a sense of elegance and hospitality, while placing the focus squarely on Thonet's iconic designs.

Despite the installation's undeniable visual and conceptual strength, its custom-built nature posed a significant sustainability challenge. The structure was designed specifically for the Salone del Mobile, with components tailored to the spatial and functional needs of the event. As a result, the materials were not easily reusable, raising questions about the environmental impact of temporary exhibition designs in the contemporary design industry.

This critical point underscores an ongoing debate within the field of exhibition design: how to balance aesthetic excellence and brand storytelling with the responsibility of reducing material waste. While the installation succeeded in delivering a refined and memorable spatial experience — one that perfectly embodied Thonet's values of quality, lightness, and innovation — it also highlighted the need for adaptable and reusable solutions in future exhibition practices.

Overall, the 2004 Thonet installation by Migliore+Servetto demonstrated how a well-conceived spatial strategy can serve both as a communication tool and as a poetic extension of the brand's identity. Through the use of flexible materials, sculptural form, and light, the designers transformed the exhibition into a dynamic environment, fostering an emotional and intellectual connection between the visitors and the displayed objects.

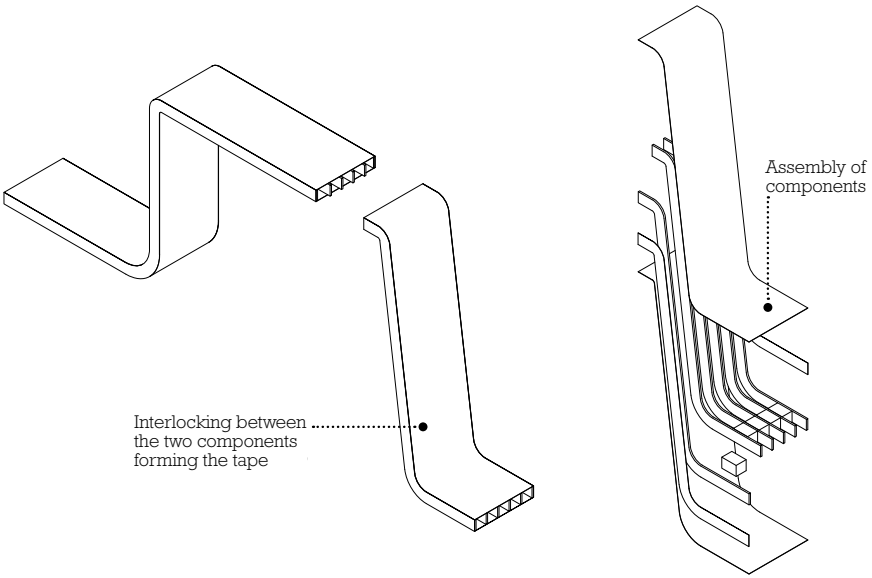


Fig. 65. Construction detail - Display components | Axonometric exploded views.

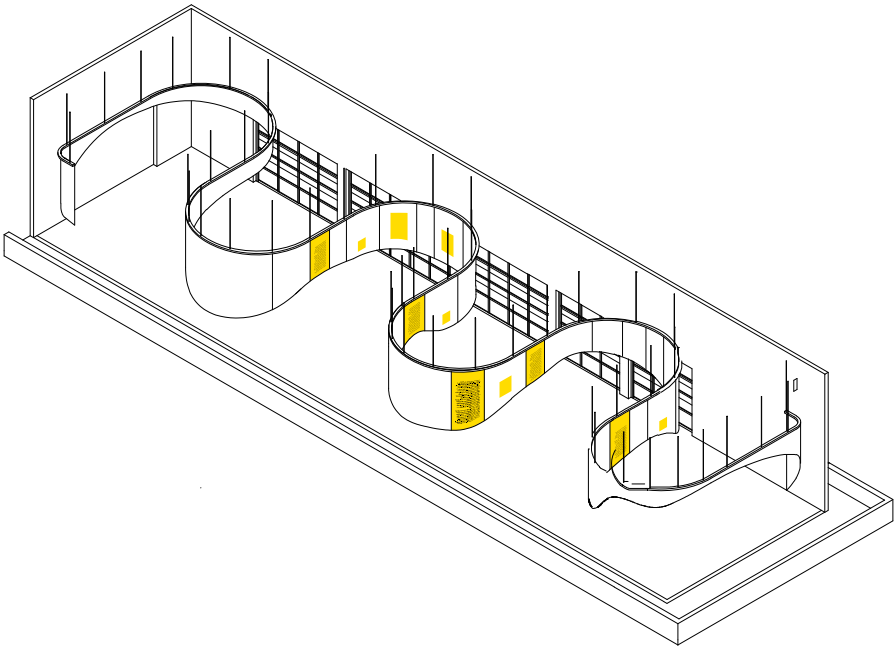
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/stand-thonet-miglioreservetto-Cvr-bfI

sheet 19

The Good Life: New Public Spaces For Recreation
Pier 40, Hudson River, New York



Amale Andraos, Dan Wood
2006

fluid path between new public spaces

In 2006, the exhibition The Good Life: New Public Spaces for Recreation offered a sharp and timely reflection on the evolving relationship between architecture, urban design, and collective well-being. Curated by Zoë Ryan and designed by the architectural studio WORKac, founded by Amale Andraos and Dan Wood, the show was staged inside the expansive, industrial space of Pier 40 in New York City — a location emblematic of urban reuse and transformation.

The exhibition assembled over 70 projects by architects, designers, landscape architects, and artists from around the globe, each proposing innovative strategies for reimagining urban public spaces to meet the evolving demands of recreation and social interaction in contemporary cities. In a world increasingly aware of the links between health, leisure, and the built environment, The Good Life invited both experts and the general public to reflect on how architecture could foster a more engaging, dynamic, and inclusive urban life.

Organized around five thematic clusters — The Fun City, The Healthy City, The Cultured City, The Connected City, and The 24-Hour City — the exhibition not only presented ideas but also embodied them in its own spatial narrative. It explored public space not as a static or merely aesthetic condition, but as a living, adaptive environment designed to promote collective experiences and improve urban quality of life.

Enhancing this conceptual framework was an ambitious public program featuring roundtables, lectures, urban tours, and playful activities. This parallel agenda activated the exhibition space as both a gallery and a site for recreation itself, further blurring the line between the observed and the lived experience. The curatorial approach highlighted the social dimension of design, while the exhibition design extended that invitation into the physical domain.

At the heart of the exhibition's immersive experience was its distinctive spatial installation — a large-scale, scenographic element that fused simplicity and flexibility. The primary design gesture was a continuous, approximately 90-meter-long

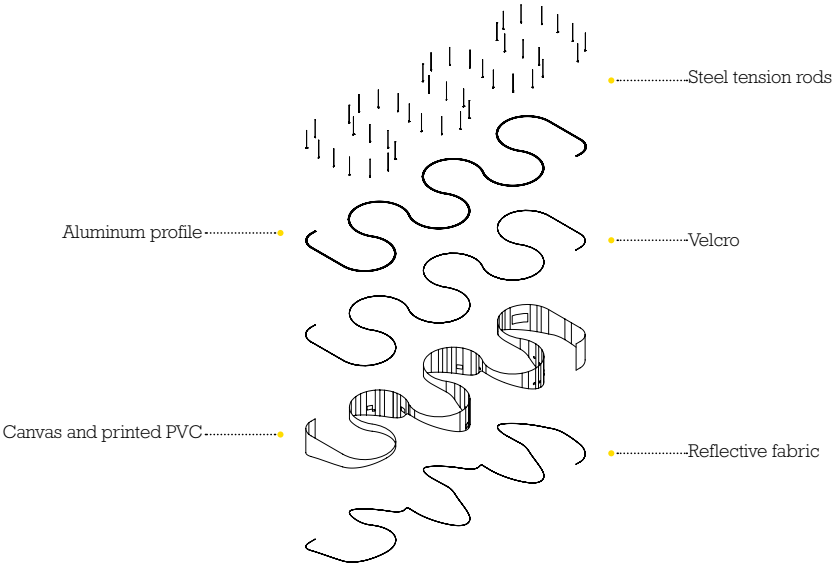


Fig. 66. Construction detail - Main components of the arrangement | Axonometric exploded view.

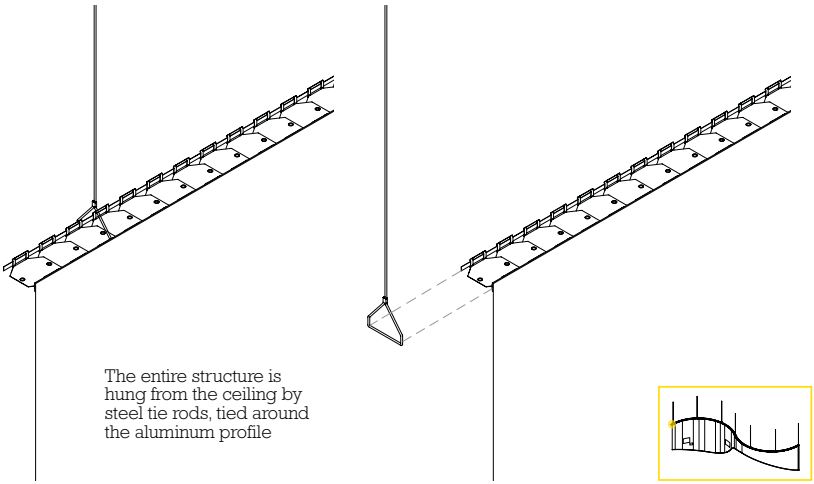


Fig. 67. Construction detail - The supporting structure in hanging | Axonometric view.

band of alternating bright yellow fabric and printed vinyl panels. This undulating ribbon traversed the entire exhibition space, carving out distinct yet interconnected areas corresponding to each thematic section.

The underlying support for this flowing element was a foldable aluminum profile, typically employed in the construction of curved drywall partitions. This construction detail, commonly found in architectural practice, allowed the designers to shape soft and enveloping curves, reinforcing the fluid and immersive quality of the exhibition path. The use of a flexible, modular material not only provided technical ease during assembly but also embodied the central exhibition theme: the adaptable and transformative nature of contemporary urban space.

The fabric and aluminum framework were joined with Velcro fasteners, a solution that enabled rapid assembly and disassembly, making the installation both reversible and efficient — qualities increasingly valued in contemporary exhibition design for their sustainability and practicality. Suspended from the ceiling by steel cables with loops, the structure maintained a sense of lightness and floating stability, subtly guiding visitors along the intended narrative route.

An additional technical refinement lay in the reflective fabric edge, which emphasized the graphic quality of the installation and heightened its visibility throughout the space. This detail was more than a formal gesture; it metaphorically reinforced the exhibition's underlying discourse on urban visibility, connectivity, and movement.

The result was an environment that blurred the distinction between content and container. The large, thermoplastic yellow membrane, arranged in a sinusoidal pattern, encouraged visitors to physically engage with the space, mirroring the conceptual exploration of urban fluidity, adaptability, and continuous transformation. The installation functioned not merely as a backdrop, but as an active spatial device — a soft, yet structurally expressive framework that elevated both the exhibits and the visitor experience.

Through its intelligent use of lightweight materials, modular construction techniques, and a visually stimulating formal language, the installation for The Good Life exemplified how exhibition design can translate architectural ideas into spatial narratives. It turned a raw industrial venue into an accessible and thought-provoking urban microcosm, inviting audiences to reconsider the role of public space in shaping the "good life" in the 21st-century city.

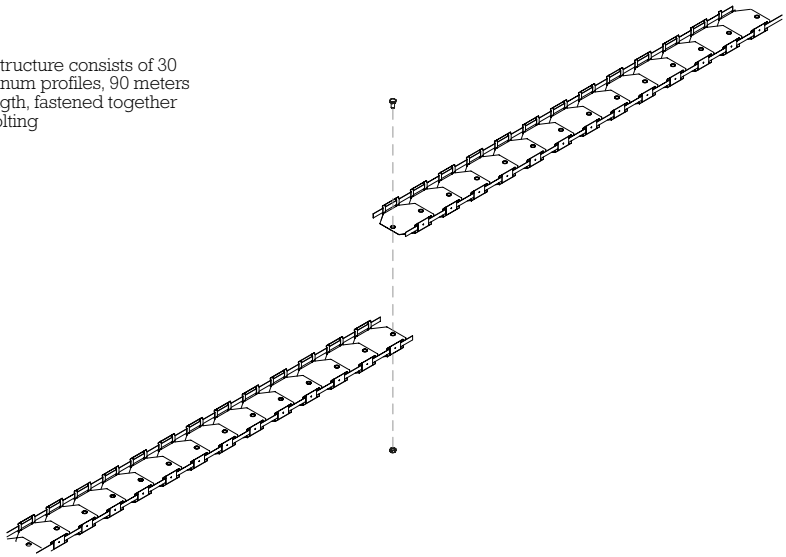


Fig. 68. Construction detail - Joints of the supporting structure | Axonometric view.

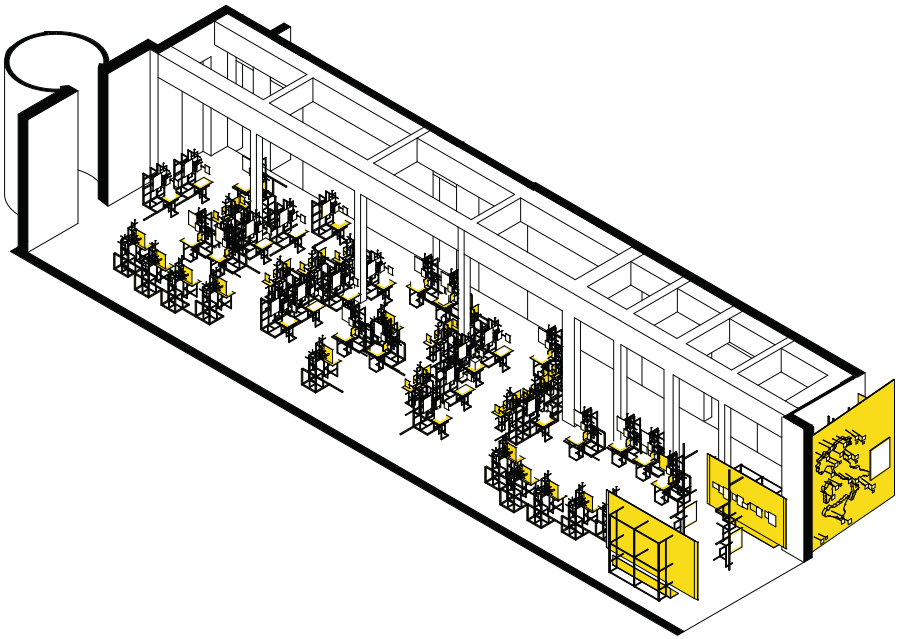
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/the-good-life-andraos-G2fQ91

sheet 20

Gold Medal for Italian Architecture
Triennale di Milano, Milan



Alessandro Scandurra
2009

Suspended architecture: the reticular arrangement

In 2009, the Triennale di Milano hosted an exhibition honoring Massimiliano and Doriana Fuksas, curated as part of the Medaglia d'Oro all'Architettura Italiana. The exhibition design, conceived by architect Alessandro Scandurra, went far beyond the typical retrospective display. It transformed the exhibition space into an immersive and poetic environment—an abstract forest of thought, image, and structure. Drawing inspiration from the surrounding nature of Parco Sempione, Scandurra crafted a space that blurred the boundaries between built environment and organic form, projecting an atmosphere of suspended reflection.

The design was neither static nor linear. It was instead envisioned as a spatial narrative—a complex overlay of ideas and visions that paralleled the multifaceted career of the Fuksas duo. Scandurra employed a digital matrix as the generative principle behind the installation: a repeating three-dimensional module, declined in various scales, composed a reticular structure that filled the space while preserving a sense of airiness and lightness. This spatial grid framed and suspended the exhibition content, creating a visual field that was simultaneously structured and immaterial.

The display strategy emphasized both vertical and horizontal elements. Photographs and conceptual images were mounted on upright panels, while physical models were housed in low, horizontal displays. This duality allowed visitors to alternate between immersive visual storytelling and tactile engagement with material forms. The exhibition became an open system where ideas floated within a network of lightweight metal structures—inviting interpretation, exploration, and discovery.

Information panels were designed with usability in mind: white typography on anthracite backgrounds ensured readability, and their lateral positioning encouraged an intuitive, non-obtrusive consultation. The legibility and layout of the didactic materials reflected a broader design intention—one rooted in clarity, accessibility, and a sense of editorial elegance.

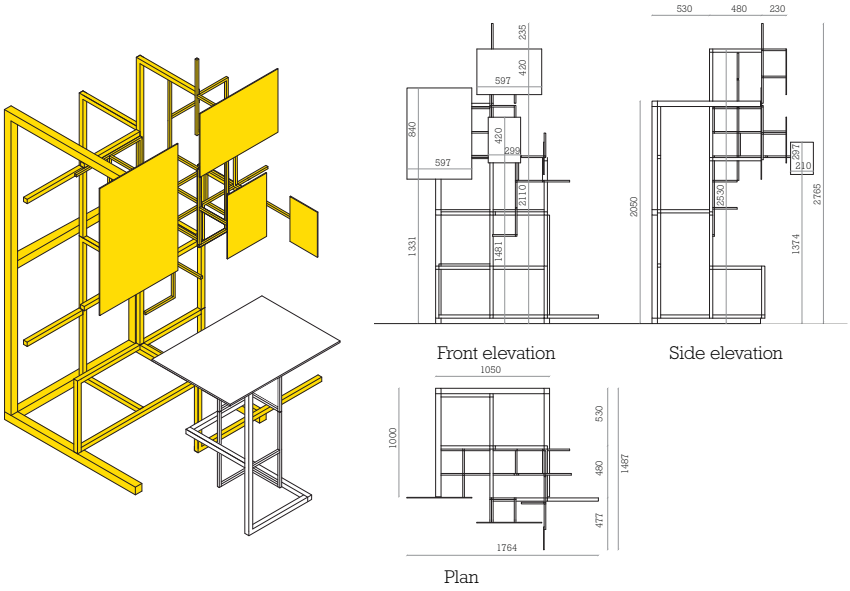


Fig. 69. Construction detail - Main display elements | Axonometric view and dimensioned elevations.

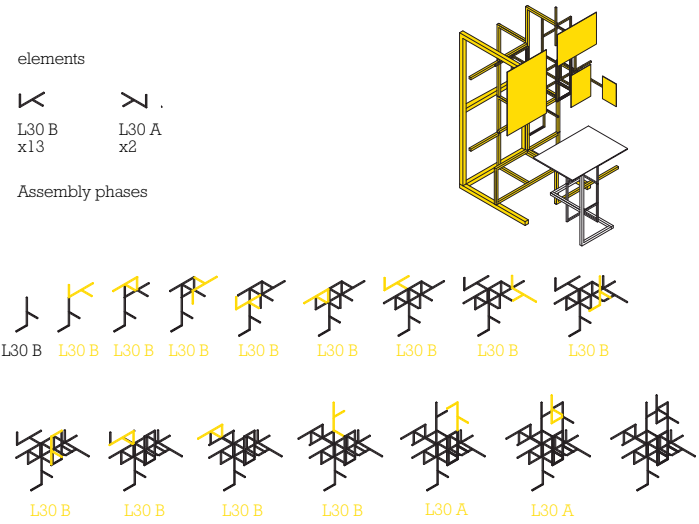


Fig. 70. Construction detail - Abacus of exhibit elements | Axonometric views.

From a technical standpoint, the system was built using hollow steel tubular elements, joined with welded connections and fixed in place using screws and threaded rivets. The result was a robust yet elegant structural skeleton. The use of a single modular element repeated across scales not only contributed to the aesthetic cohesion of the installation but also enabled logistical flexibility. Designed to be transported and reassembled in four different locations, the entire structure was conceived with disassembly, mobility, and sustainability in mind.

The modularity of the system allowed for rapid on-site construction and reduced the environmental footprint associated with producing bespoke display elements for each venue. This approach aligned with contemporary concerns around sustainable design in temporary exhibitions. Moreover, the clarity of the assembly system—enhanced by visually intuitive diagrams akin to IKEA manuals—highlighted the importance of effective communication in design documentation, an often overlooked but critical aspect of curatorial logistics.

Scandurra's design offered not only a spatial translation of the Fuksas studio's architectural ethos but also a broader meditation on how exhibition spaces can be both informative and experiential. The reticular framework made the void visible, inviting visitors to perceive absence as a narrative element. The structural grid did not merely support content—it became a metaphor for thought processes, creative connections, and architectural imagination.

Ultimately, the exhibition stood as an homage not only to the Fuksas' contributions to architecture but also to the very act of designing space. It demonstrated how exhibition design, when treated as a conceptual and technical challenge, can amplify meaning, stimulate engagement, and reinforce the dialogue between form, function, and the ephemeral nature of experience.

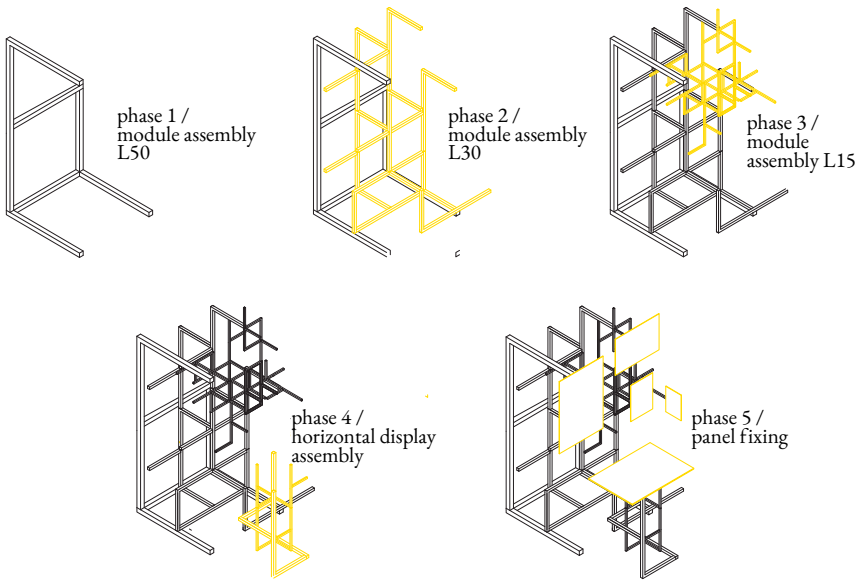


Fig. 71. Construction detail - Phased composition of exhibit elements | Axonometric views.

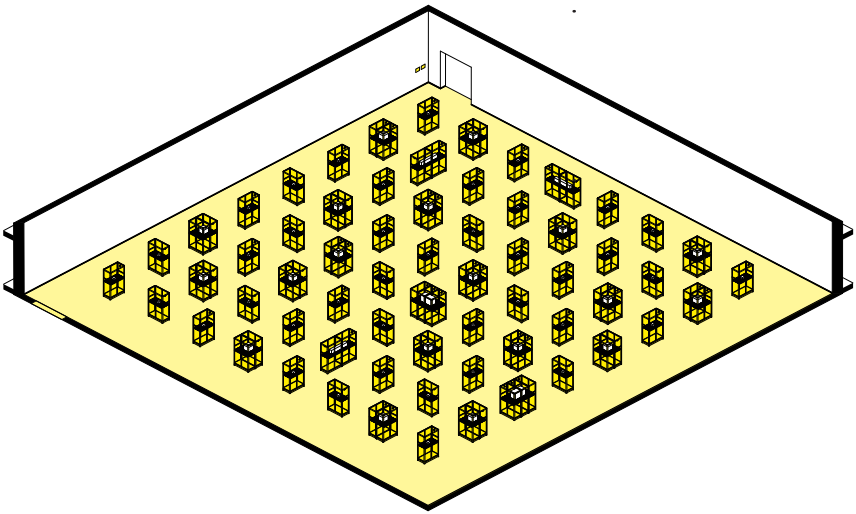
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/medaglia-doro-scandurra-pq39Z7

sheet

The current state of Kanazawa crafts,
21st Century Museum of Contemporary Art, Kanazawa



Nendo
2009

Arts and crafts in Kanazawa

The exhibition "The Current State of Kanazawa Crafts" at the 21st Century Museum of Contemporary Art in Kanazawa, Japan, presented 62 handmade pieces created by 50 local artisans. Curated as part of the Kanazawa Crafts Triennale and designed by the renowned Japanese studio Nendo, the exhibition aimed to reflect on the state of craftsmanship today — its value, its meaning, and its coexistence with the logic of industrial production. Held in 2006 in the spacious 729 m^2 People's Gallery A, the exhibition avoided theatrical gestures and instead embraced a refined and minimalist aesthetic that placed artisanal work at the center.

The works on display ranged from ceramics and lacquerware to textiles and wood, showcasing both technical skill and cultural memory. The curatorial intent was to highlight the specificity of each object while drawing a line of continuity with the museum's collection. Visitors were invited to observe not only the materials and forms, but also the symbolic and human dimensions of artisanal work, offering a silent critique of mass standardization and the culture of excessive consumption.

A key element of the exhibition's success was its distinctive spatial strategy. Instead of building a traditional layout or creating custom display furniture, Nendo chose an unexpected solution: repurposed domestic greenhouses. These industrially produced glass structures, commonly used for small-scale farming, were adapted into exhibition modules with integrated shelving and pre-installed wiring for lighting. Their transparency and modularity created an open and non-hierarchical layout that allowed visitors to move freely, discovering the objects in an environment that appeared light, respectful of the exhibition content, and highly functional.

The use of greenhouses as display elements demonstrated how pre-existing structures could be reinvented in a design context. Not only did this reduce the environmental impact of the exhibition by minimizing material waste and the need for new constructions, but it also introduced a highly evocative metaphor: the idea of cultivating and preserving the fragile culture of craftsmanship, just like

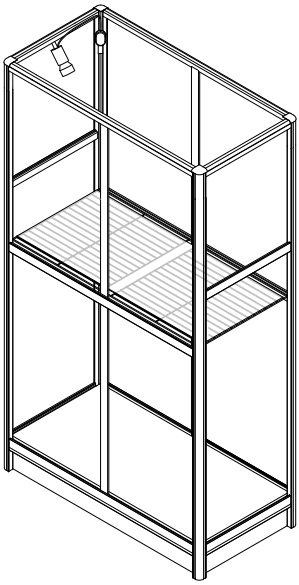


Fig. 72. Construction detail - Display used in the set-up | Axonometric views.

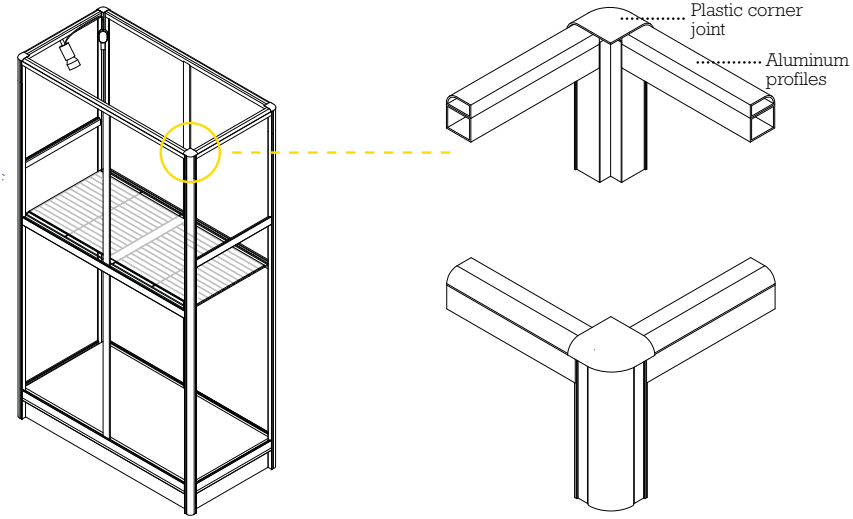


Fig. 73. Construction detail - Corner joints of the display | Axonometric views.

plants in a controlled environment. This parallel between craftsmanship and care added further meaning to the visitor's experience.

The technical solution was resolved through a system of interlocking plastic joints used to assemble the greenhouses. Made of mono-material components, the joints allowed for a simple and reversible construction, without screws, adhesives, or complex tools.

The ability to disassemble and reuse the structure in different contexts reflects a contemporary awareness of sustainable circular practices, rejecting more traditional single-use constructions in favor of adaptable systems that evolve over time.

However, the use of plastic — even if recyclable — raises questions about the durability of the chosen solution. Although lightweight and cost-effective, this material may not offer the necessary resistance for long-term repeated use. Thus, the project highlights a design challenge: how to reconcile sustainability with longevity and mechanical reliability.

Overall, "The Current State of Kanazawa Crafts" stands as an example of exhibition design that is both conceptually rich and materially responsible, demonstrating that aesthetics and ethics need not be in conflict.

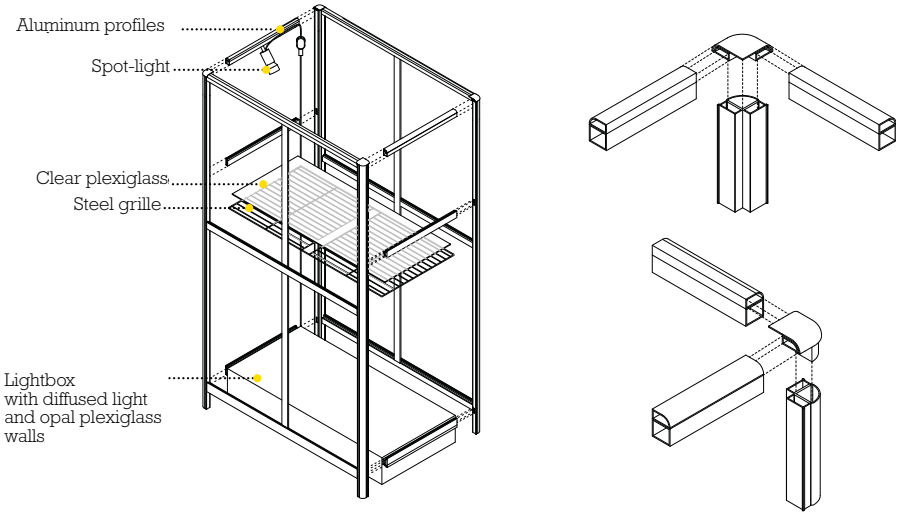


Fig. 74. Construction detail - Main components of the display | Axonometric exploded view.

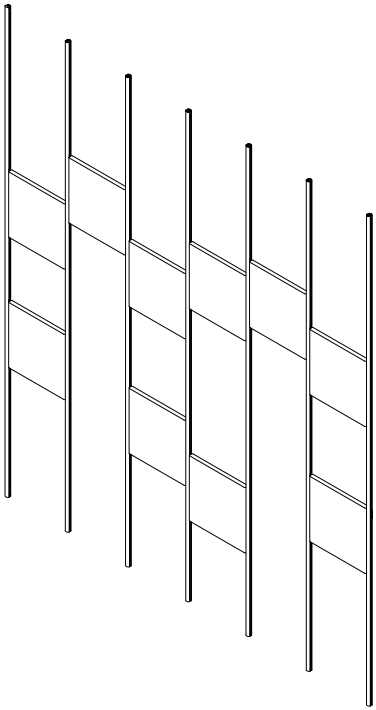
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/kogei-nendo-ml10Fi

sheet 22

FontanaArte Flagship Store
Milan



Calvi Brambilla
2013

Expose with lightness and flexibility

The Italian lighting brand FontanaArte inaugurated its flagship store in Milan in 2013 with an installation designed by architects Fabio Calvi and Paolo Brambilla. This exhibition space, located in the heart of Italy's design capital, was not conceived solely as a commercial environment, but as a dynamic platform to celebrate and reinterpret the legacy of Italian design. Inspired by the stylistic language of Gio Ponti — one of FontanaArte's most iconic figures — the installation appeared as a contemporary homage to the rationalism popular in the mid-twentieth century.

The display system developed for the store was not only a showcase to enhance the brand's lighting products but also a sophisticated design solution. Calvi and Brambilla's approach was based on modularity, adaptability, and clarity; their work went beyond aesthetics for its own sake, addressing both functional and ethical needs that reflected current discussions on sustainability and the circularity of built artifacts.

At the core of this installation was a system of seven vertical tubular structures with a round section. These tubes, functioning as electrified rails, also served as the supporting and distribution structure of the system. Square display panels — minimalist surfaces that supported the exhibited lighting pieces — were attached to them. The vertical grid became the backbone of the store, transforming a typical wall-mounted display into a flexible and interactive matrix.

The verticality of the system was essential not only for providing the visual identity of the space but also for its functionality: the possibility of repositioning the panels along the tubes allowed for various spatial compositions and different curatorial narratives. Whether hosting wall lamps, flat graphics, small sculptural objects, or framed artworks, the structure easily adapted to the content. This transformability was achieved without compromising the integrity of the system, highlighting a key principle of contemporary design.

Modularity also extended to the aesthetic adaptability of the installation: through

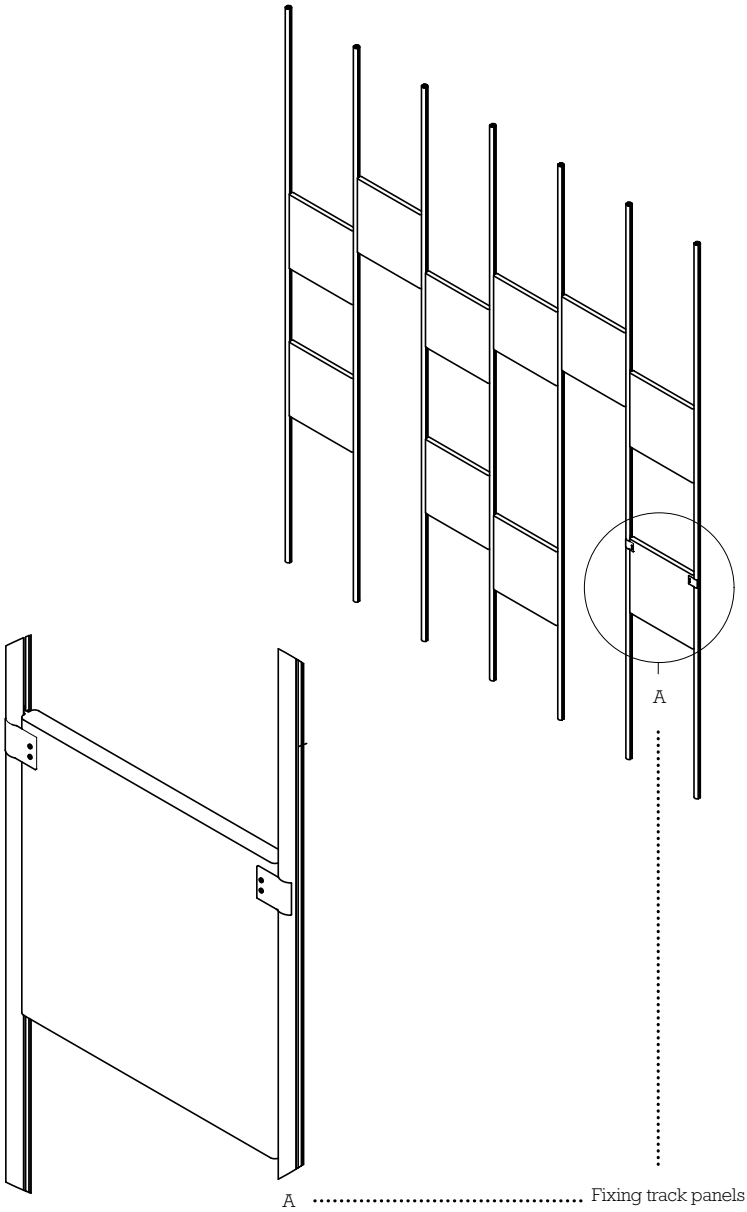


Fig. 75. Construction detail - Modular outfitting system and single component focus | Axonometric views.

various finishes and multiple color treatments of the panels and supports, the appearance of the display could change to suit seasonal themes, specific product lines, or unexpected artistic collaborations. The system thus functioned as a "blank canvas," providing an infrastructural skeleton that welcomed different content from time to time.

The proposed system was reconfigurable, reusable, and durable, extending its life cycle compared to traditional temporary setups. From a sustainability perspective, this approach appears more responsible, as resources are not wasted on single-use structures, and any changes do not produce waste.

The project exemplifies how minimalist design can encompass deep conceptual and technical richness; the simplicity of the components — tubes, panels, and hardware — conceals the sophistication of the system, where each element plays multiple roles: structural, aesthetic, and functional. This multifunctionality is central in contemporary design, especially when space, cost, and environmental impact are significant factors.

This type of exhibition, in the end, encourages respectful and dynamic interaction with the displayed objects; such an approach reflects Gio Ponti's ethic, according to which design must be "functional, beautiful, and durable" (Ponti, 1952). Revisiting the principles of the Milanese master through a contemporary lens, Calvi and Brambilla honor the legacy of both the designer and the brand, proposing a model in which past and present merge in a living dialogue.

This display system shows how good design infrastructure can support the broadest creative freedom: a small set of intelligent components can offer infinite spatial potential. Being inherently reconfigurable and built with durable materials, the system responds to present and future needs, accommodating different users, objects, and narratives.

In conclusion, Calvi and Brambilla's installation for the FontanaArte flagship store is much more than a simple commercial arrangement: it is a lesson in adaptive spatial design. The fusion of technical engineering, aesthetic clarity, and sustainable values makes it a benchmark for future exhibitions, which are increasingly called to question innovation, ecology, and beauty.

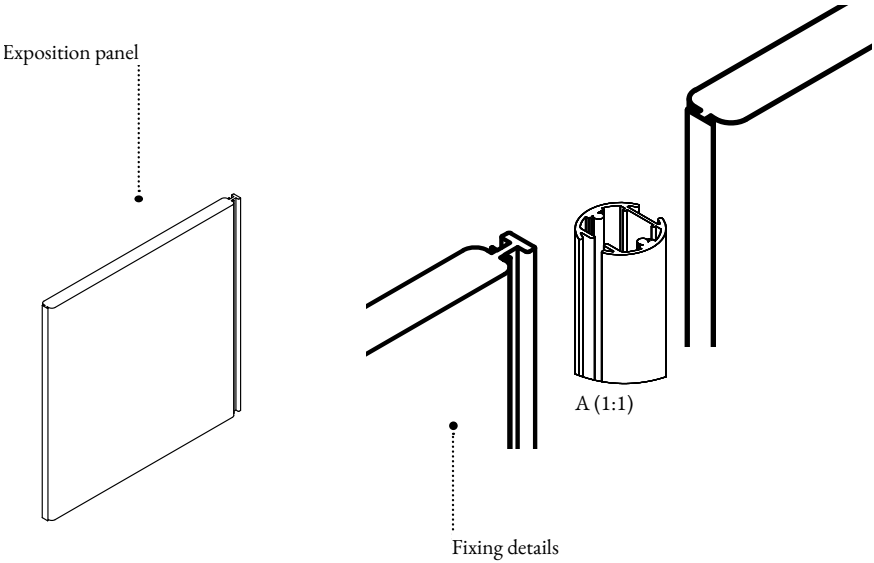


Fig. 76. Construction detail - Joint enabling interlocking between panels |Axonometric views.

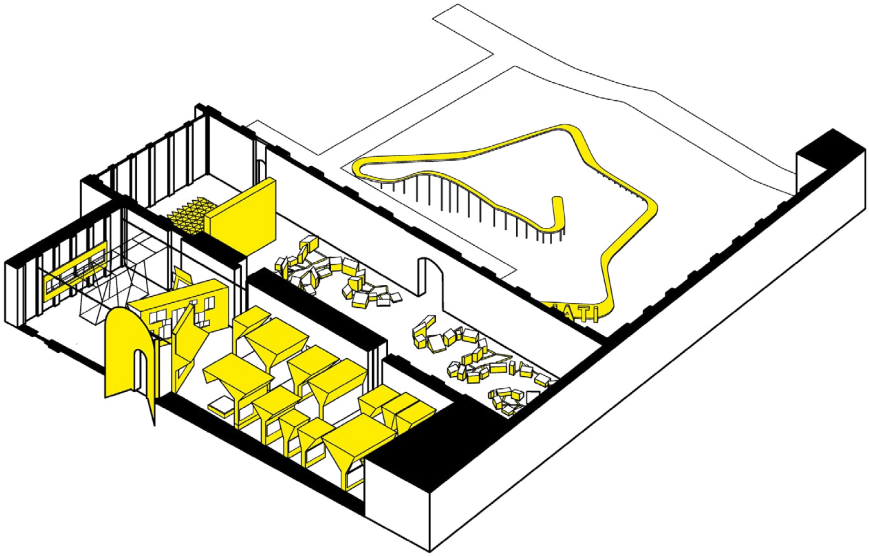
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/fontana-arte-store-calvi-brambilla-z6qmvC

sheet 23

Innesti/Grafting, Italian Pavilion
Venice Biennale, Venice



Cino Zucchi
2014

Designing narrative spaces

At the 14th International Architecture Exhibition of the Venice Biennale (in 2014), the Italian Pavilion at the Arsenale, curated by architect Cino Zucchi, appeared as a refined installation that combined historical awareness with contemporary architectural language. Entitled "Innesti/Grafting," the pavilion functioned as both a conceptual and physical laboratory, particularly in the section dedicated to Expo Milano 2015, "A Laboratory for the Environment." This part, created in collaboration with the multimedia collective Studio Azzurro, reflected on the role of exhibition architecture as a ground for experimentation in urban innovation and environmental sustainability.

The narrative structure of the exhibition was articulated through a spatial and visual dramaturgy that guided visitors from the monumental metal portal at the entrance through a sequence of thematic environments. These spaces were designed not only to convey content but also to evoke experiences blending physical interaction with intellectual engagement. The luminous installation at the entrance immediately placed the visitor within an evolving environment—a representation of a constantly transforming laboratory, where architecture becomes the medium for interpreting and shaping the changing relationships between people, cities, and environments.

This first luminous element—an immersive and dynamic threshold—set the tone for the exhibition. It symbolized a gateway into a hybrid space, echoing the overarching metaphor of "grafting" adopted by Zucchi. In botanical terms, grafting is the process of joining two different organisms to create a new entity. In architectural terms, it became a metaphor for the overlapping of historical legacy and contemporary intervention, of permanence and temporariness.

A particularly impactful example of this project was the installation that explained the master plan of Expo Milano 2015. Here, the space served as both a visual and conceptual synthesis of environmental concerns, urban planning strategies, and the potential of technological experimentation. Through projections, videos,

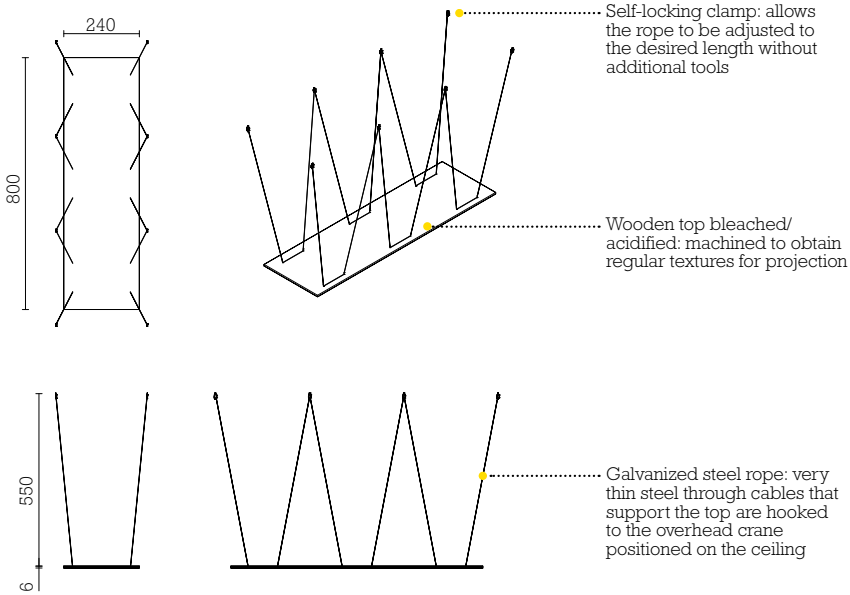


Fig. 77. Construction detail - Central display element | Axonometric views and dimensioned projections.

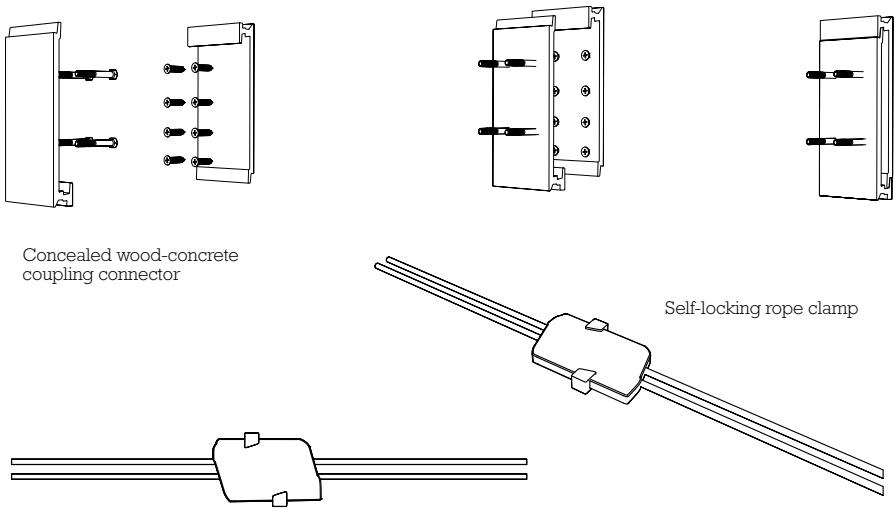


Fig. 78. Construction detail - Shelving joints | Axonometric views and exploded views.

interactive displays, and material samples, the exhibition highlighted the complex design strategies behind the initiative, while also launching a broader reflection on how large events, although temporary, could contribute to long-term urban transformation.

Zucchi's use of exhibition architecture as a narrative device was emphasized by the spatial flexibility of the installation. Modular and lightweight structures were arranged in a way that recalled the work of Italian masters such as Franco Albini and Carlo Scarpa, combining communicative clarity with poetic nuance. Transparency, rhythm, and balance characterized the arrangement of the exhibition elements, while a carefully designed lighting system—mixing natural and artificial sources—accentuated textures and guided the visitor's path.

This hybrid approach created a dialogue between architecture and scenography, between past and future: the installation was not simply an exhibition of objects and models, but a landscape of ideas and materials. Every detail, from the position of the projections to the tactile quality of the surfaces, was part of an orchestrated experience that invited reflection on the environmental, cultural, and aesthetic dimensions of urban design.

At the heart of this immersive experience was the theme of sustainability, understood not only as an ecological concern but as a broader cultural and design ethos. The materials used in the installation were selected for their lightness, modularity, and recyclability, embracing the temporary nature of the pavilion without sacrificing material richness. The use of steel mesh, fabric screens, and corten elements shaped a system that was as infrastructural as it was expressive.

From an architectural point of view, the Italian Pavilion demonstrated the potential of exhibition design which, beyond the function of presenting projects, became a "spatial essay" on the relationship between architecture, city, and environment. The use of architectural "grafts" as both literal and metaphorical interventions allowed for a coherent integration of diverse themes, from the history of Italian modernism to the future of Milan as a metropolitan center. Thus, the pavilion exemplified how curatorship, scenography, and architecture can converge to create experiences that are intellectually active and spatially engaging.

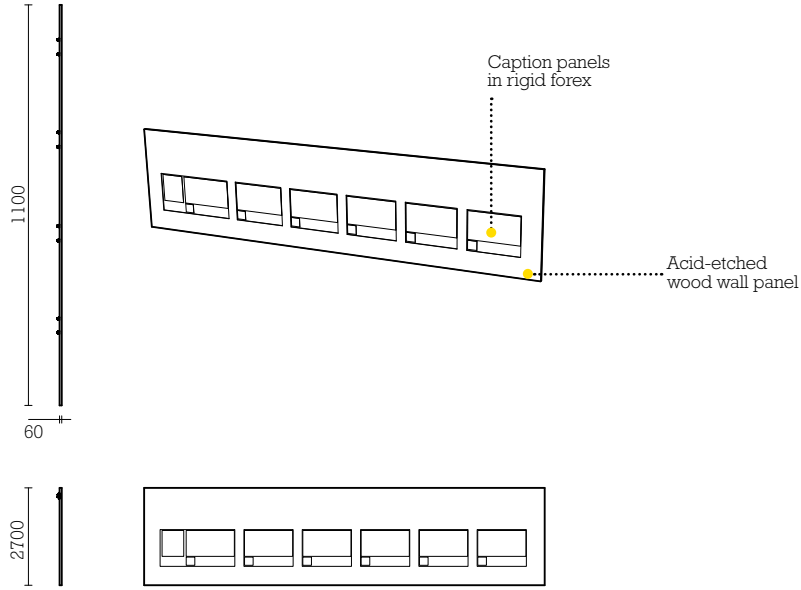


Fig. 79. Construction detail - Wall display panel| Axonometric view and dimensioned elevation.

QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/innesti-grafting-zucchi-dUAjKH

Rethinking the exhibition space

In the broader context of the Italian Pavilion at the 2014 Venice Architecture Biennale, the architectural narrative did not unfold solely through the organization of content or the thematic divisions of space. One of the exhibition's strengths, curated by Cino Zucchi, was indeed its ability to transform technical components into expressive elements, demonstrating how infrastructure, when carefully designed, can become a storytelling device.

Among the most emblematic details of the installation was the strategic use of bent sheet metal cable trays—commonly known as "cable covers"—which served both as infrastructural supports and scenographic devices. These elements, usually relegated to hidden areas of a building, were brought to the forefront of the pavilion's spatial language: integrated into the exhibition path, they were elevated from passive components to active participants in the architectural composition. The cable trays were made of pre-oxidized corten steel, chosen both for its material expressiveness and for its ability to evoke a sense of raw, industrial honesty. Their branching configuration, installed at different heights and directions, visually suggested the structure of tree canopies or vascular systems. This organic image reinforced the exhibition's central theme: grafting, where layers and disparate systems meet, intertwine, and generate new architectural hybrids.

More than functional devices to hide cables or support lighting, the cable covers thus shaped the spatial rhythm of the pavilion. Their paths guided the movement of the visitor: bending and extending in multiple directions, these metal lines operated as an "abstract cartography" of the space, leading toward key installations or drawing attention to specific visual axes.

This technique underlines a fundamental lesson for exhibition design: when technical constraints are not merely accepted as necessities but are integrated into the conceptual framework of the installation, they can enhance the spatial and narrative quality of an environment. The result is a language in which every element—even the smallest and seemingly insignificant—contributes to the larger

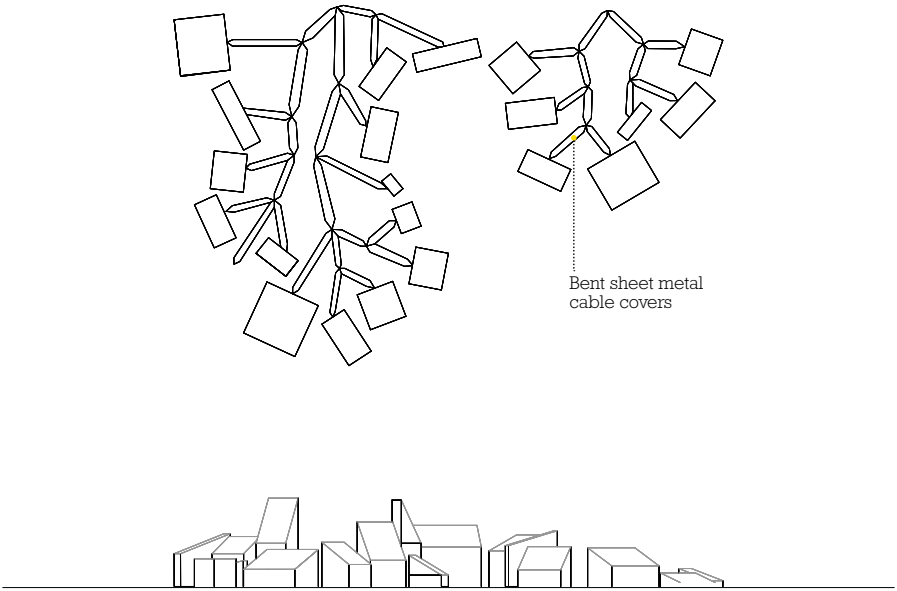


Fig. 80. Construction detail - Display elements| Perspective and plan views.

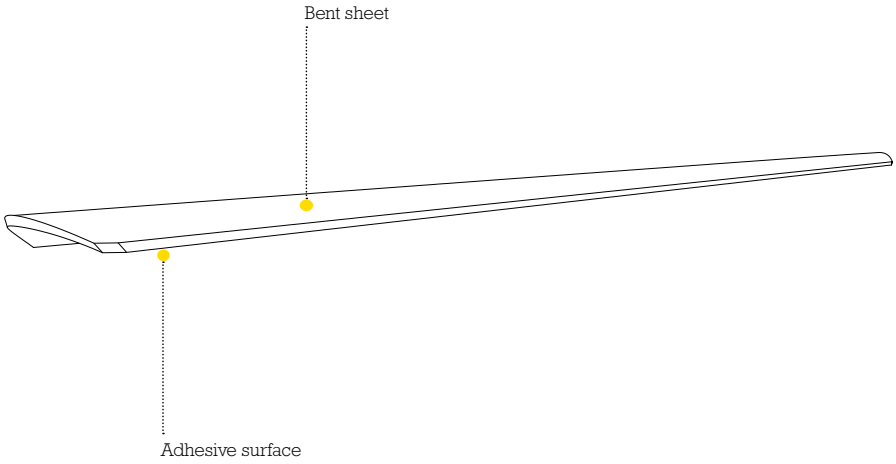


Fig. 81. Construction detail - Structural load-bearing element | Perspective views.

story being told. Here, the choice to reveal (and aestheticize) the bent metal cable trays introduced a form of architectural honesty aligned with contemporary concerns about transparency, materiality, and the ethics of production.

Formally, the cable trays created a visual dialogue with the surrounding structures. Their rust-toned hues echoed the historical textures of the Arsenale, while their geometric profiles contrasted with the irregularity of the existing walls. This contrast between care and decay, between intervention and context, encapsulated the logic of grafting that permeated the entire pavilion.

Moreover, the cable trays established a bridge between architecture and other disciplines: they evoked not only vegetal or biological forms, but also referenced the graphic language of wiring diagrams, electronic boards, and data networks, thus touching on the contemporary condition of digital interconnection. In this way, they became a metaphor for the flow of information and energy that govern cities and cultural systems. Thanks to them, the detail was elevated to narrative: they were neither background nor decoration, but became mediators between concept, function, and experience.

From a curatorial standpoint, their presence challenged the traditional hierarchies of exhibition design because—instead of privileging only models, drawings, or screens—the design highlighted infrastructure as a legitimate site of aesthetic exploration. This shift in meaning broadens the field of what can be considered "worthy of display," offering new perspectives on innovation.

Furthermore, the materiality of corten steel—its patina, its tactility, and its declaration of aging—added a temporal dimension to the installation: unlike polished metals or synthetic materials, corten suggests process, oxidation, and transformation over time. The design of these cable trays also raised critical questions about sustainability: their reusability, modularity, and minimal production impact demonstrated how even the technical components of exhibitions could adhere to ecological principles. Rather than producing wasteful scenographies for a short-term event, the pavilion thus embraced the idea of responsible design even in its most utilitarian parts.

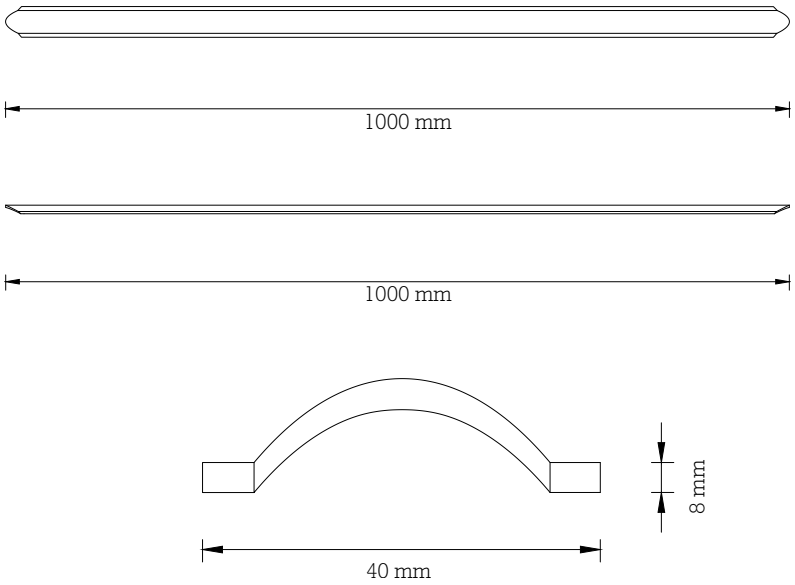


Fig. 82. Construction detail - Structural load-bearing element | Dimensioned elevations.

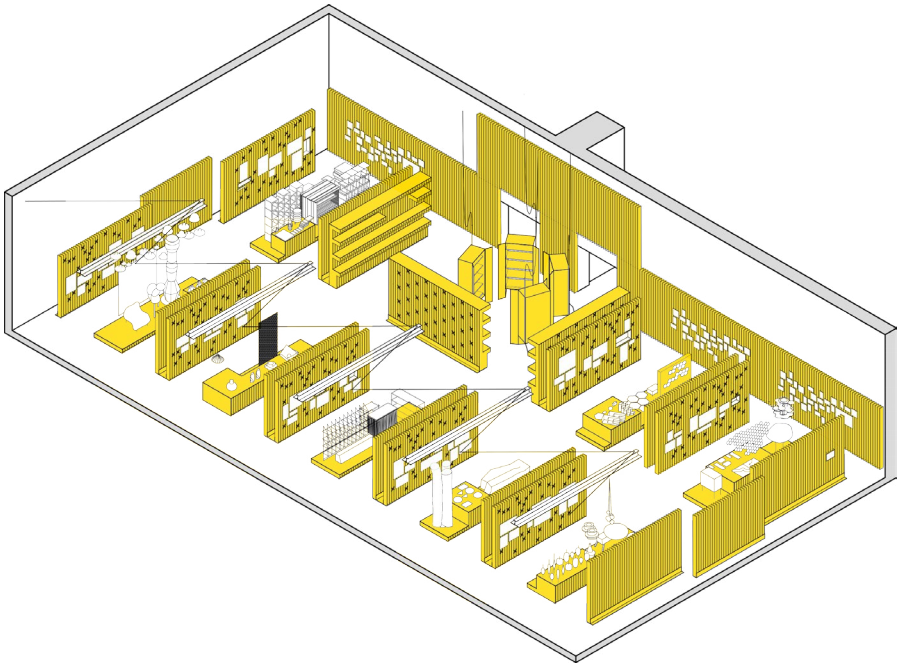
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/innesti-grafting-zucchi-dUAjKH

sheet 24

Sempering
XXI International Exhibition of the Triennale di Milano,
MUDEC – Museo delle Culture, Milan



Cino Zucchi
2016

Creativity between innovation and tradition

In the context of the 21st International Exhibition of the Triennale di Milano in 2016, the exhibition "Sempering" stood out as a critical and poetic reflection on the transformative power of design in the contemporary world. Curated by Luisa Collina and Cino Zucchi, the exhibition sought to reconsider the role of material and constructive processes in the act of design, drawing direct inspiration from the theories of 19th-century architect and theorist Gottfried Semper. His fundamental categorization of architectural elements—earthworks, structures, enclosures, and the hearth—became the conceptual foundation for a renewed dialogue between tradition and innovation.

The curators extended Semper's ideas into eight design actions—stacking, weaving, folding, joining, molding, blowing, carving, and engraving—which made explicit how materials are transformed through human intervention. These categories became interpretative lenses for observing a series of contemporary artifacts and installations: each action embodied a specific relationship between form and process, highlighting the ongoing tension between craftsmanship and digital fabrication, between permanence and temporariness.

Through a curated selection of objects, prototypes, and experiments, "Sempering" demonstrated how contemporary designers manipulate materials to give life not only to new functions, but also to renewed meanings. The exhibition drew attention to the "poetics of construction"—that is, how a stacked brick, a stitched fabric, or a laser-cut panel can become an aesthetic statement. These gestures, far from being purely technical, act as cultural signs, reflecting local traditions, technological capabilities, and environmental awareness.

A central element of "Sempering" was its scenographic layout, which played a decisive role in narrating the exhibition's content. The spatial design, instead of serving as a neutral backdrop, functioned as an active part of the curatorial discourse. The platform that ran through the entire exhibition space served as a unifying base that elevated the objects and physically separated them from the

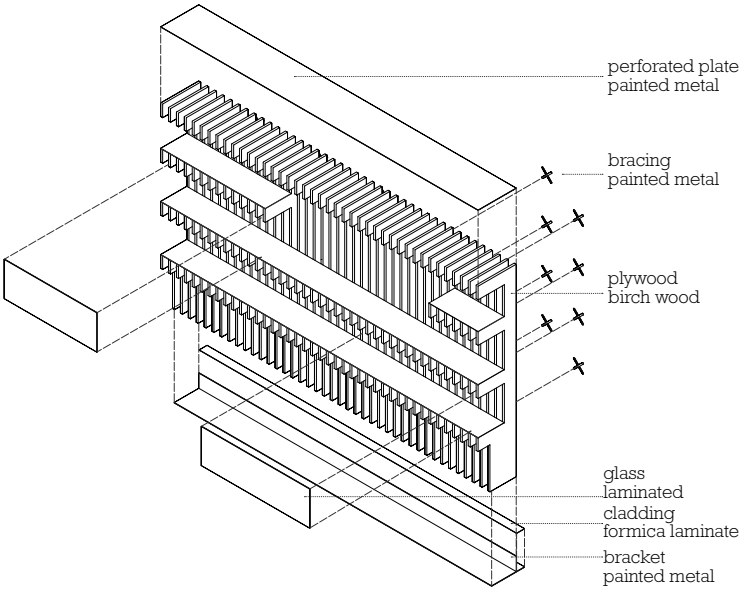


Fig. 83. Construction detail - Main display element | Axonometric exploded view.

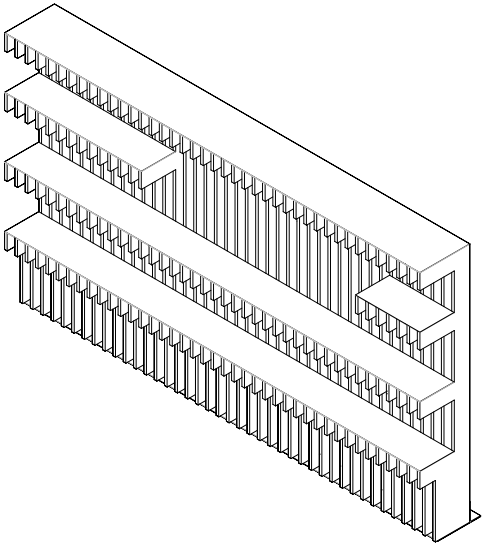


Fig. 84. Construction detail - Main display element | Axonometric view.

museum floor. This elevation not only created a visual hierarchy but also emphasized the idea of detachment and focus, so that each object became a protagonist within its own micro-stage.

By contrast, the system of vertical diaphragms structured the spatial progression through a series of lightweight walls and textured surfaces. These devices modulated the visitor's experience, creating alternating moments of openness and closure, since the diaphragms were not opaque walls but semi-transparent or perforated layers that encouraged a dynamic play between visibility and concealment. This use of spatial filtering resonated with Semper's notion of "enclosure" as a textile condition—a condition that defines space not through mass but through layers and veils.

The exhibition's installation and narrative approach was based on modular systems, exposed connections, and visible construction details, deliberately used to emphasize the processual nature of the installation. Materials such as plywood, metal mesh, and industrial pipes were left untreated or minimally processed, in line with the exhibition's ethic of revealing (rather than hiding) the act of making. Lighting also played a fundamental role in shaping the exhibition's atmosphere and rhythm: the soft directional light, calibrated to avoid glare, highlighted textures and volumes, emphasizing the surface qualities of the materials on display. The expressive power of light also marked the transitions between the eight actions, providing sensory cues that intuitively guided the visitor through the exhibition.

By transforming the exhibition itself into a narrative, "Sempering" redefined the exhibition space as a laboratory of contemporary tectonics. The curators challenged the conventional distinction between object and support, instead proposing a holistic experience in which form, structure, and spatial sequence worked in concert.

Ultimately, "Sempering" offered a new perspective on exhibition design, reformulating it as a continuum of actions—each with its own story, technique, and expressive potential. The exhibition thus invited a reconsideration of the foundations of making, encouraging a more conscious appreciation of how things are made.

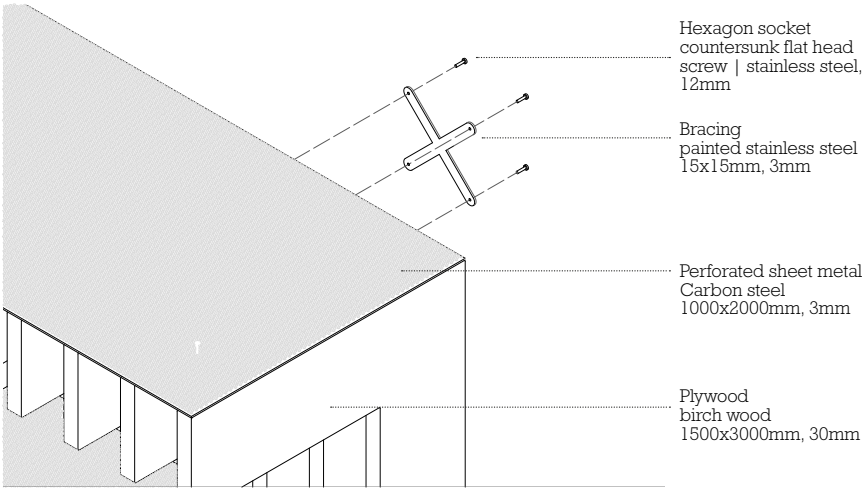


Fig. 85. Construction detail - Joints of the main display element| Axonometric exploded view.

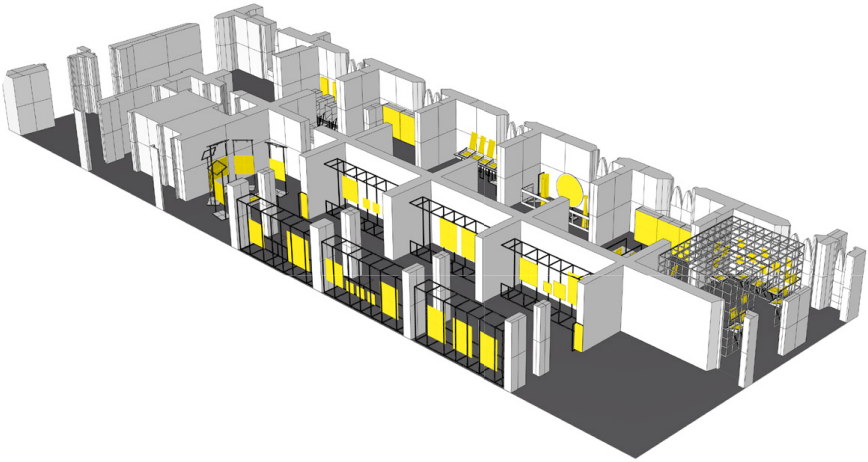
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/sempering-zucchi-LAnTZ2

sheet 25

Leonardiana
Castello Sforzesco, Vigevano



Migliore+Servetto
2016

Unity and sustainability

In the heart of the historical Castello Sforzesco of Vigevano, nestled within the fortified Maschio, lies La Leonardiana, a permanent exhibition dedicated to one of the most iconic figures of the Renaissance: Leonardo da Vinci. Curated by Claudia Zevi & Partners and developed under the scientific supervision of Leonardo scholar Carlo Pedretti, the exhibition offers an immersive and interpretive journey into the mind of the master, blending historical narrative, contemporary museography, and technological innovation.

Far from being a traditional museum, La Leonardiana presents itself as a dynamic "exhibition machine," reconfiguring the relationship between content and context. The architectural space of the castle does not serve merely as a neutral container; instead, it engages in an active dialogue with the exhibition narrative. The curatorial team has approached the centuries-old structure with care and respect, inserting a clear, modular system into the existing architecture—one that provides visual coherence without overwhelming the character of the historic interior.

Technologically, the exhibition leverages multimedia tools, ambient lighting, and large-scale wall graphics to guide visitors through ten thematic rooms. These rooms explore Leonardo's genius from various angles: the courtly context of his life in Milan, his engineering and scientific investigations, and his unparalleled artistic legacy. Central to this experience are high-fidelity replicas of twenty-five works—manuscripts, drawings, and inventions—produced in collaboration with Giunti Editore. These reproductions anchor the interpretive journey and provide tactile access to the complexity of Leonardo's creative process.

From a design and construction standpoint, the exhibition's infrastructural language is built upon a repetitive modular system. The supporting structures are made from matte dark gray enameled steel tubing and are deployed in three primary configurations: cage-like frames used in the Sala dei Codici, sequential vertical panel displays in the gallery of paintings, and freestanding vertical displays in the Sala del Cenacolo. These are accompanied by horizontal cases containing glass

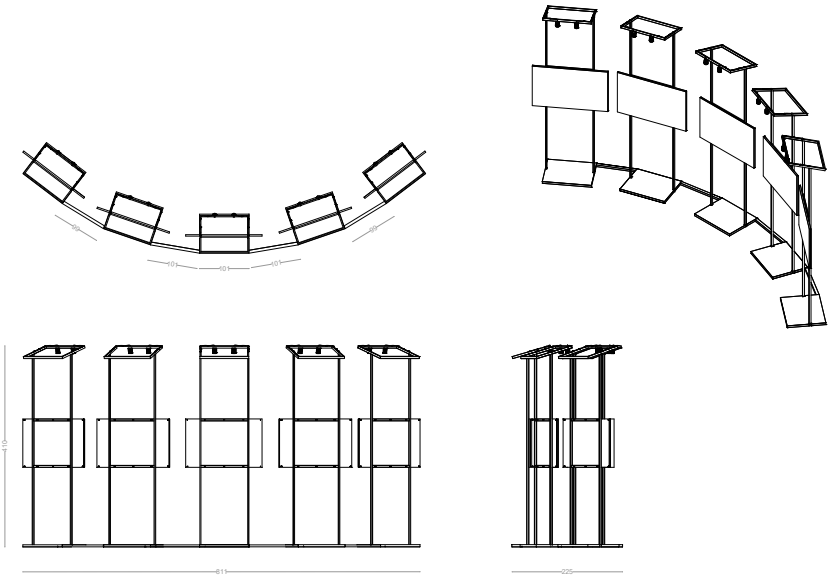


Fig. 86. Construction detail - Configuration of display elements | Axonometric view, floor plan and elevations.

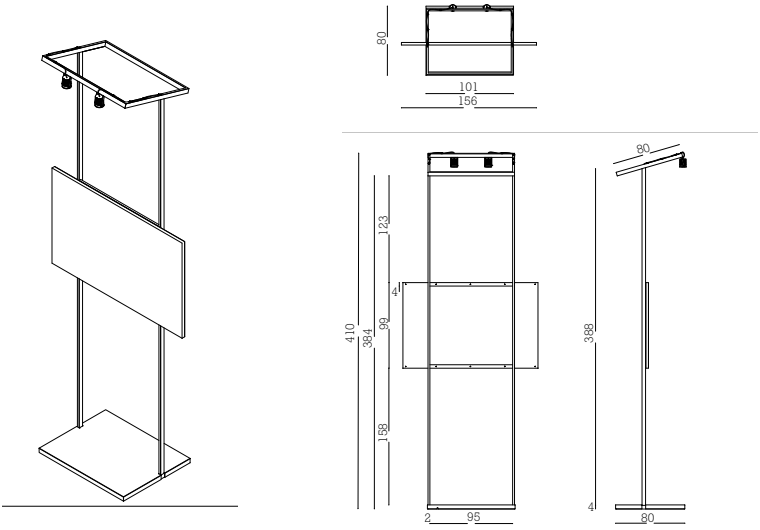


Fig. 87. Construction detail - Structure of an exhibition element | Axonometric view and dimensioned projections.

vitrines for original sketches and objects.

The modular strategy offers several advantages. The repetition of elements ensures a unified visual grammar across the different rooms, supporting narrative cohesion while accommodating diverse content types. The use of easily sourced industrial components—standard screws, bolts, and friction-based joints—contributes to the exhibition's logistical sustainability. Most components are removable and adaptable, designed to be disassembled and reconfigured as needed, facilitating future upgrades and reducing environmental impact. Nevertheless, in certain instances, some elements were permanently welded to enhance stability, which, while sacrificing full reversibility, reflects a calculated compromise between flexibility and structural security.

Lighting plays a pivotal role in guiding the visitor's attention and animating the archival materials. Integrated spotlights and projection systems subtly underscore the curvature of manuscripts and the textures of wood and parchment. Environmental graphics—large murals and translucent overlays—act as a secondary layer of interpretation, emphasizing key historical insights without competing with the physical exhibits.

In the Sala del Cenacolo, which houses thematic interpretations of Leonardo's Last Supper, the technical sophistication of the exhibit design becomes even more apparent. Observations conducted in situ revealed an optimal balance between ambient light control and visual accessibility. The decision to anchor support elements only at predefined junction points ensured minimal intrusion on the stone flooring and preserved the room's architectural integrity. This detail exemplifies a larger design ethos: prioritizing historical sensitivity while enabling contemporary storytelling.

Originally conceived as a temporary display, La Leonardiana has evolved into a cultural landmark in the city of Vigevano. It was awarded the prestigious Compasso d'Oro ADI in 2018, not just for its content, but for its innovative "exhibition theater" design that embodies the spirit of Leonardo himself: inquisitive, adaptive, and timeless. As a model of interpretive museography, the project offers a roadmap for future exhibitions seeking to harmonize historical preservation with immersive technology and sustainable construction.

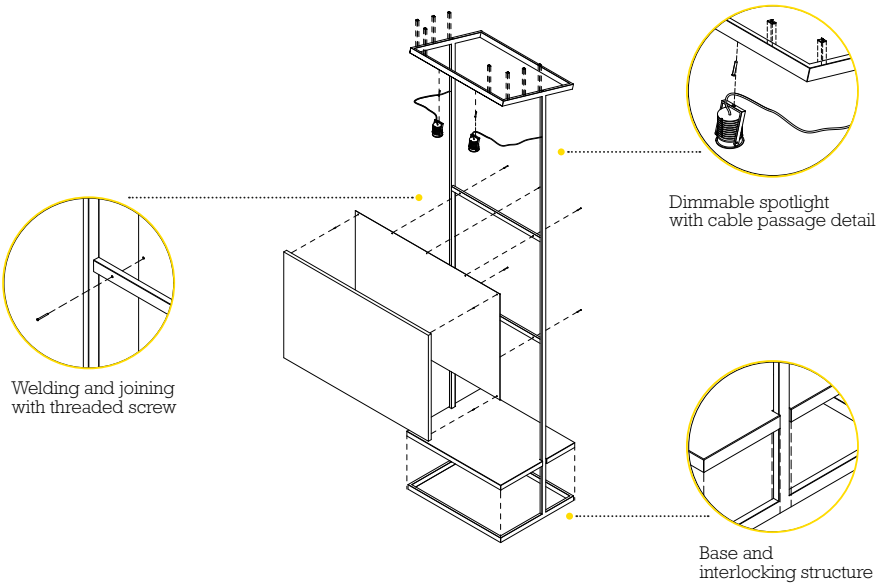


Fig. 88. Construction detail - Joints for attachment of exhibition drapery | Axonometric and exploded views.

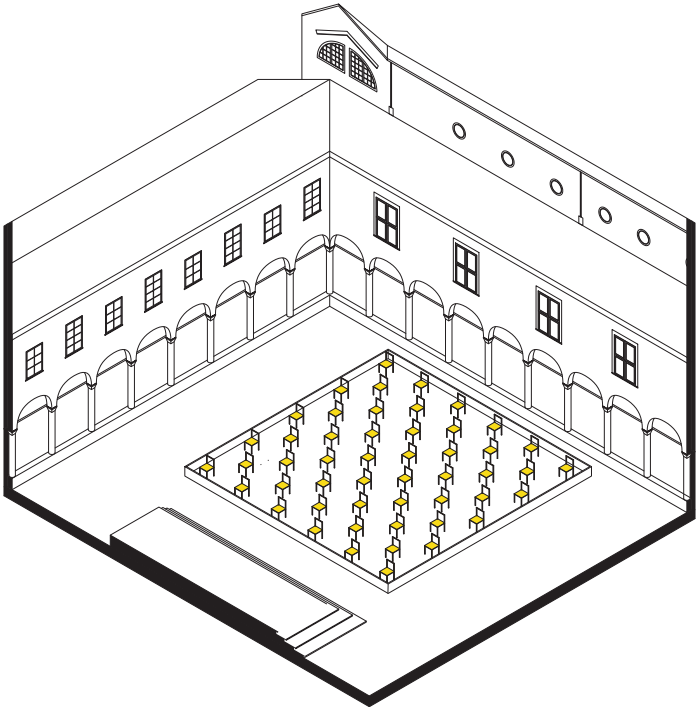
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/leonardina-miglioreservetto-7m3isS

sheet 26

50 Manga Chairs
Cloister of San Simpliciano, Milan



Nendo
2016

Conceptual lightness and technical solidity

As part of the Fuorisalone 2016 in Milan, Japanese design studio Nendo presented 50 Manga Chairs, a site-specific installation that transformed the historic Chiostro Minore of San Simpliciano into a contemporary stage for design, narrative, and cultural juxtaposition. The project, created in collaboration with Friedman Benda Gallery, consisted of fifty stainless steel chairs, each inspired by a symbolic motif extracted from the graphic and narrative language of Japanese manga. Positioned on a raised white platform within the Renaissance cloister, the chairs were arranged in diagonal rows, each one encapsulating a particular visual trope from the comic tradition—speed lines, sound effects, levitation, shadows, or movement bursts.

Far from being a simple display of seating design, 50 Manga Chairs was a conceptual work that blurred the boundaries between function, fiction, and form. Each chair functioned as both a utilitarian object and a narrative fragment, inviting viewers to engage with a story that unfolded spatially rather than sequentially, mimicking the episodic rhythm of manga panels.

The visual staging of the exhibition played a critical role in amplifying its conceptual ambition. The elevated flooring system—covered in pristine white carpet—served not merely as a support structure but as a visual and symbolic device. In contrast, the circulation path and surrounding portico were enveloped in black carpet, creating a stark chromatic opposition that heightened the sense of detachment between the installation and its historical context. This spatial demarcation isolated the chairs like museum artifacts or characters caught in a suspended storyboard, inviting viewers to reconsider the role of design in narrative construction.

From a technical perspective, the elevated flooring was a fundamental element of the project. Designed to support the weight of both the visitors and the heavy, mirrored chairs, the floor system was composed of modular panels supported by a steel substructure. Typically employed in trade fairs, office buildings, or server rooms, raised floor systems offer quick assembly and disassembly, adaptability to

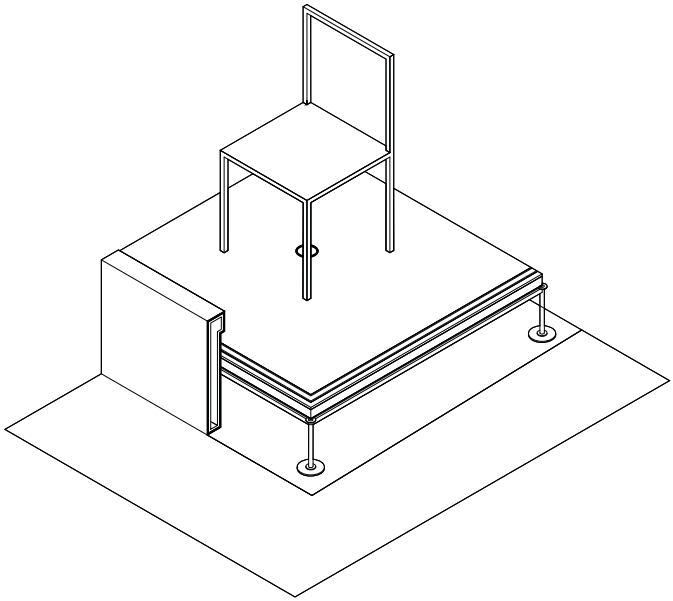


Fig. 89. Construction detail - Display platform structure | Axonometric view.

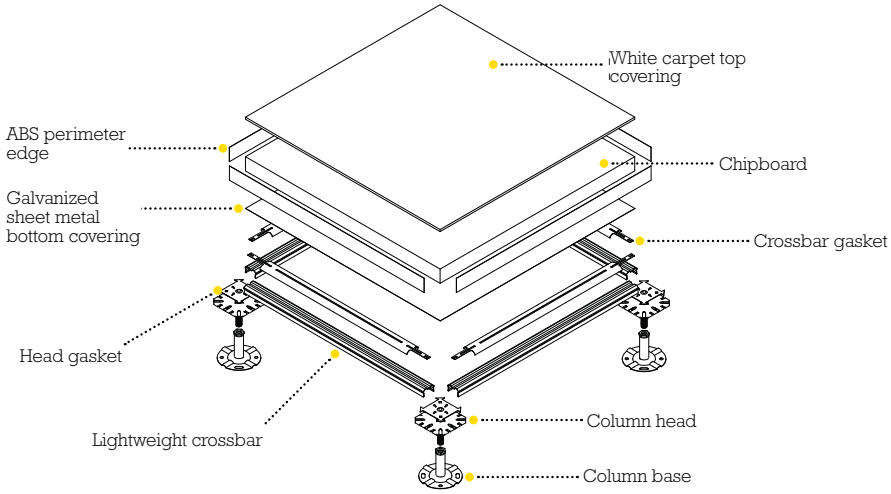


Fig. 90. Constructive detail - Structure of the exhibition platform | Axonometric exploded view.

uneven terrain, and convenient routing of electrical or AV systems beneath the surface.

In the case of Nendo's installation, the modular panels were likely constructed from high-density wood core or calcium sulfate, resting on adjustable steel pedestals with integrated locking mechanisms. The use of a white carpet finish not only achieved visual uniformity and aesthetic elegance but also softened acoustics within the stone cloister. The system's reversibility and minimal impact on the existing site also aligned with principles of non-invasive, sustainable exhibition design—values increasingly central to contemporary curatorial practices.

Moreover, the mirrored finish of the chairs played a vital role in extending the design narrative into the experiential realm. By reflecting both the architecture of the cloister and the movement of visitors, the chairs became performative devices—frames that captured, distorted, and repeated reality, much like manga itself. This interplay between static object and dynamic interaction reinforced the core themes of identity, perception, and transformation.

50 Manga Chairs thus functioned on multiple levels: as an exercise in typological variation, as a formal exploration of surface and reflection, and as a site-specific narrative intervention. The choice of a raised floor—often overlooked in exhibition design—became here a critical enabler of the installation's visual language. It elevated not just the chairs but the act of storytelling itself.

By analyzing this detail, we come to appreciate how technical elements—when chosen and implemented with intent—can reinforce the conceptual goals of a design project.

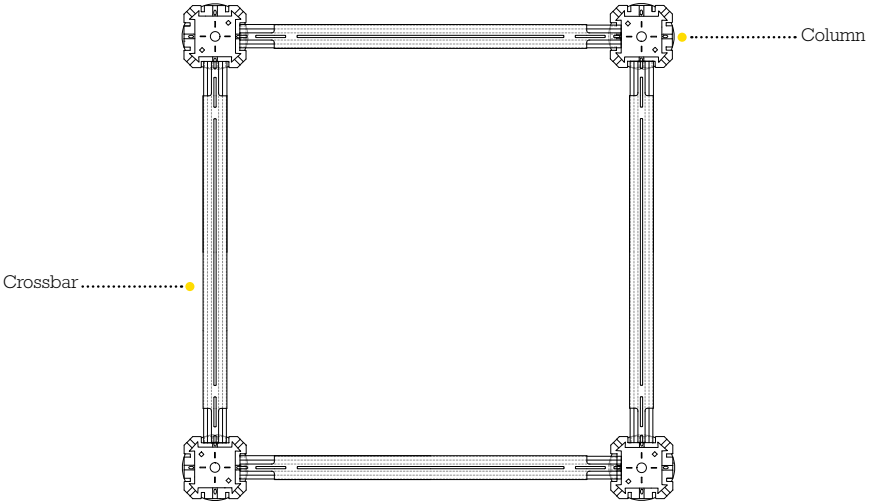


Fig. 91. Construction detail - Joints of the display wall | Cross section.

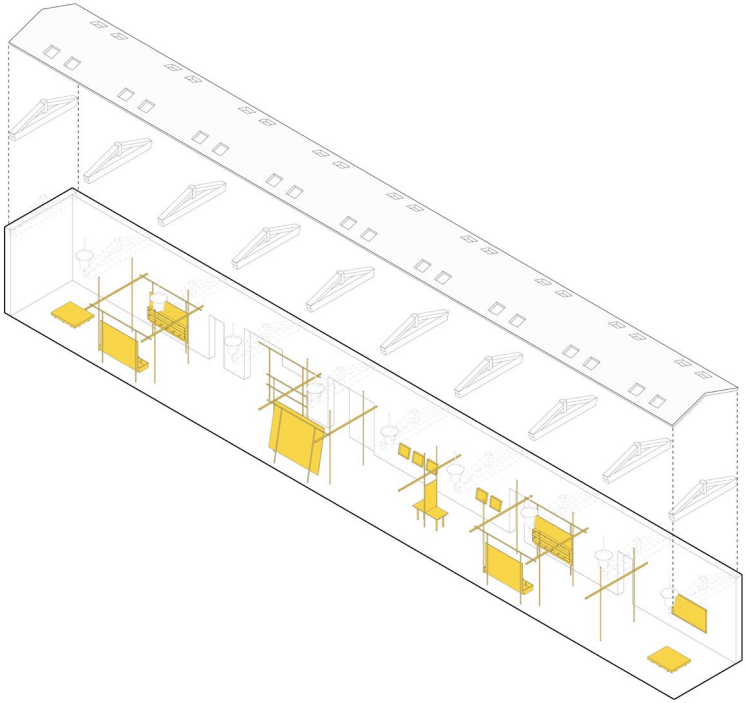
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/50-manga-chairs-nendo-CjqaYB

sheet 7

NOI/US Stories of communities,
Ideas, Products and Reggiane Lands
Palazzo dei Musei, Reggio Emilia



Francesco Librizzi
2016

Narrative and space

The exhibition NOI. Storie di comunità, Idee, Prodotti e Terre Regiane is an eloquent tribute to the collective intelligence of the Reggio Emilia region, a territory that has historically cultivated a fertile dialogue between tradition and innovation. Curated by architect and theorist Luca Molinari, the exhibition investigates how communities, institutions, and productive landscapes in this part of northern Italy have contributed to the formation of resilient and sustainable ecosystems. This cultural richness is not presented as a static heritage, but as an evolving process shaped by cooperative action, shared knowledge, and a capacity for reinvention.

Hosted within a museum context and mainly occupying the third floor of the institution—a long, corridor-like space—the exhibition reconfigures the architectural setting to amplify the narrative experience. A sequence of architectural "portals" punctuates the linear layout, rhythmically dividing the space into three metaphorical aisles. These frame diverse exhibits such as busts, maps, machines, archival documents, and even animal skeletons, bringing together scientific, historical, and sociocultural narratives.

The primary goal of the design is to slow down the pace of the visit, inviting contemplative engagement. The spatial strategy adopted to achieve this is a "code of exhibition," which determines the placement, hierarchy, and rhythm of the objects. This ensures that the visitor does not passively consume information but is gently guided through a layered, immersive experience. The display becomes not just a container, but a navigational device that structures perception.

From a technical standpoint, the exhibition's physical framework is defined by its sustainable and modular construction. It makes use of three different wood species—mahogany, ekumè, and spruce (abete)—carefully chosen for their structural properties, aesthetic warmth, and environmental sustainability. The main structural frame consists of a horizontal square-profiled axis (4cm x 4cm), mounted to vertical cylindrical poles of 4cm diameter using precision wood screws.

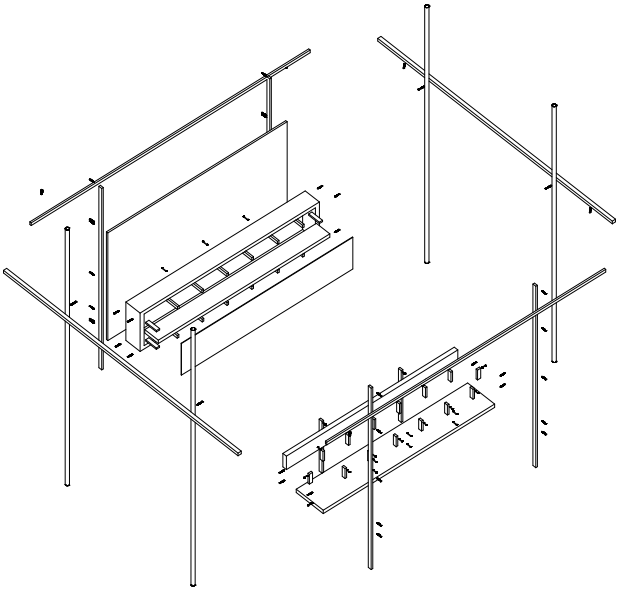


Fig. 92. Construction detail - Main display case structure | Axonometric exploded view.

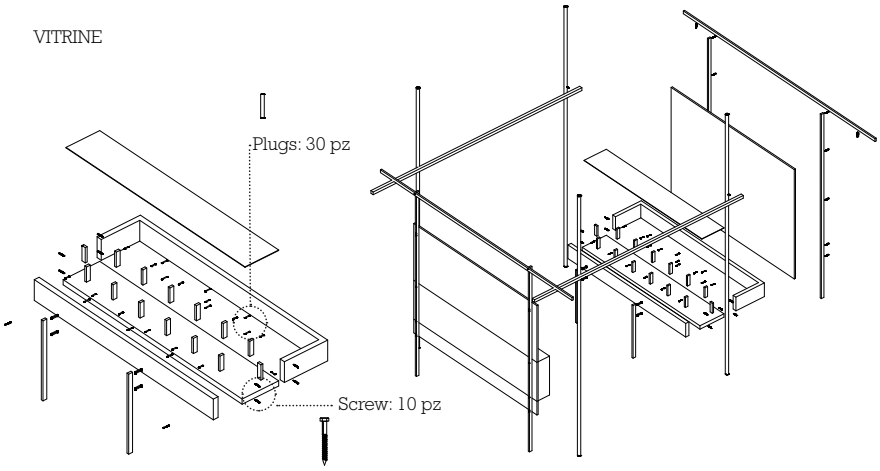


Fig. 93. Construction detail - Display case | Axonometric exploded view.

This configuration offers both mechanical stability and compositional clarity.
The system integrates two types of panels: vertical and horizontal. These serve dual functions—as supports for didactic information and as shelving or framing for small objects. Additional components include transparent glass plates mounted with suction cups, enabling safe, reversible display without the need for invasive fixings. These materials and their assembly techniques are intentionally visible, embracing a design philosophy that celebrates transparency—both literal and conceptual.
The project is engineered for mid- to long-term use. Its demountable design facilitates easy transportation, reconfiguration, and storage, aligning with principles of circular design and resource optimization. Moreover, this modular system allows the exhibition to adapt flexibly to various content types and space constraints. The attention to tactile materiality and intuitive assembly not only enhances the physical coherence of the exhibit but also reflects the ideological underpinnings of the show—community-driven ingenuity and sustainable foresight.
One of the most compelling features of NOI is its ability to turn a deeply local narrative into a universal message. The exhibition reframes the idea of landscape—not merely as physical geography but as an active, living ecosystem shaped by cooperation, education, and cultural production. It demonstrates how place-based knowledge and historical memory can inform contemporary strategies for sustainability and global citizenship.
In the context of global climate challenges and sociopolitical transformation, NOI serves as both a retrospective and a manifesto. It invites the audience to reimagine the future through the lens of solidarity, equity, and environmental ethics. The exhibition is not merely a passive archive of the past, but an open framework for imagining inclusive and interconnected futures.

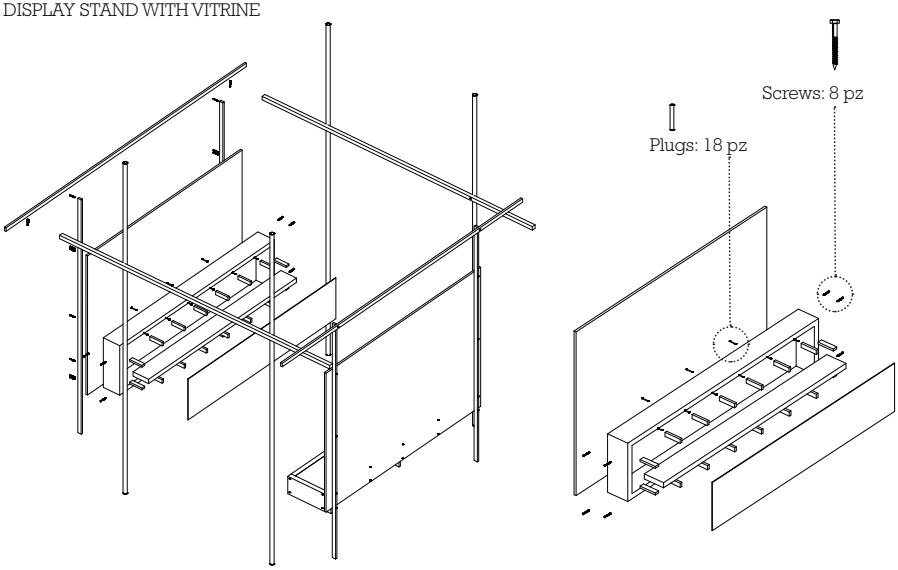


Fig. 94. Construction detail - Display case | Axonometric exploded view.

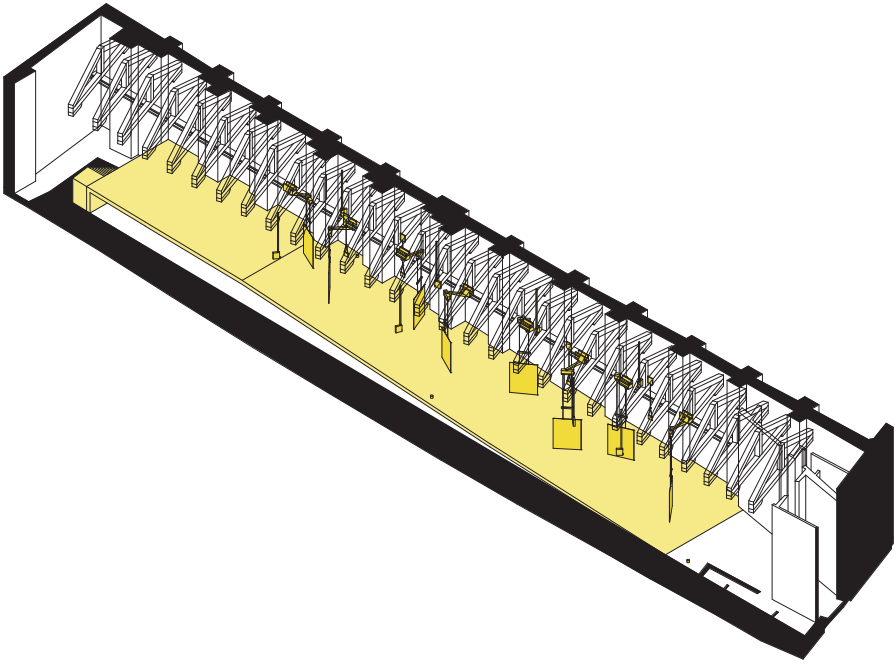
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/noi-us-librizzi-GUZJRN

sheet 26

Water Projects
Magazzini del Sale, Venice



Studio Azzurro
2017

Designing the invisible

On the occasion of the 16th International Architecture Exhibition of the Venice Biennale, the Emilio and Annabianca Vedova Foundation hosted Renzo Piano and his "Water Projects", an immersive exhibition curated by Studio Azzurro. The exhibition, set up in the evocative spaces of the Magazzino del Sale, explored the work of the Renzo Piano Building Workshop through the interpretative lens of water—an element inseparable from both urban development and the city of Venice itself.

The curatorial approach did not follow a chronological narration of Piano's career, but rather offered a sensory and poetic interpretation of his design process. At the center of the installation were eight suspended "islands," each containing a transparent display case that combined digital animation with physical sketches, technical drawings, and images of completed buildings. These screens floated within the darkened volume of the space, offering visitors a contemplative journey through sixteen architectural projects, all linked by their intimate relationship with water—serving at times as physical context, emotional metaphor, or structural challenge.

Rather than presenting completed buildings as static products, the exhibition focused on the origins of their form—the "asemantic scribbles" that Renzo Piano produces during the early stages of conceptual development. These expressive marks came to life on the screens, accompanied by soundscapes and rhythmic "washes" of digital water that periodically cleansed the surfaces, metaphorically renewing the design process.

From a technical point of view, the installation demonstrated remarkable precision and innovation. Visual content was projected using NEC PA653U projectors (6500 lumens), mounted at an angle of about 20° to accommodate the narrow and elongated space. Synchronization was achieved via networked video players that ensured smooth image playback across the various displays.

Each display surface was made of transparent acrylic (methacrylate), treated in

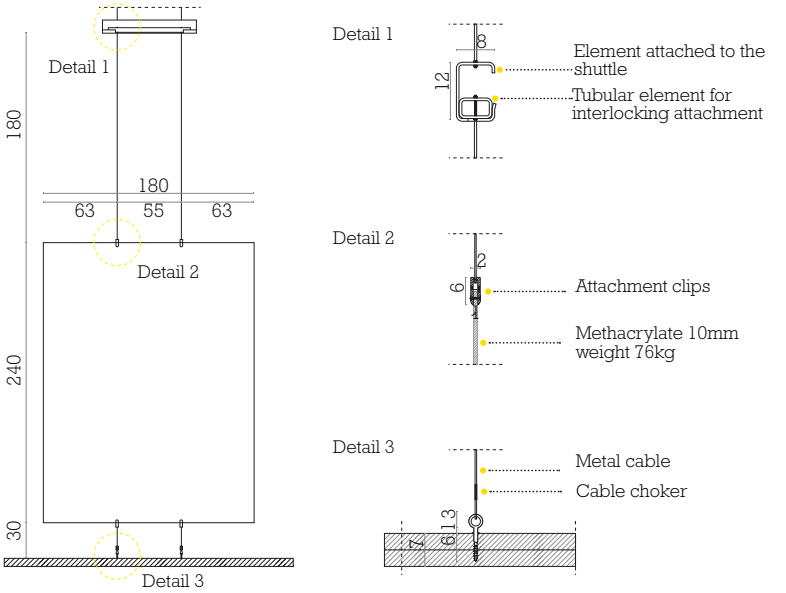


Fig. 95. Construction detail - Display structure of the exhibit and details of joints | Dimensioned views.

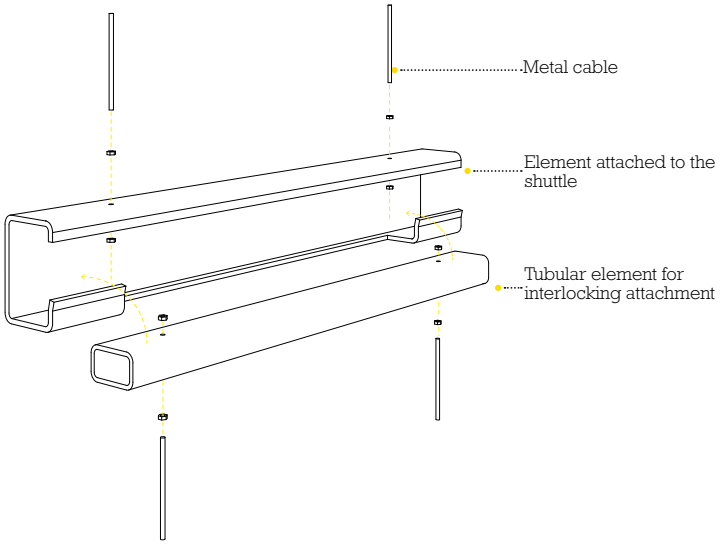


Fig. 96. Construction detail - Coupling for suspension of the structure | Axonometric exploded view.

three distinct ways to manipulate light, depth, and texture. The first treatment used a double-sided rear-projection film with a 180° viewing angle, offering clarity and brightness from multiple directions. The second employed a Holopro holographic film, allowing the projected image to float while maintaining background visibility. Finally, some areas were coated with opaque white tempera, introducing a painterly and tactile quality that contrasted with the high-tech nature of the projection system.

These overlapping techniques created a visual and conceptual integration that reflected the complexity of Piano's architecture: the simultaneous presence of lightness and weight, of drawing and construction, of thought and material. The use of projection and reflection thus became a tool not only for visualization but also for architectural storytelling.

Crucial to the success of the exhibition were the sensitivity to space and treatment of context. The Magazzino del Sale, a long, narrow warehouse marked by rough textures and an industrial character, presented the design team with both opportunities and challenges. Architect Alessandro Traldi, who collaborated with Studio Azzurro, spoke of the need to preserve the integrity of the historic structure while introducing contemporary technological elements. An elegant solution in this regard was a system of golden rails discreetly mounted along the ceiling, designed to withstand the corrosive effects of Venetian humidity. This system also carried electric power and enabled the inclusion of movable robotic arms, a tribute to the dynamic installations once used by Emilio Vedova.

Even the most functional components—supports, joints, fasteners—were selected with the utmost care. Wherever possible, standard exhibition elements were employed without modifications, to maintain reversibility and sustainability, while avoiding permanent interventions on the architectural envelope. The result was an exhibition that expressed both material lightness and conceptual depth, embodying Renzo Piano's design ethics and remaining faithful to the character of the space that hosted it.

In summary, "Water Projects" offered an overview of the renowned architect's work, successfully showcasing his technical virtuosity while also transforming the exhibition space itself into an architecture of thought and experience.

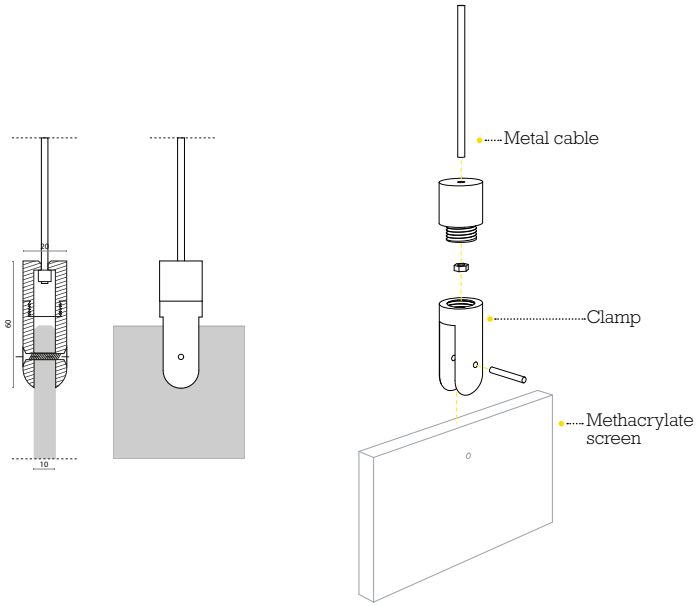


Fig. 97. Construction detail - Joint for attachment of display panels | Axonometric exploded view and sections.

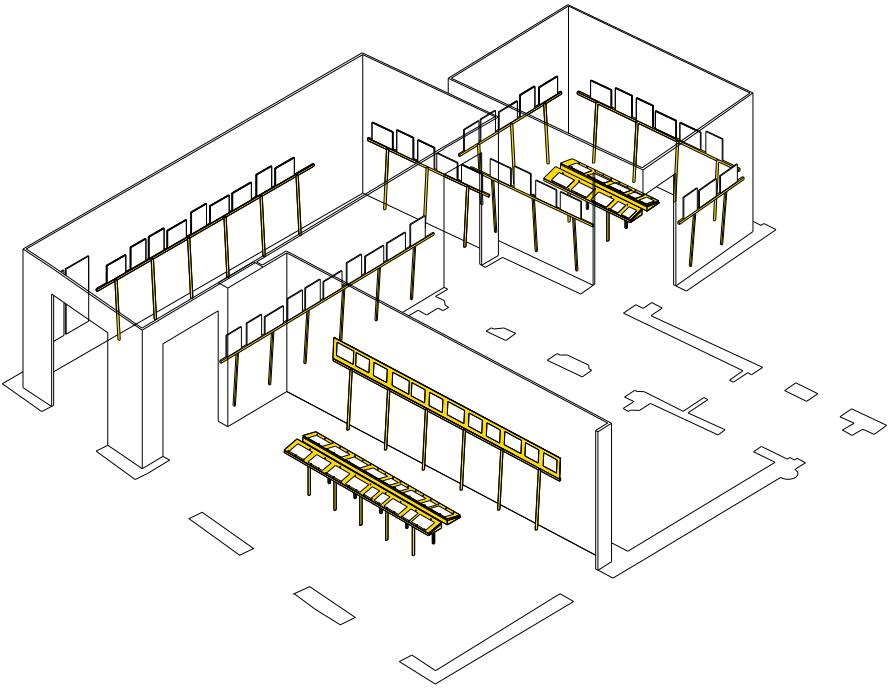
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/progetti-dacqua-studio-azzurro-T-ZIiDp

sheet 29

Tires/Viscose, Andrè Kertèsz
Casa Saraceni, Bologna



Francesco Librizzi
2019

Photography and architecture in dialogue

The exhibition "Tires", presented during the fourth edition of the Foto/Industria Biennale in Bologna (2019), offered a unique perspective on photographic expression and public interaction. At its center was a selection of photographs taken by Hungarian photographer André Kertész during his American period, in 1944, specifically for two lesser-known journalistic reportages. Rather than serving as simple documentation, these images were elevated to sculptural presences within the exhibition space, thanks to a curatorial and design strategy that subverted the conventions of photographic installation.

Instead of being traditionally hung on the gallery walls, Kertész's black-and-white prints were placed on low support structures that allowed them to "rest" on the floor or lean gently on inclined bases. This choice altered the classic visual posture of the viewer, requiring them to look downward, often from very close distances, and to move physically through the space, encouraging a slower and more mindful observation. The resulting spatial arrangement promoted a greater intimacy between the public and the works, prompting an active reconsideration of how photographic images can be received and understood.

This staging was not merely aesthetic. Rather, it functioned as a conceptual gesture that reformulated the photographs as material artifacts—objects that occupy space and carry weight, rather than flat and dematerialized windows to the past. In doing so, Tires implicitly questioned the omnipresence of eye-level display, challenging assumptions about how images should be presented. As many contemporary curators argue, altering the standard mechanics of display can fundamentally shift the cognitive and emotional impact of an exhibition (Bennett, 2015).

The curatorial strategy adopted for "Tires" also resonated with broader themes proposed by the 2019 Foto/Industria Biennale, organized by the MAST Foundation. This edition focused on the intersection of industrial culture, visual memory, and archival reconstruction, linking historical masters like Kertész to emer-

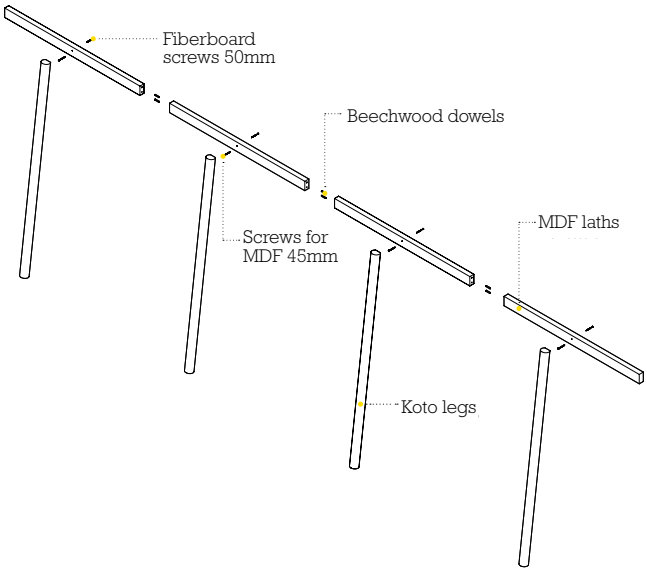


Fig. 98. Construction detail - Side display structure | Axonometric exploded view.

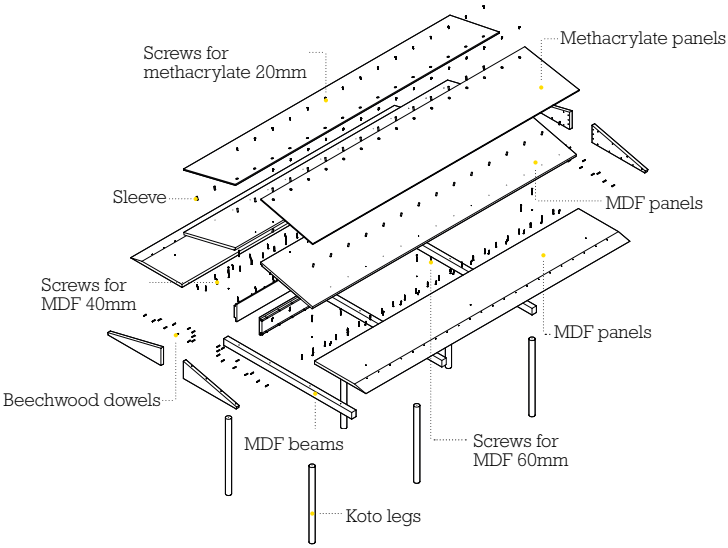


Fig. 99. Construction detail - Central display structure, single module | Axonometric exploded view.

ging photographers working in new media and experimental techniques. In this wider context, Tires stood out for its quiet radicalism: a minimalist installation that conveyed a deep understanding of the role of photography in visual culture.
Technically, the support system used in Tires was simple yet effective. The prints were mounted on rigid panels and then placed on custom-made bases with grooves—in MDF or plywood—with minimal depth and slightly inclined to enhance readability.
This decision to move away from verticality and to emphasize the autonomy of the image on a horizontal reading plane highlights a political and philosophical commitment to presenting photography as both memory and artifact.
The spacing between the images was carefully calibrated to avoid visual congestion, giving each photograph its own spatial "frame" within the gallery. Finally, the use of soft lighting prevented reflections on the prints, ensuring clarity and a sense of timelessness.
The architectural environment of Palazzo Pepoli, where the exhibition was held, also played an active role in the overall experience. With its historic interiors and soft ambient light, the site created a contrast between the temporal specificity of the images—the postwar American industrial landscapes—and the atemporal materiality of the exhibition container. The tension between ephemerality and permanence, between fragility and weight, was thus central to the conceptual core of the exhibition.
In this sense, Tires was not just a photographic retrospective, but also functioned as a curatorial mediation. As scholars such as Edwards and Hart (2004) have noted, the material support of photographs is inseparable from their meaning: the impact of an image is often co-produced by its frame, its context, and the method of interaction it suggests.
In the end, Tires is not only about Kertész's vision—it's about us.
It invites us to kneel, to bend, to look again. And in doing so, it reminds us that every exhibition is a "choreography of perception," where even the slightest change in angle or height can transform what we see—or how deeply we are willing to see it.

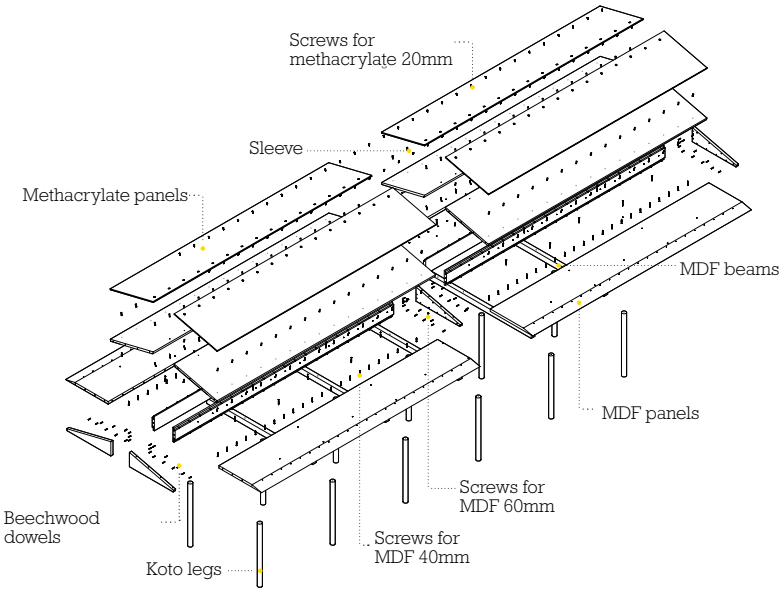


Fig. 100. Construction detail - Central display structure, double module | Axonometric exploded view.

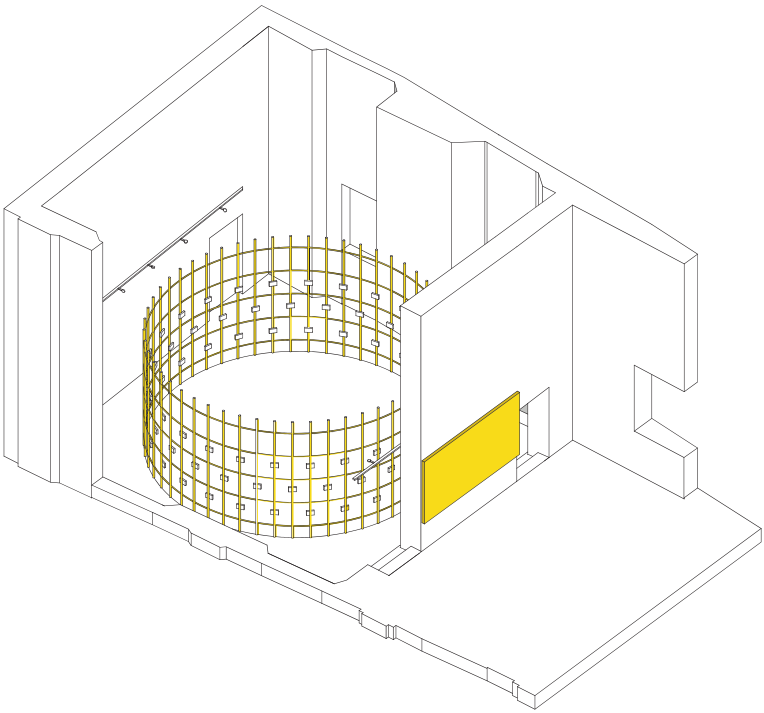
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/tires-viscose-librizzi-s4Q3Fs

sheet 30

A Certain Collector B, Yosuke Bandai
International Museum and Library of Music, Bologna



Francesco Librizzi
2019

The cyclical nature of the image

Presented as part of the fourth edition of Foto/Industria 2019, the international Biennial of Photography of Industry and Work promoted by Fondazione MAST, the exhibition "A Certain Collector, B" by Japanese photographer Yosuke Bandai was hosted within the evocative spaces of Palazzo Sanguinetti, home to Bologna's Museum of Music. Curated by Francesco Zanot, the exhibition offered a profound and immersive experience that blurred the boundaries between sculpture, photography, and installation, highlighting themes of transience, transformation, and memory.

The show was housed in a concave room that embraced the visitor in a continuous visual loop. This spatial configuration played a crucial role in reinforcing the conceptual basis of Bandai's work: seriality and the cyclic nature of material life. From every point within the room, the viewer could see the entire sequence of images, generating an effect of endless repetition, like a looped archive of ephemeral matter.

Bandai's artistic process begins with a deeply reflective and ecological act of recovery. He collects discarded or decaying objects — fragments of wood, bits of plastic, pebbles, dried insects — typically overlooked or considered refuse. These materials are then reassembled into delicate, ephemeral sculptures. Rather than presenting these sculptural objects directly, Bandai uses a scanner to digitize them, thereby reducing their materiality and dimensionality, and transforming them into 2D photographic prints. Through this act of mediation, Bandai preserves and elevates the objects, fixing their impermanence into visual memory.

The installation echoes this transformation. Seventy photographic images are housed in lightweight, transparent containers and protected by plexiglass plates. These cases, arranged in a circular formation, mirror the cyclical nature of the work itself, enabling the viewer to perceive the collection from multiple angles. The choice of clear materials ensures that the images remain visually accessible while maintaining a minimal environmental footprint. This structural and ma-

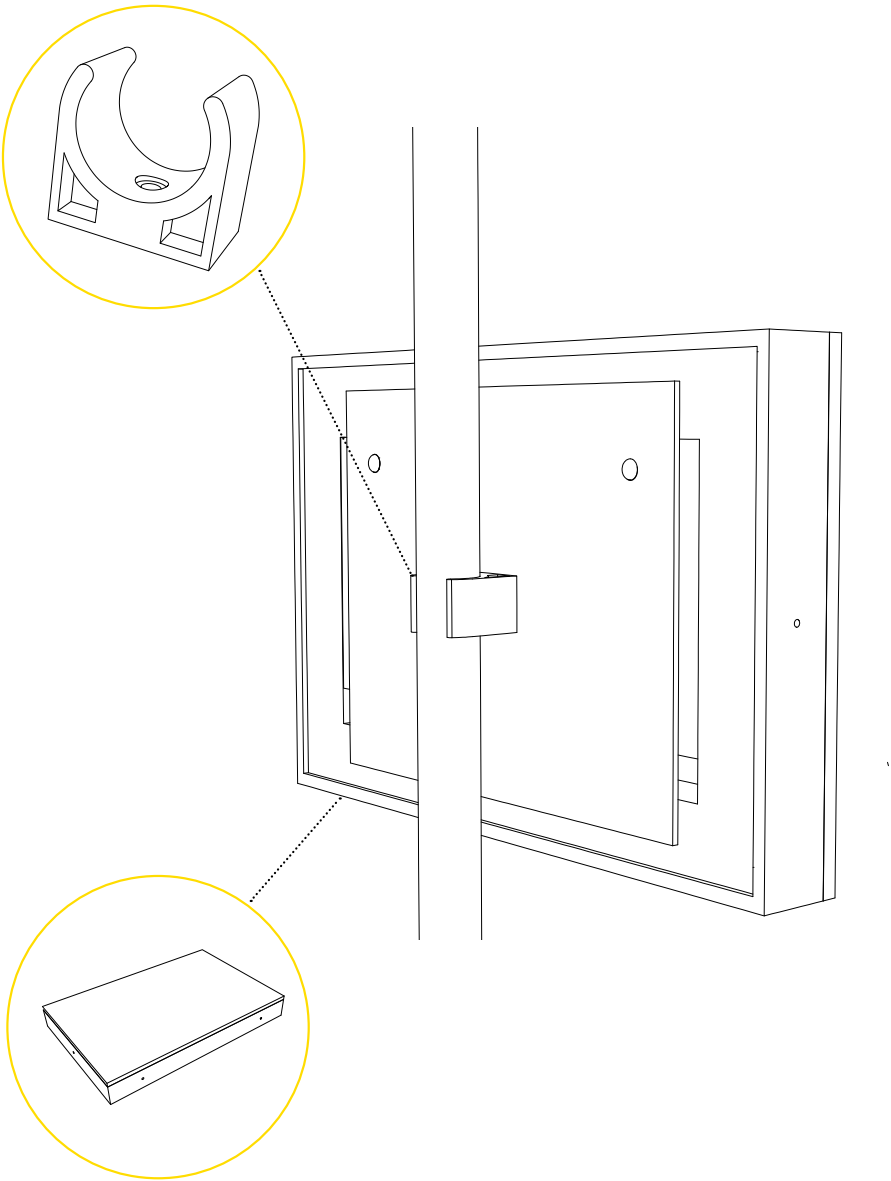


Fig. 101. Construction detail - Exhibit support and its components| Axonometric views.

terial lightness reinforces the conceptual framework of the show: the fragility of matter, the endurance of memory, and the poetics of waste.

Bandai and Zanot's design respects the architectural and historical character of Palazzo Sanguinetti while introducing a contemporary aesthetic that complements the building's layered heritage. The installation's coherence is achieved through a rhythm of repetition and transparency, with each image acting as both an individual artwork and a component of a larger narrative. By avoiding traditional framing methods and adopting modular, stackable presentation elements, the exhibition maintains a dialogue with sustainability principles and modularity in exhibition design.

Moreover, the suggestion of introducing reflective or translucent surfaces to further extend the notion of visual recursion opens up the potential for a more dynamic perceptual experience. Reflections could multiply the objects, deepen the spatial narrative, and reinforce the oscillation between presence and absence — between what once was and what remains.

"A Certain Collector, B" is more than a photographic exhibition; it is an experiential meditation on the act of seeing, collecting, and remembering. It challenges the hierarchy of materials, positioning the discarded as worthy of aesthetic contemplation and historical inscription. Bandai's work, through its hybrid form and its engagement with the languages of sculpture and photography, invites the viewer to reflect not only on the ephemeral nature of objects but also on the enduring power of the image to hold memory and meaning.

In this sense, the exhibition becomes a contemporary cabinet of curiosities — a visual and conceptual archive that unites craftsmanship, design, and the poetic reuse of materials. Through the lens of a scanner and the clarity of a plexiglass case, the viewer enters a space where refuse becomes relic, and where the beauty of decay is reframed as a celebration of the fragile rhythms of life.

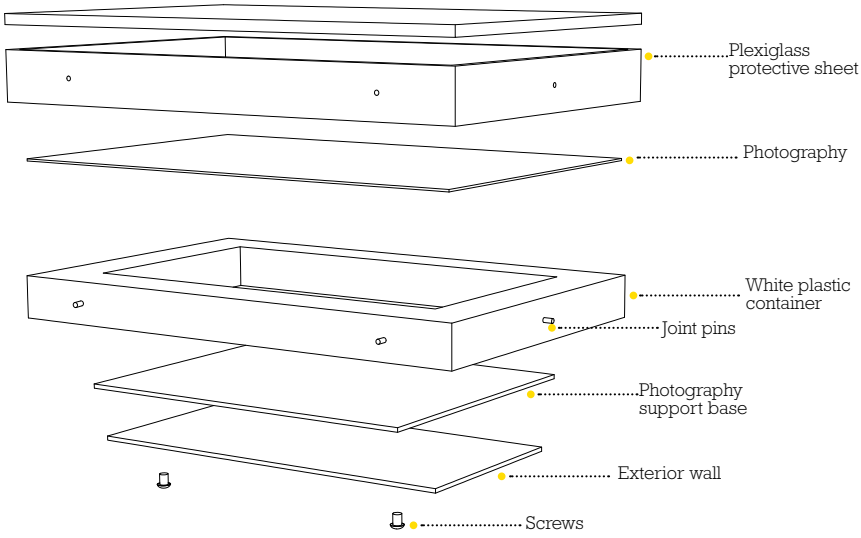


Fig. 102. Construction detail - Supporting structure of the photo display | Axonometric exploded view.

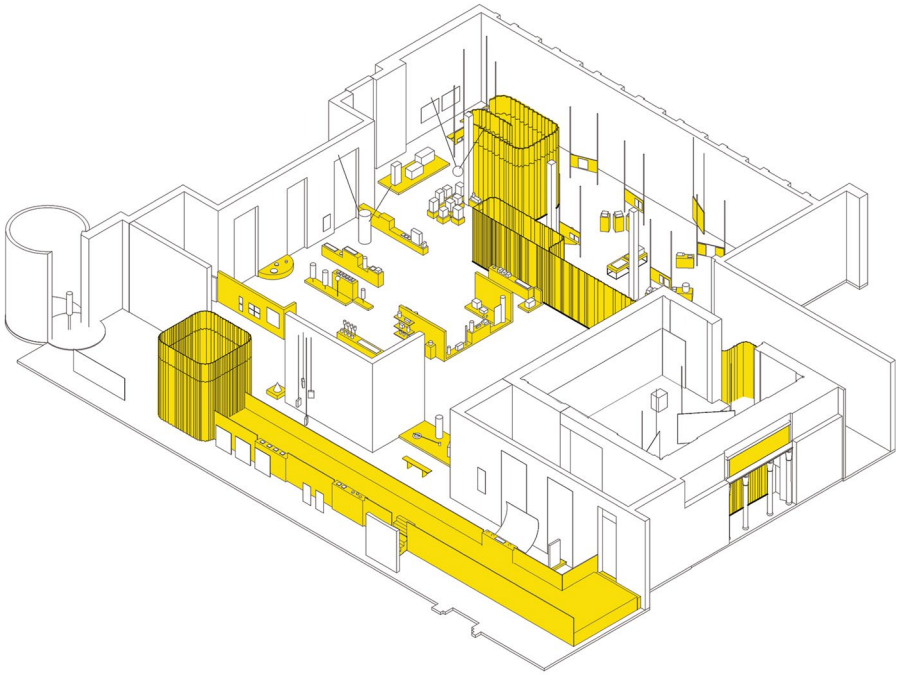
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/a-collector-b-librizzi-xNgqPH

sheet 31

Broken Nature: Design Takes on Human Survival
XXII Triennale di Milano, Milan



Matilde Cassani, Studio Folder
2019

Reconstructing humanity's relationship with nature

The exhibition "Broken Nature: Design Takes on Human Survival", inaugurated during the 22nd Triennale di Milano in 2019, stands as a milestone in the discourse on design and sustainability. Curated by Paola Antonelli, head of the Architecture and Design Department at the Museum of Modern Art in New York (MoMA), and designed by Matilde Cassani in collaboration with Studio Folder, the exhibition presents a thought-provoking narrative that repositions design on a critical (as well as project-based) level as a strategic tool in the face of environmental, social, and cultural fractures.

Focusing on the concept of "restorative design," Broken Nature explores how design can play an active role in rebuilding damaged ecosystems and social fabrics. The exhibition draws attention to the current Anthropocene era—a geological age shaped by human impact—and challenges designers to move beyond anthropocentric perspectives. Through this lens, design is no longer simply a discipline focused on utility or aesthetics, but a mediating force that promotes harmony between humans, other species, and the planet.

The exhibition is structured as a series of interconnected environments that fuse form and content with extraordinary clarity. Organized around contributions from renowned international studios—including Formafantasma, Neri Oxman, and Sigil Collective—the exhibition spans a wide range of themes, from architecture to material experimentation, from bio-design to speculative futures. These contributions share a common goal: to question the design status quo and propose new paradigms rooted in care, empathy, and interdependence.

Technically, the exhibition setup embraces a language of lightness and modularity. Studio Folder and Matilde Cassani opted for a system of reusable and adaptable structures composed of raw, untreated materials that reflect the ecological message of the exhibition. These components are not only efficient and easy to dismantle but also respect the historic architecture of the Triennale, avoiding impositions or distortions. Instead of hiding the infrastructural logic, the designers

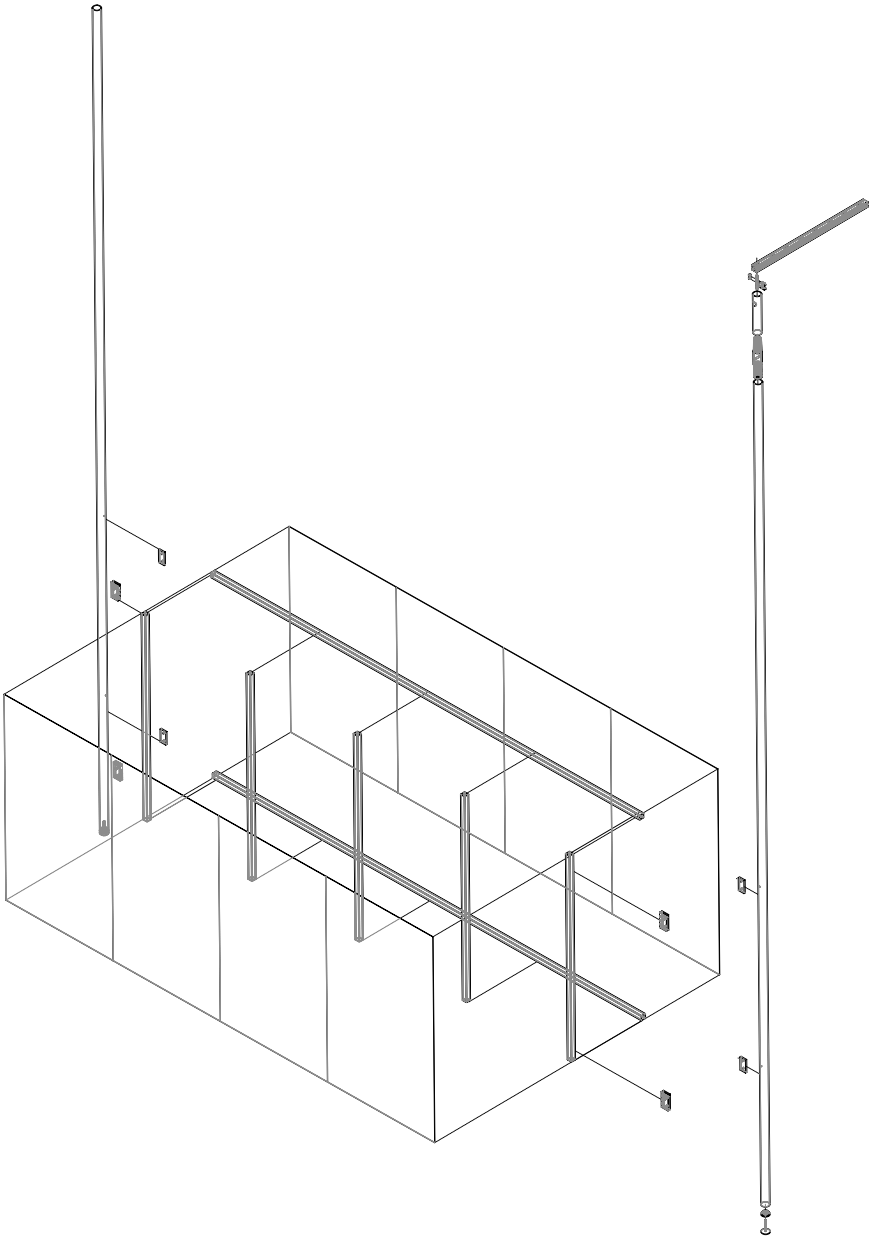


Fig. 103. Construction detail - Modular structure of the exhibition| Axonometric view.

exposed it, using it as a narrative device that enhances the themes of the exhibition. The particular care in designing the exhibition layout allowed for the management of a dense and conceptually rich body of content without creating visual confusion. This was achieved through the strategic placement of partitions and through diachronic groupings of works, supported by an intuitive graphic system created by Anna Kulachek. The exhibition avoids the temptation of spectacle for its own sake, instead fostering deep reflection among visitors. The result is an immersive yet serene experience that underscores the value of design as a tool for care, repair, and prevention.

Among the most interesting technical and spatial design choices is the modular display system developed for the central pathway of the exhibition. Composed of simple repeatable frames in wood and metal, this system allowed for flexible configurations based on the scale and nature of each object. The joints—designed to facilitate assembly—enabled quick and efficient installation while reducing the environmental impact associated with transport and waste generation.

The scenographic philosophy of the exhibition was reinforced through calibrated lighting, which created contrast between full and empty spaces. Finally, the choice of materials—such as raw plywood or recycled textiles—further enhanced the sensory experience while reducing the installation's carbon footprint. These choices are not purely technical, but deeply political, as they propose a more ethical and sensitive approach to exhibition design and realization. This is an approach consistent with the principles of the circular economy, emphasizing durability, adaptability, and reuse over disposal.

In summary, Broken Nature successfully proposes a new framework for curatorial and exhibition practices, combining scientific insight, aesthetic achievement, and social commitment. It is a tangible demonstration of how design, when conceived as a collective and long-term process, can catalyze and guide the transformation of our cultural and ecological systems.

Indeed, Broken Nature does not merely provide an alarmist vision or document the damage done—it offers a constructive perspective, inviting designers, institutions, and citizens to embrace responsibility, awareness, and imagination in shaping the future.

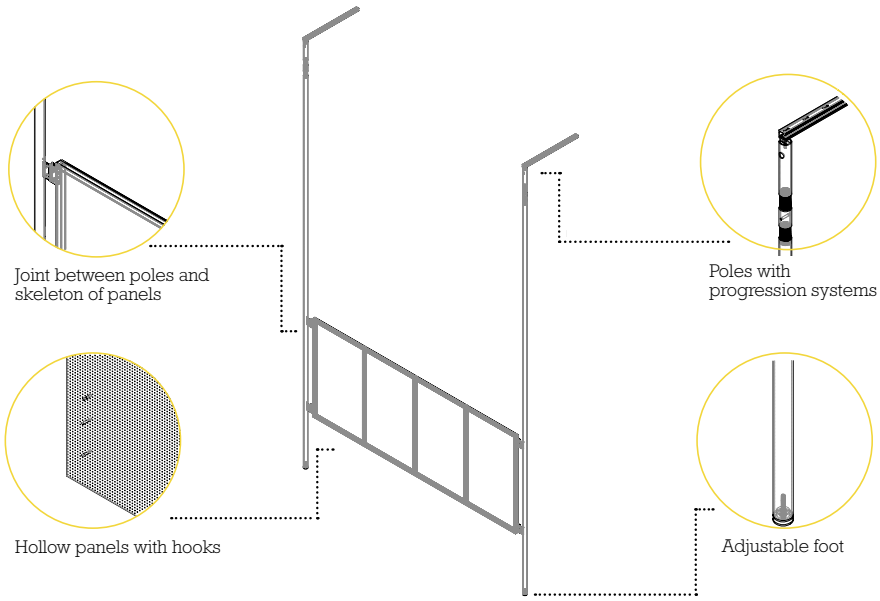


Fig. 104. Construction detail - Main components of the supporting structure | Axonometric views.

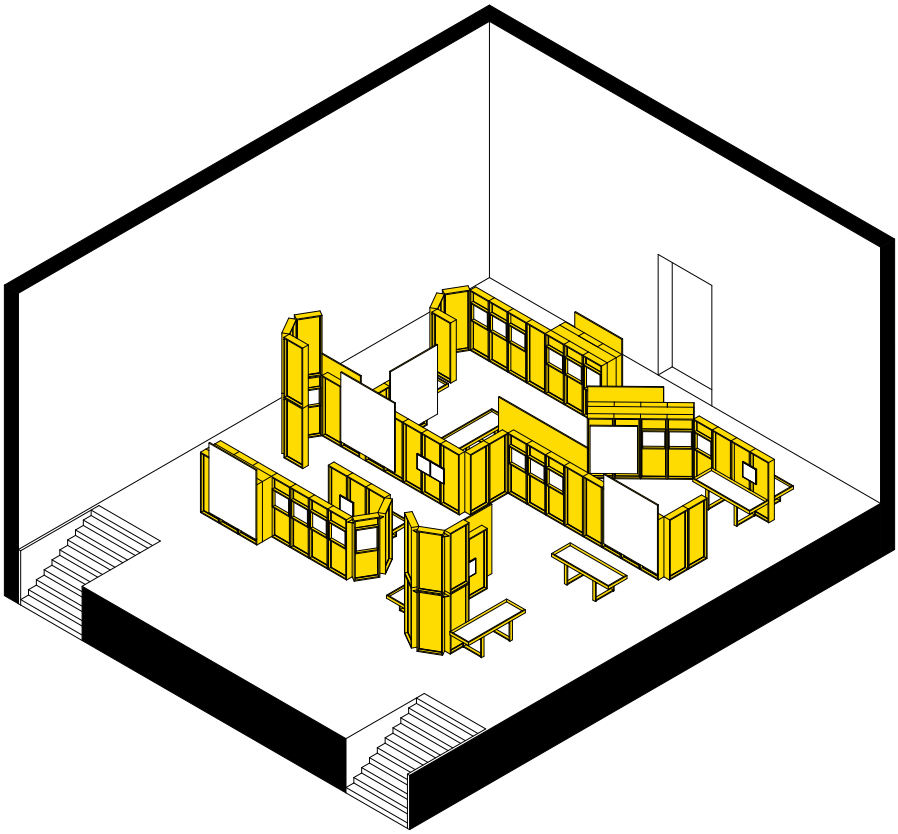
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/broken-nature-cassani-5PkAIo

sheet 37

The Disquieted Muses
Central Pavilion, Venice Biennale, Venice



Formafantasma
2020

Sustainability between memory and experiment

On the occasion of the 16th International Architecture Exhibition of the Venice Biennale, the Emilio and Annabianca Vedova Foundation hosted "The Disquieted Muses. The Venice Biennale Faces History", an exhibition commemorating the 125th anniversary of the institution by retracing its complex entanglement with history. Curated collectively by the six artistic directors of the Venice Biennale and coordinated by Cecilia Alemani, the exhibition adopts a thematic and chronological approach, exploring six crucial periods—from the Fascist era to the Cold War, to the rise of postmodernism and globalization—each interpreted through a different artistic discipline.

Hosted in the Central Pavilion of the Giardini, the exhibition unfolds across six galleries, each corresponding to a specific historical era and curatorial voice. Among these, Gallery 2 stands out as a focal point of the exhibition, covering the years from 1928 to 1964. It is divided into two main segments: "The Biennale during Fascism" and "The Cold War and the New World Orders", offering a rich documentary and visual narrative that examines the ideological shifts and institutional transformations that shaped the identity of the Biennale and the broader cultural landscape of the 20th century.

The exhibition design was conceived by the studio Formafantasma, which developed a spatial and material strategy that privileges modularity, sustainability, and legibility. The entire exhibition system is based on lightweight plywood modules—frames, tables, and supports—assembled using brass connectors. The intention is to create a flexible and dismountable system that can be reused for future archival exhibitions. By employing unpainted plywood in its raw form, Formafantasma introduces an aesthetic of material honesty and a declared construction logic, reinforcing the documentary nature of the display.

Large black-and-white photographic prints are mounted directly onto plywood panels, transforming historical documents into elements that dialogue at architectural scale, with monumental presence. These prints guide the visitor along

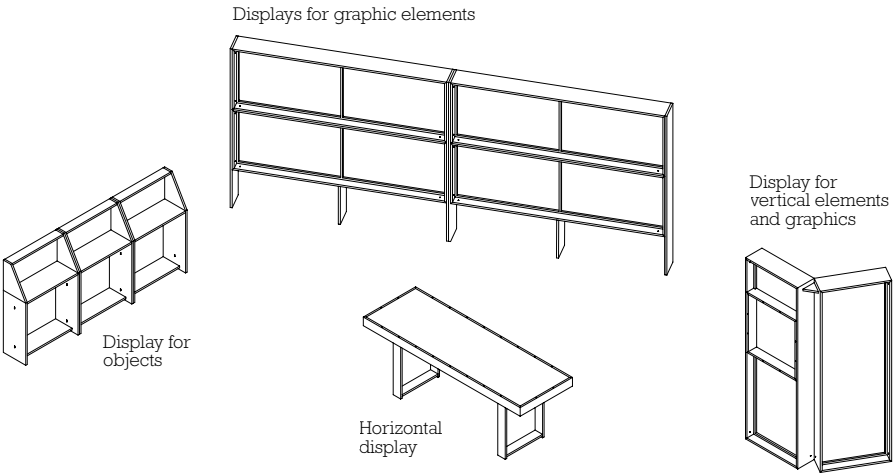


Fig. 105. Construction detail - Main displays of the exhibit | Axonometric views.

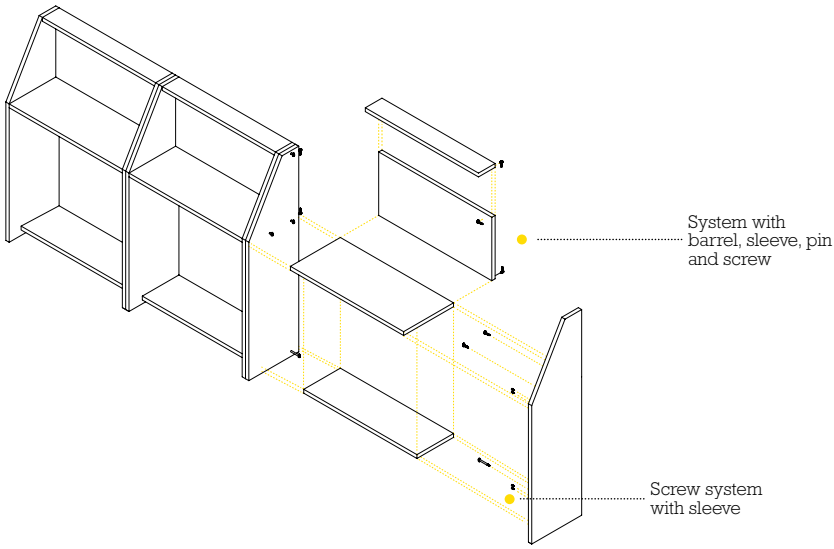


Fig. 106. Construction detail - Modular components of one of the displays | Axonometric view.

a temporal and spatial line, inviting them to experience history not as a passive narrative, but as a tangible and vivid encounter. The combination of raw wood, soft-toned fabrics, and diffused lighting creates a contemplative atmosphere in which the public is encouraged to pause, reflect, and engage more deeply with the exhibited materials.

Despite the limited material palette, the installation succeeds in offering a layered and immersive experience: the plywood elements are not simple neutral supports for content, but are integrated into the visual language of the exhibition. Their modularity allows for compositional variation and spatial rhythm, while their untreated surfaces evoke a sense of construction-in-process that mirrors the very notion of history as something living through assemblages, reinterpretations, and reconsiderations.

What emerges from "The Disquieted Muses" is not only a compelling narrative, but also a model of curatorial and spatial collaboration in which the exhibition artifact becomes a critical medium in itself: the scenography of the exhibition invites reflection on museum politics, the role of institutions, and the ways in which design can mediate complex historical content without resorting to spectacle.

From a technical standpoint, the modularity of the system represents both a strength and a challenge. Although the use of repeatable and reconfigurable units significantly reduces waste and supports long-term sustainability goals, this choice also introduces potential fragilities—particularly in the joints and connections, which may require frequent maintenance with repeated use. Similarly, the brass connectors, while elegant and functional, require careful calibration to maintain structural integrity over time. Despite these issues, the commitment to reuse aligns the realization of the exhibition with contemporary concerns regarding environmental impact and responsible design.

In this context, Formafantasma's design emerges as an exemplary approach that integrates aesthetics, functionality, and sustainability: by using ordinary materials in standard configurations and allowing them to "speak" through their intrinsic qualities, the studio affirms the value of restraint and adaptability. This strategy not only respects the archival nature of the displayed content, but also provides a model for future exhibitions that must balance narrative clarity with environmental responsibility.

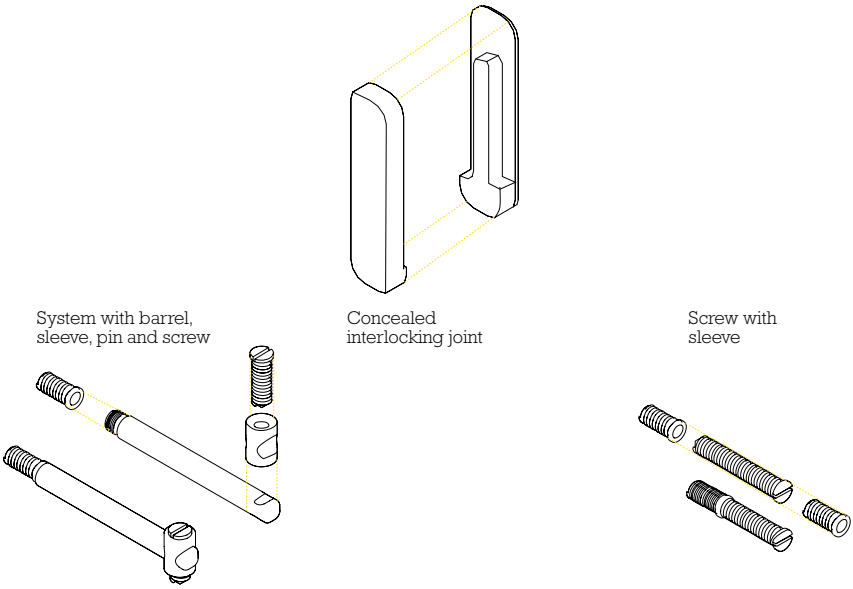


Fig. 107. Construction detail - Joining elements of the displays | Axonometric views.

QR code for 3D model

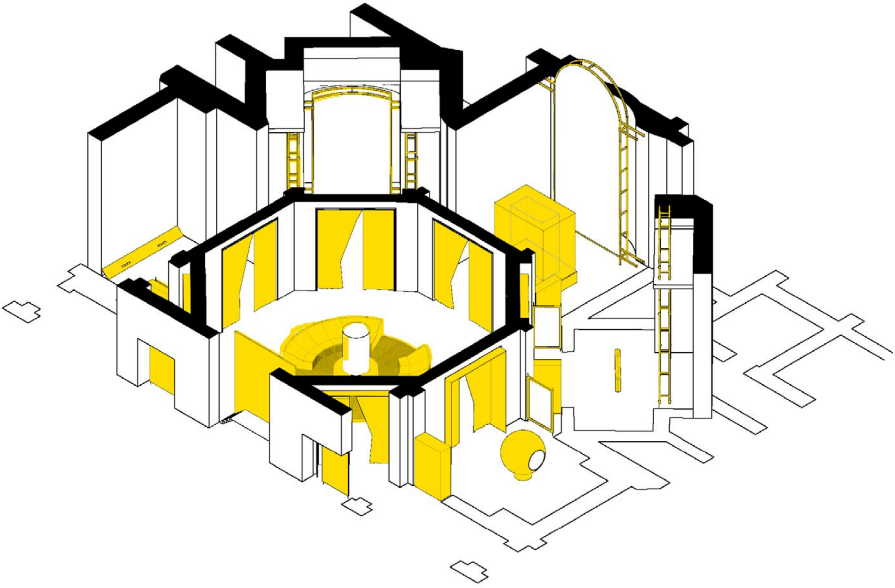
Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/le-muse-inquiete-formafanta-sma-AY5Kmc

sheet 33

Raphael and the Domus Aurea

Domus Aurea, Rome



DotDotDot
2021

Immersive design in the space

In 2020, to commemorate the 500th anniversary of the death of Raffaello Sanzio, the Parco Archeologico del Colosseo hosted an immersive exhibition that explored the rediscovery of ancient Roman painting within the subterranean ruins of the Domus Aurea. Curated by Vincenzo Farinella and Alfonsina Russo, and designed by the multidisciplinary studio Dotdotdot, the exhibition offered a multisensory journey into the origins, transformations, and lasting influence of grotesque decoration on Renaissance and modern art.

Central to the scenographic concept was the Octagonal Hall, a monumental space where ancient statuary and cutting-edge projection technology coexisted in a harmonious visual and conceptual dialogue. The focal point of this hall was the Farnese Atlas, a towering marble sculpture from the 2nd century CE, whose mythological significance as bearer of the celestial sphere provided a natural anchor for the surrounding astrophysical imagery.

Above the statue, a dynamic 360-degree video projection animated the domed ceiling with rotating celestial maps, echoing Renaissance interest in astrology and symbolic cosmology. The immersive atmosphere was enhanced by ambient soundscapes and a custom-designed circular seating platform at the center of the hall, inviting visitors to recline or sit in contemplative observation.

Technically, this seating element exemplified the exhibition's synthesis of craft, structure, and sensory design. Developed with the collaboration of specialized artisans, the circular bench was constructed from a lightweight but durable frame incorporating custom-fabricated metallic joints, support beams, and stainless-steel mounting fixtures. Particular attention was given to the detailing of the joints, many of which were manufactured using standard building components—such as rivets and mesh clip brackets—adapted for bespoke use. These elements ensured not only mechanical stability but also visual coherence with the aesthetic minimalism of the wider exhibition.

This juxtaposition of refined technological execution and raw materiality

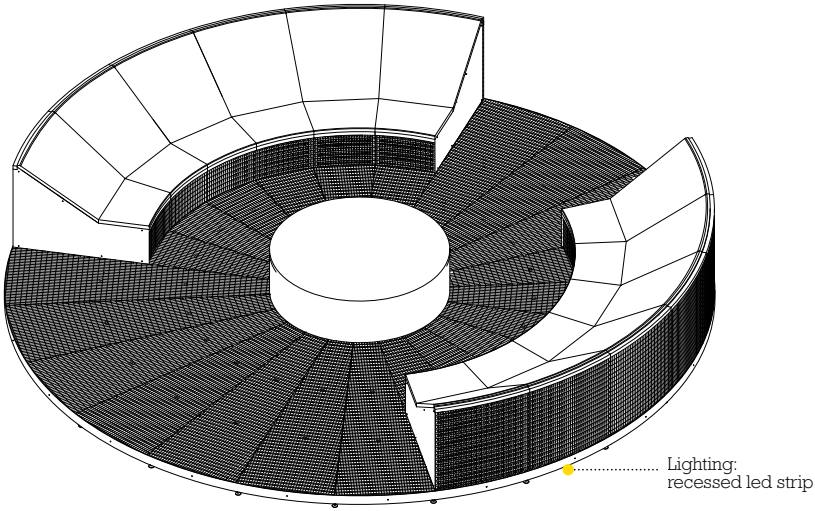


Fig. 108. Constructive detail - Seating of the central core of the arrangement | Axonometric view.

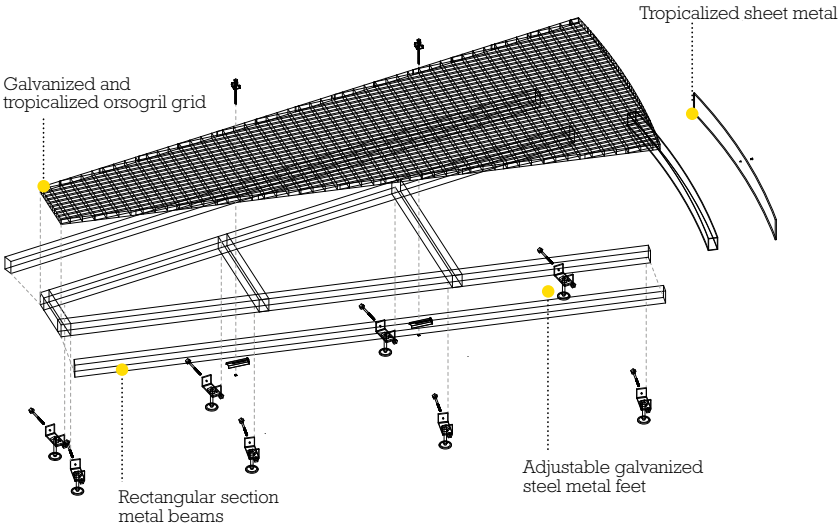


Fig. 109. Construction detail - Construction components of the seating | Axonometric Exploded view.

reflected the central curatorial themes: transformation, translation, and the enduring relevance of antiquity. The exposed nature of the fixtures and mounting devices paid homage to the unfinished character of the grotesques discovered in the Domus Aurea, aligning with the fragmented quality of Rodin or Klee's later reinterpretations.

Moreover, the adaptability of the structure highlighted a key feature of Dotdotdot's design ethos: modularity and reuse. The platform was fabricated in prefabricated segments to allow for rapid assembly and future relocation, in keeping with sustainability principles. Despite the complexity of the technical system, the final result presented a seamless aesthetic experience that complemented the thematic content without overwhelming it.

Ultimately, the Octagonal Hall's transformation into a meditative planetary theatre spoke not only to Raffaello's journey into the Domus Aurea but also to our contemporary efforts to reanimate and reinterpret historical knowledge through spatial and technological innovation.

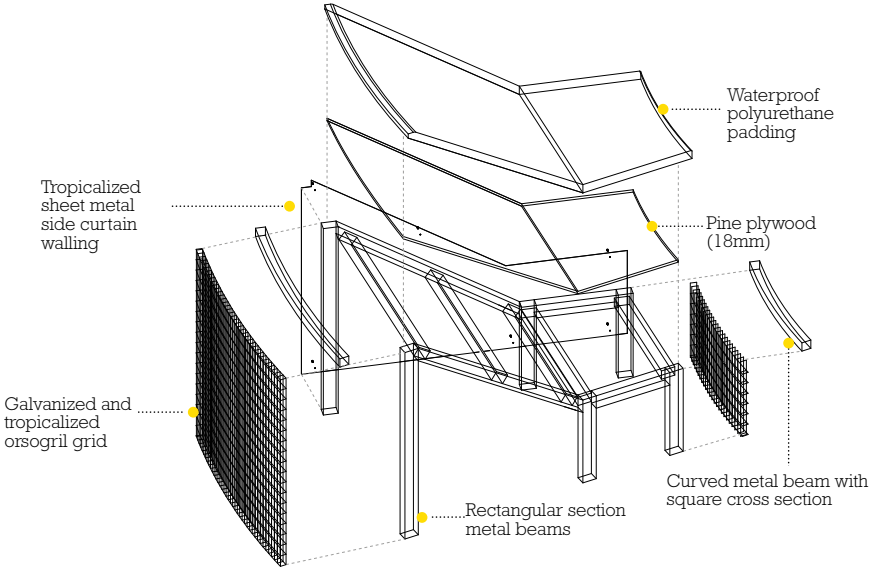


Fig. 110. Construction detail - Seating of the central core of the exhibit | Axonometric Exploded view.

QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/raffaello-e-la-domus-aurea-dotdot-dot-uMcfDW

Immersive journey through projections and interaction

The multisensory exhibition curated by Vincenzo Farinella and Alfonsina Russo at the Domus Aurea offered a layered exploration of the grotesque tradition and its influence from the Renaissance to the modern day. Designed by Dotdotdot, the exhibition was especially notable for the precision and intent behind its spatial devices. While the overall scenography moved seamlessly between historical evocation and digital reconstruction, two elements stood out in their ability to enhance both interpretation and visitor engagement: the display case for the Laocoon group and the digital projection panel for grotesque frescoes.

The Laocoon display case was engineered as both a protective housing and a theatrical framing device. Designed to accommodate strict conservation requirements, the teca incorporated high-performance glass with anti-reflective and UV-filtering properties, alongside a built-in climate control mechanism. The lighting strategy was equally critical: a system of adjustable LED luminaires allowed for nuanced modulation of brightness and temperature to enhance the sculpture's dramatic relief while preventing photodegradation.

Beneath its technical sophistication, the case structure utilized a system of concealed joints, clamps, and anchoring nodes manufactured in stainless steel and aluminum. These allowed for a stable and secure structure without interrupting the viewer's visual field. Aesthetic minimalism guided the formal resolution of the case: its geometry was reduced to its essential lines, echoing the ancient themes of control and chaos embodied by the sculpture itself.

Parallel to this, the projection panel played a foundational role in translating historical frescoes into immersive, animated narratives. Using high-lumen projectors and seamless edge-blending software, Dotdotdot recreated segments of grotesque frescoes from the Domus Aurea onto large translucent panels. These digital reconstructions functioned not only as educational tools but as interpretive canvases that allowed visitors to perceive the dialogue between past and present artistic languages.

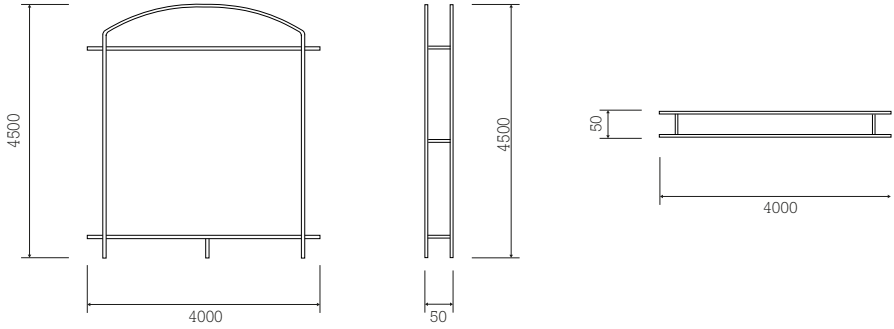


Fig. 111. Construction detail - Interactive panel | Dimensioned views.

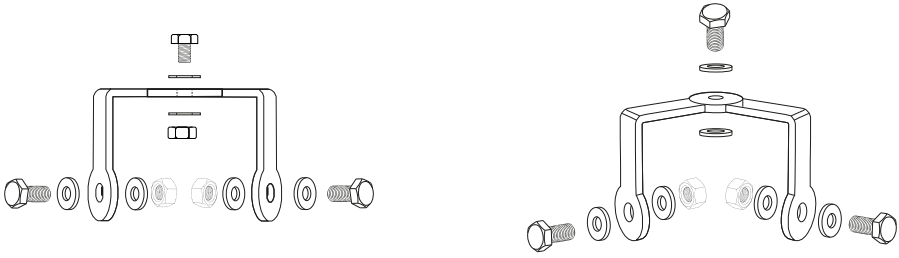


Fig. 112. Construction detail - Structural joint | Axonometric exploded views.

Structurally, the projection panels were composed of lightweight aluminum frames stretched with projection mesh treated with an optical coating for contrast enhancement. Integrated cabling and cooling systems were discretely housed within the panel's substructure, ensuring continuity in function and form. The choice to employ mobile, self-supporting frames also allowed the projections to be reoriented or relocated within the exhibition sequence depending on thematic emphasis.

Both the display case and the panel reflected a design philosophy grounded in flexibility, precision, and narrative clarity. Together, they demonstrated how technical detailing can support and enhance curatorial intent, transforming a traditional exhibition space into an active participant in meaning-making.

Through these crafted interventions, the exhibition not only illuminated the visual language of the grotesque but embodied its spirit: dynamic, hybrid, and intricately composed. The historical becomes legible again—not through nostalgia, but through technical sophistication and design as storytelling.

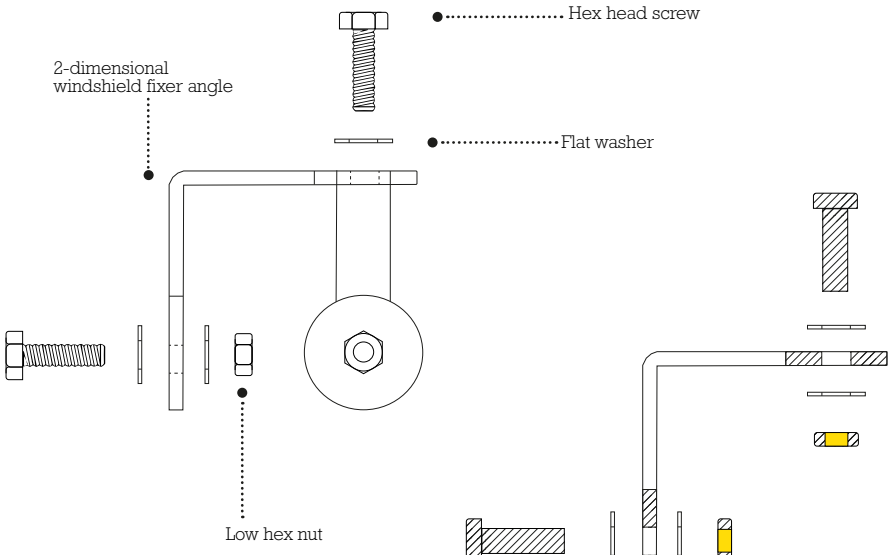


Fig. 113. Construction detail - Main joint components | Side elevation and section.

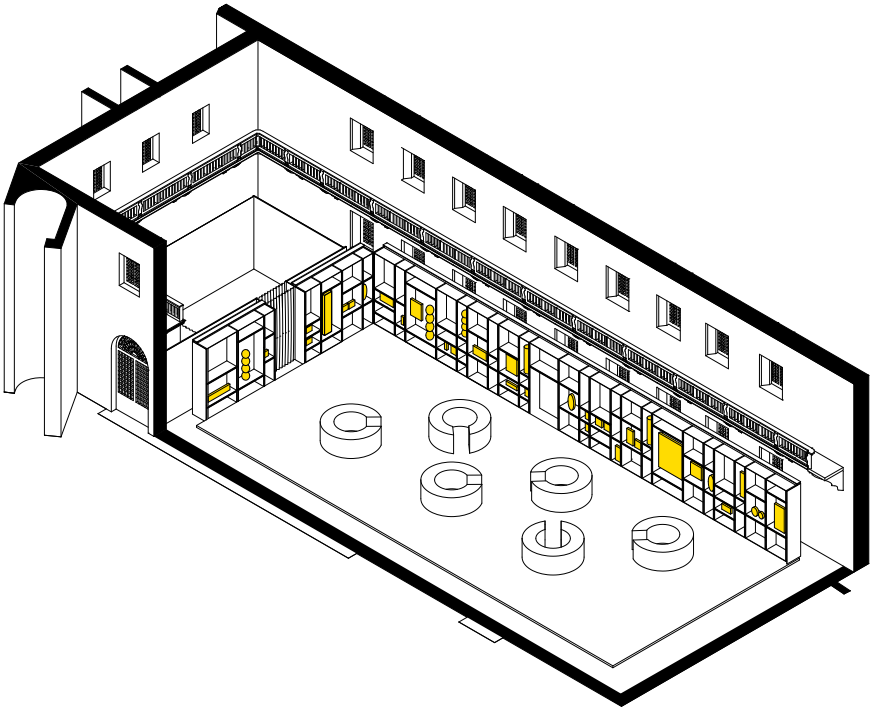
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/raffaello-e-la-domus-aurea-dotdot-dot-uMcfDW

sheet 34

Next of Europe – Homo Faber
San Giorgio Maggiore Island, Venice



Stefano Boeri, Jean Blanchaert
2022

Modular structures for a contemporary cabinet

The exhibition "Next of Europe," held within the Homo Faber 2022 framework, represents a powerful synthesis of European craftsmanship, curated and designed by Stefano Boeri and Jean Blanchaert. Aimed at celebrating artisanal excellence through an accessible, contemporary language, the installation translates the complexity of Europe's diverse material cultures into a spatial narrative that is both orderly and immersive.

Central to the exhibition is a large-scale cabinet de curiosités constructed around a rhythmic and repetitive shelving system. The walls are lined entirely with standardized modules—square and rectangular units—that house over 150 unique artworks from across Europe. Each piece occupies a dedicated niche, framed and elevated within the matrix, allowing a clear, unencumbered view and avoiding the visual overload often seen in crowded installations. This clear segmentation guides the visitor through a cohesive and intuitive spatial journey.

The technical structure of the display system takes inspiration from modular furniture design. Each shelving unit is built from lightweight panels made of recycled wood particles and a honeycomb core, a material choice that ensures strength while reducing weight and environmental impact. The pieces are joined using wooden pegs and concealed locking screws, resulting in a seamless finish that enhances the visual clarity of the entire installation. Subtle spacers between the horizontal shelves maintain even spacing and load distribution, contributing to the structure's durability and visual harmony.

The modularity of the system not only facilitates transportation and reassembly but also underlines the project's commitment to sustainability. Soft lighting and light-colored finishes further accentuate the refined minimalism of the space, allowing the craftsmanship of the exhibited pieces to take center stage. The result is an elegant yet functional system that respects the artisanal narrative it is meant to support.

In addition to static display elements, the exhibition includes live artisan demon-

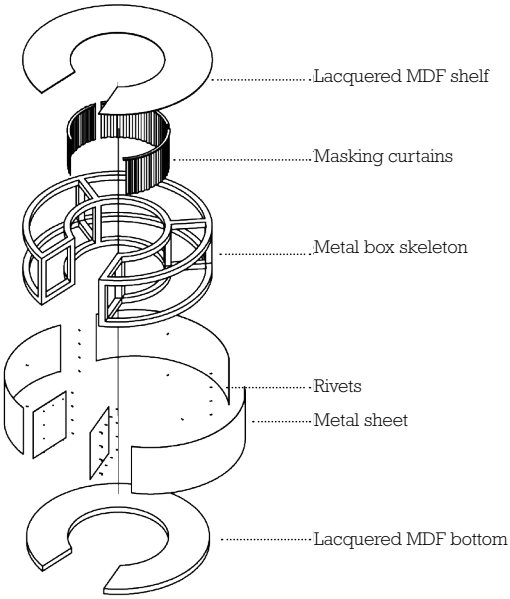


Fig. 114. Construction detail - Seating arrangement element | Axonometric exploded view.

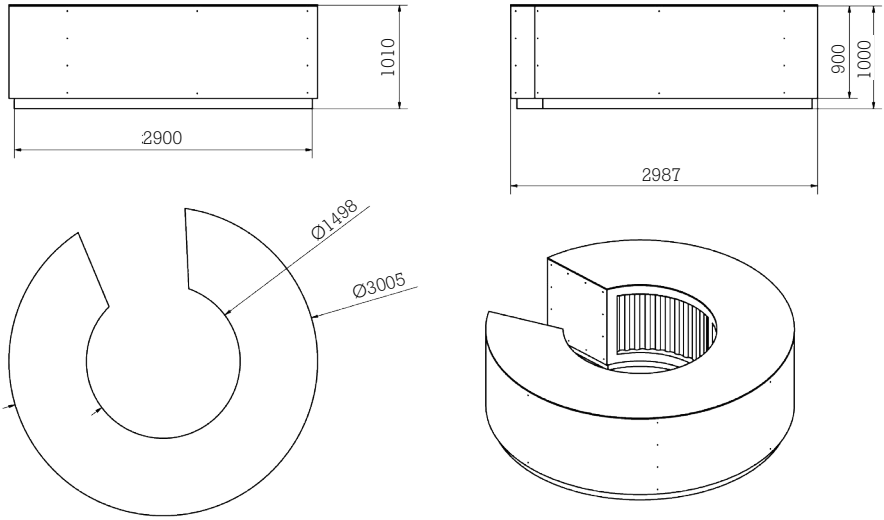


Fig. 115. Construction detail - Seating arrangement element | Axonometric view and dimensioned projections.

strations. Circular counters topped with mirrored discs allow visitors to observe intricate manual techniques from multiple angles, enhancing both accessibility and engagement. This spatial device blurs the line between viewer and maker, offering an educational component that is immediate and tangible.

Overall, "Next of Europe" redefines the act of exhibiting craft in the 21st century. It succeeds in building a bridge between tradition and innovation, anchoring a pan-European vision of craftsmanship within a modular, sustainable, and human-centered spatial framework.

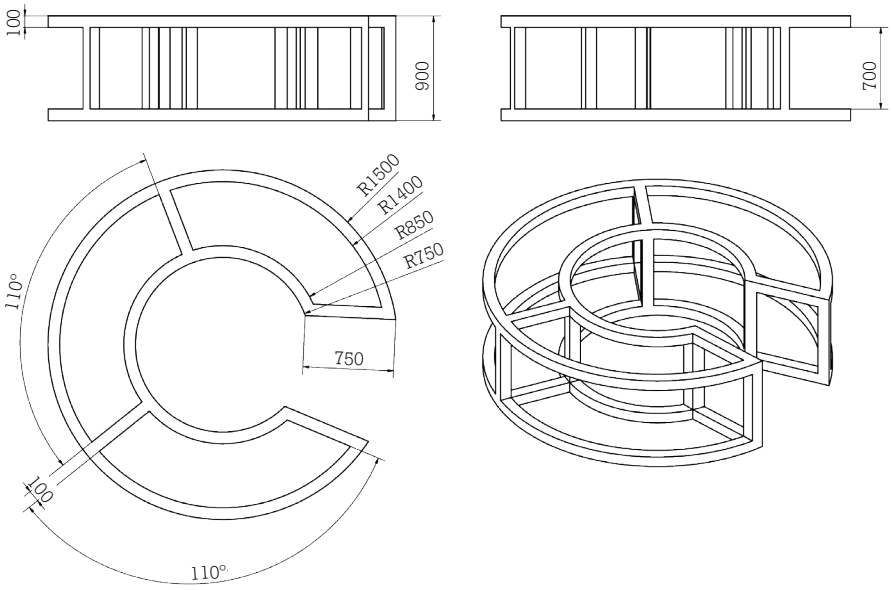


Fig. 116. Construction detail - Structural components of the seating| Axonometric view and dimensioned projections.

QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/homo-faber-boeri-WzMF0c

Live craftsmanship, interactive rituals

"Next of Europe" is not merely an exhibition of objects; it is a dynamic celebration of European craftsmanship as a "living process." The installation, structured across two interconnected rooms, takes the form of a modern cabinet of curiosities. While the modular shelving structures provide a clear organizational framework for the exhibition path and reference a traditional imaginary, the show innovatively integrates interactive and performative elements into its spatial language.

One of the most distinctive features of the exhibition is the presence of live craft demonstrations, which transform the experience from passive observation into a dynamic exchange. Positioned around circular counters with mirrored disks, artisans perform manual work live, offering visitors a rare and close-up perspective on the tools, gestures, and rhythms of their trade. These interactive islands are not only spatial anchors but also pedagogical platforms that embody the principle of knowledge transmission through direct experience.

The mirrors, mounted horizontally above the demonstration tables, serve both practical and symbolic functions. Practically, they allow the audience to see the work from above, capturing subtle actions that would otherwise be hidden. Symbolically, they reflect the exhibition's central message: craftsmanship is both a personal and collective act, connecting past and present through shared practices.

The installation's design supports this engagement by carefully calibrating proximity and visibility on the "theatrical field." The circular arrangement invites the public to move around the artisan, fostering a sense of dynamism and accessibility. These design choices render the creative process legible, transforming what is usually hidden in workshops into an open and participatory ritual.

From a technical standpoint, these stations are built according to the same sustainable principles as the shelving system: lightweight wooden components and modular framing ensure that the demonstration units can be dismantled and reused in future exhibitions. This modularity supports the broader ethic of Homo Fa-

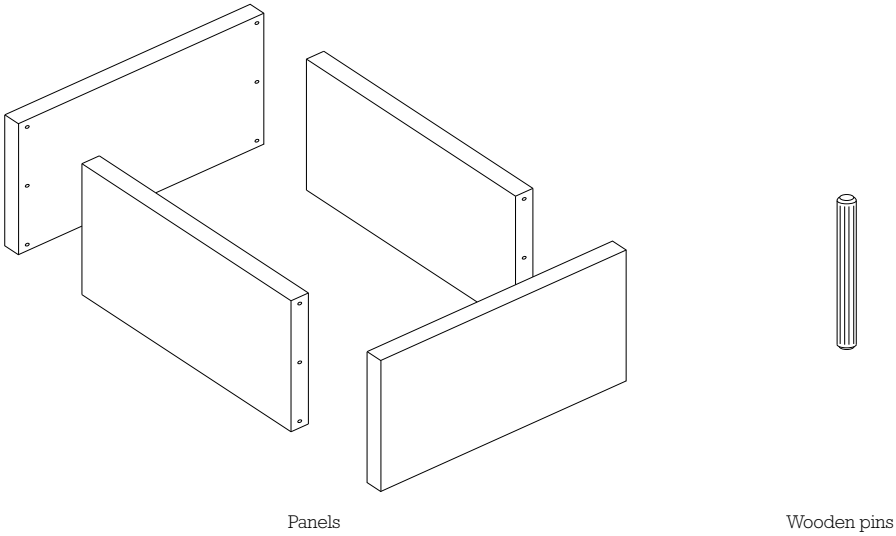


Fig. 117. Construction detail - Shelving components | Axonometric exploded view.

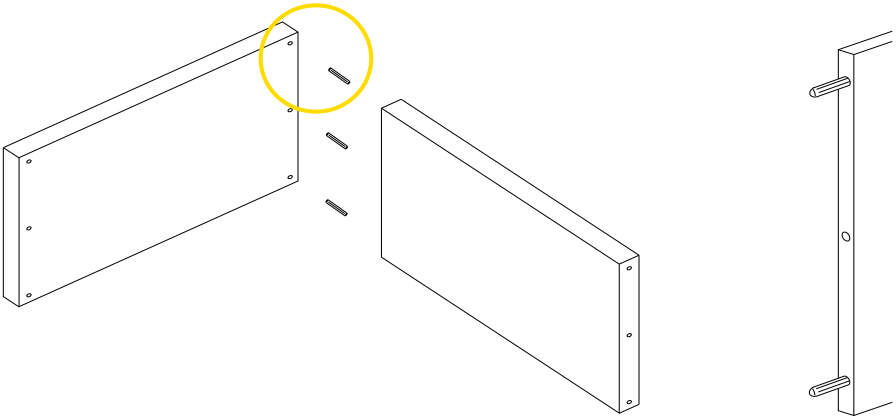


Fig. 118. Construction detail - Joints of the shelving | Axonometric views.

ber, aimed at promoting a more humane and environmentally conscious future. By combining exhibition and action, the show promotes not only the appreciation of finished objects, but also the value of making itself: the environment becomes a pedagogical arena in which spectators become witnesses and agents of the continuity of cultural heritage.

In conclusion, this second exhibition component of "Next of Europe" underscores the importance of direct understanding, interaction, and rituality in presenting craftsmanship as a creative, design-driven, poetic, and technical act.

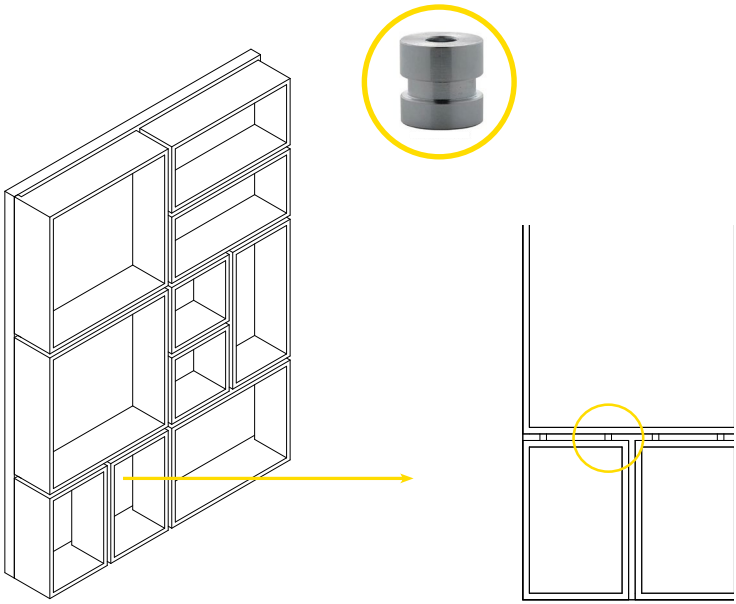


Fig. 119. Construction detail - The display shelving| Axonometric view and joint detail.

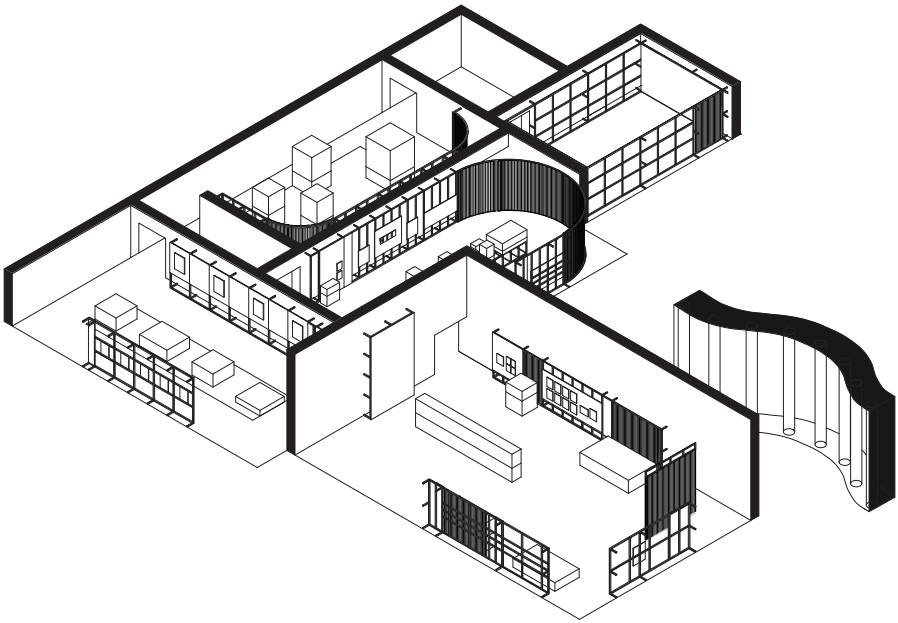
QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/homo-faber-boeri-WzMF0c

sheet 35

Rodin and Dance
MUDEC – Museo delle Culture, Milan



DotDotDot
2023

Lightness as a narrative language

The exhibition Rodin e la Danza, curated by Dotdotdot, offers a sophisticated interpretation of Auguste Rodin's exploration of movement, fragmentation, and transformation. Conceived as both an immersive experience and a scenographic environment, the display transforms the museum's interior into a theatrical space in which sculpture, sound, light, and architecture merge in a multisensory dialogue. Centered around Rodin's series Mouvements de danse—fifteen terracotta statuettes that capture suspended gestures and the dynamic tensions of the human body—the exhibition becomes a spatial and emotional extension of the artist's creative language.

Inspired by Rodin's fascination with incompleteness and his use of partial forms to evoke vitality and fluidity, the exhibition design avoids conventional solutions. Instead, it proposes a scenography that recalls the expressive power of dance through the use of translucent textiles, scenic backdrops, and light modulations that oscillate between the dramatic and the neutral. These elements, influenced by figures such as Loïe Fuller and Isadora Duncan—dancers who deeply inspired Rodin—contribute to the sensation of being inside a suspended moment, a place where time is stilled but energy continues to resonate.

One of the most distinctive aspects of the design lies in its treatment of structural elements, particularly the use of galvanized steel profiles typically employed in drywall construction. Rather than concealing these materials, the designers have chosen to expose and elevate them to the level of aesthetic components, allowing technical infrastructure to become part of the visual and conceptual narrative. This deliberate gesture transforms functional components into visible, expressive elements, echoing Rodin's own elevation of the raw and the unfinished into artistic language.

The vertical and horizontal tracks—standard profiles used to frame plasterboard walls—are recontextualized here as elegant carriers of meaning. Folded, cut, and joined with surgical precision, these components form a skeletal framework that

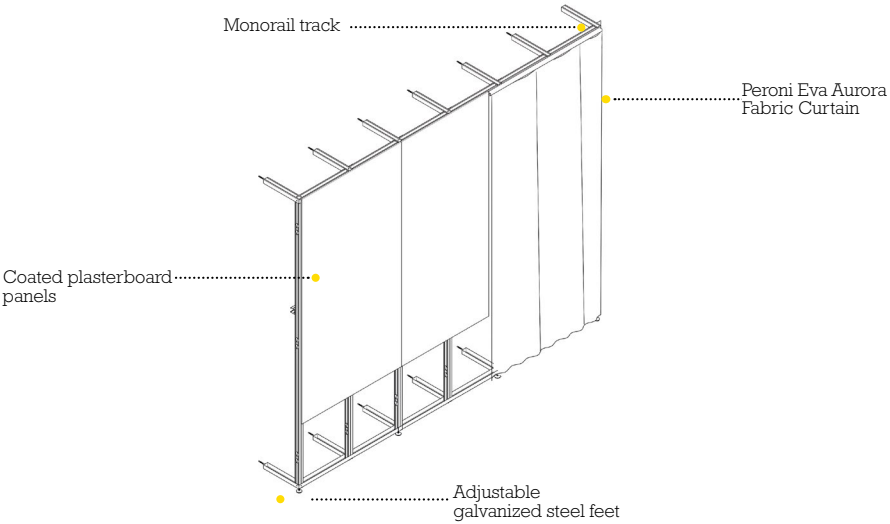


Fig. 120. Construction detail - Structure of the display wall | Axonometric view.

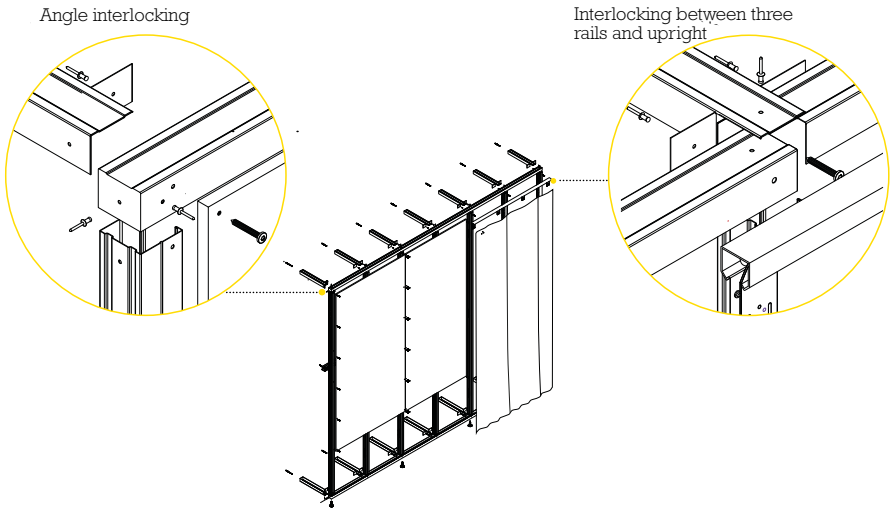


Fig. 121. Construction detail - Joints of the display wall | Axonometric exploded views.

supports not only the artworks but also the scenographic layers of the exhibition. The joints are carefully designed with mirrored 90° cuts, riveted connections, and clearly legible intersections that reveal the constructive logic behind the composition.

The galvanized steel elements, untreated and deliberately exposed, reflect the light in subtle ways, enhancing the perception of materiality and resonating with the surface texture of Rodin's terracotta figures. This material honesty reinforces the conceptual alignment between the exhibition design and the artist's process—a process where the incomplete becomes expressive, and the void becomes part of the form.

The interplay between structural rigor and poetic intent continues throughout the exhibition path. Lightweight steel frames define zones within the open space, guiding visitors through a rhythm of compression and release. The spatial layout evokes the idea of choreography: an invisible score that leads the body of the visitor alongside those of the sculptures. The result is a seamless integration of content and container—an architecture of movement that mirrors the suspended vitality of Rodin's dancers.

In the final section of the exhibition, an interactive installation with a digital projector invites visitors to become part of the scenography, animating their own gestures in response to Rodin's work. This extension into participatory design not only amplifies the immersive quality of the show but also situates the viewer within the continuum of the artistic gesture—bridging the gap between observation and expression.

Through this careful orchestration of structure and atmosphere, Rodin and the Dance becomes more than a display of artworks. It is a meditation on form, balance, and impermanence. The use of common materials in unexpected ways, the attention to detail in every joint and connection, and the sensitivity to light and sound all contribute to a project where design is not a neutral backdrop but an active voice in the storytelling. By transforming utilitarian construction systems into poetic devices, Dotdotdot has crafted an exhibition that honors both the fragility and the power of Rodin's vision.

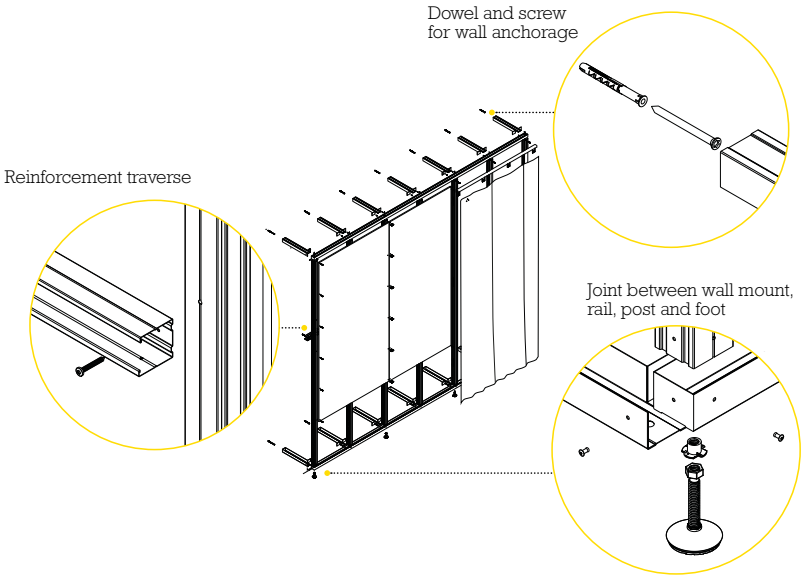


Fig. 122. Construction detail - Joints of the display wall | Axonometric exploded views.

QR code for 3D model

Link for 3D model

https://formazione.nonsibuttavianiente.it/dxfs/rodin-e-la-danza-dotdotdot-dwsD8s

References

SHEET 1

Albini, F. (1941). Scipione: Il bianco e il nero [Exhibition installation]. Pinacoteca di Brera, Milan.

Bassi, A. (2010). Franco Albini: Architettura, la costruzione dello spazio. Milan: Electa.

Branzi, A. (2011). La casa calda: Esperienze del nuovo design italiano. Milan: Mondadori Electa.

Christov-Bakargiev, C. (2012). Documenta 13. Ostfildern: Hatje Cantz.

Fiore, A. (2020). Allestire il moderno: Franco Albini e l'arte dell'esporre. Mantua: Corraini Edizioni.

Teiger Foundation. (n.d.). Climate Action for Curators. https://www.teigerfoundation.org/

Gallery Climate Coalition. (2019). Carbon Calculator for Exhibitions.

Julie's Bicycle. (2009). Creative Climate Tools. https://juliesbicycle.com/

SHEET 2

Albini, F., & Branzi, A. (1996). Franco Albini: Works 1930–1977. Milan: Skira.

Argan, G. C. (1979). Progetto e destino. Milan: Il Saggiatore.

De Fusco, R. (2007). Storia del design. Rome–Bari: Laterza.

Polano, S. (2002). Franco Albini. Milan: Electa.

Tufano, R. (2010). Museografia italiana. Dal progetto d'allestimento alla valorizzazione dei beni culturali. Naples: CLEAN.

SHEET 3

Albini, F., & Branzi, A. (1996). Franco Albini: Works 1930–1977. Milan: Skira.

De Fusco, R. (2007). Il design italiano: Dall'Art Nouveau a oggi. Rome–Bari: Laterza.

Polano, S. (1992). Architettura italiana del Novecento. Milan: Electa.

Micheli, S. (2004). Franco Albini e Franca Helg: architetture 1952–1977. Milan: Mondadori Electa.

Tufano, R. (2009). L'architettura degli interni in Italia. Naples: Clean Edizioni.

SHEET 4

Antonelli, P. (2008). Design and the Elastic Mind. New York: Museum of Modern Art.

Buccellato, A. (2019). Allestire l'arte. Carlo Scarpa e le esposizioni del dopoguerra. Syracuse: LetteraVentidue.

Castiglioni, A., & Polano, S. (1995). Achille Castiglioni: Complete Works. Milan: Electa.

Fallan, K. (2010). Designing Modern Norway: A History of Design Discourse. Farnham: Ashgate.

Settis, S. (2007). Italia S.p.A.: L'assalto al patrimonio culturale. Turin: Einaudi.

SHEET 5

Barovier, M. (2016). Carlo Scarpa: The Architect at Work. Milan: Skira.

Brugnaro, C. (2010). La mostra come architettura: Carlo Scarpa e l'allestimento museale. Venice: Marsilio.

Bucarelli, P. (1956). Piet Mondrian. Rome: Galleria Nazionale d'Arte Moderna.

De Fusco, R. (1993). Carlo Scarpa: Teoria e disegno. Rome–Bari: Laterza.

Franz, E. (2014). Carlo Scarpa: Architecture and Design. London: Phaidon.

Long, C. (2004). The New Space: Carlo Scarpa and the Museum. Journal of Architecture, 9(2), 173–196.

Longatti, A. (1996). La Galleria Nazionale d'Arte Moderna e l'opera di Palma Bucarelli. Milan: Electa.

Tafel, E. (1984). Exhibition Design as Interpretation: The Work of Carlo Scarpa. Design Issues, 1(1).

Trentin, M. (2014). Exhibition as Device: Scarpa and the Staging of Mondrian. Journal of Exhibition Studies, 5(2), 55–74.

Zannier, I. (1996). Carlo Scarpa fotografo: L'occhio e la mano. Milan: Electa.

SHEET 6

Branzi, A. (2005). Achille Castiglioni. Milan: Electa.

Fiell, C., & Fiell, P. (2001). Design of the 20th Century. Cologne: Taschen.

Friedman, A. (2012). The Castiglioni Brothers: Masters of Italian Design. Milan: Corraini Edizioni.

Iliprandi, G., & Waibl, H. (1956). Graphic Design for the RAI Pavilion. Archivio Aiap, Milan.

Trabucco, F. (2001). Achille Castiglioni: Designer e architetto. Milan: Skira.

SHEET 7

Castiglioni, A., & Castiglioni, P. G. (1959). Sala delle Vernici, Montecatini. XXXVII Fiera Campionaria di Milano. Archivio Achille Castiglioni.

Branzi, A. (2007). Achille Castiglioni. Milan: Electa.

Fiell, C., & Fiell, P. (2003). Design of the 20th Century. Cologne: Taschen.

Huber, M. (1959). Graphic design for Sala delle Vernici. In Arc. Max Huber, Museo del Novecento, Milan.

Trabucco, F. (2001). Achille Castiglioni: Designer e architetto. Milan: Skira.

Savi, A. (2019). Il dettaglio come linguaggio espressivo. L'allestimento temporaneo nel lavoro di Castiglioni. Rivista dell'Architettura Italiana, 25(3), 85–94.

SHEET 8

Albini, F., & Helg, F. (1961). La Montecatini nel sud d'Italia, Fiera Campionaria di Milano. Archivio Albini Helg.

Branzi, A. (1988). La casa calda: Esperienze del nuovo design italiano. Milan: Mondadori.

Ciucci, G., Dal Co, F. & Tafuri, M. (1976). Modern Architecture in Italy. Cambridge, MA: MIT Press.

D'Amia, E. (2016). Franca Helg. Architetture, Design, Interni. Milan: Electa.

Fiell, C., & Fiell, P. (2001). Industrial Design A–Z. Cologne: Taschen.

Spadolini, G. (1961). "Montecatini alla Campionaria." Domus, (374), 30–37.

SHEET 9

Castiglioni, A., & Castiglioni, P. G. (1965). Padiglione RAI, Fiera Campionaria di Milano. Archivio Achille Castiglioni.

Mari, E. (1965). Contributi grafici al Padiglione RAI. Milano: Archivio Enzo Mari.

Sudjic, D. (2008). The Language of Things. London: Penguin Books.

Fiell, C., & Fiell, P. (2001). Design of the 20th Century. Cologne: Taschen.

Triennale Milano. (n.d.). Archivio della Fiera Campionaria. Retrieved from https://www.triennale.org

SHEET 10

Antonelli, P. (2008). Achille Castiglioni: Design!. New York: Museum of Modern Art.

Fiore, M. (2016). Design and the Politics of Reuse: Ethics of Sustainability in Contemporary Exhibition Practices. Milan: FrancoAngeli.

Polano, S. (1995). Achille Castiglioni. Milan: Electa.

Santi, M. (2014). Exhibition Design in Italy: Practices Between Art and Architecture. Macerata: Quodlibet.

Vinti, C. (2017). Storia del design in Italia. Bologna: Il Mulino.

SHEET 11

Belli, G. (2013). AG Fronzoni: Design Lessons. Mantua: Corraini Edizioni.

Fiore, M. (2016). Design and the Politics of Reuse: Ethics of Sustainability in Contemporary Exhibition Practices. Milan: FrancoAngeli.

Lora-Totino, A. (1970). La poesia concreta: testi e documenti. Milan: Lerici Editori.

Pelosio, G. (2001). Scaffolding and Design: From Innocenti Tube to Spatial Systems. Domus, (837), 54–61.

Vinti, C. (2017). Storia del design in Italia. Bologna: Il Mulino.

SHEET 12

Ambasz, E. (1980). The Architecture of Museums. New York: The Museum of Modern Art.

Baker, G. (1995). Theatre and the Weimar Republic: A Cultural Analysis of German Drama 1918–1933. Cambridge: Cambridge University Press.

Finessi, B. (2001). Il dettaglio nella progettazione d'interni. Abitare, (408), 74–87.

Fiore, M. (2016). Design and the Politics of Reuse: Ethics of Sustainability in Contemporary Exhibition Practices. Milan: FrancoAngeli.

Krüger, L. (1992). Theatre in the Weimar Republic: The Aesthetics of Political Performance. London: Routledge.

SHEET 13

Antonelli, P. (2008). Italy: The New Domestic Landscape. New York: Museum of Modern Art.

Branzaglia, C., & Dellapiana, E. (2011). AG Fronzoni: Design e metodo. Mantua: Corraini Edizioni.

Ciucci, G., & Polano, S. (1989). Architettura italiana del Novecento. Milan: Electa.

Finessi, B. (2001). AG Fronzoni: ordine, metodo, rigore. Abitare, (409), 92–99.

Polano, S. (1996). AG Fronzoni. Milan: Electa.

Vinti, C. (2007). Grafica italiana del Novecento. Milan: Electa.

SHEET 14

Ciucci, G., & Polano, S. (1989). Architettura italiana del Novecento. Milan: Electa.

Finessi, B. (2001). Achille Castiglioni: la forza del progetto. Abitare, (408), 74–87.

Griffin, J. (2018). Achille Castiglioni. London: Phaidon Press.

Polano, S. (1996). Achille Castiglioni. Milan: Electa.

Sparke, P. (1986). An Introduction to Design and Culture in the 20th Century. London: Allen & Unwin.

SHEET 15

Bassi, A. (2018). Achille Castiglioni: All Around Design. Milan: Corraini Edizioni.

Vergine, L. (1980). L'altra metà dell'avanguardia 1910–1940: pittrici e scultrici nei movimenti delle avanguardie storiche. Milan: Mazzotta.

Fiell, C., & Fiell, P. (2013). The Story of Design. London: Goodman Fiell.

Antonelli, P. (2008). Achille Castiglioni. New York: The Museum of Modern Art.

SHEET 16

Albini, M., Helg, F., & Piva, A. (1980). Allestimento della Pinacoteca del Castello Sforzesco. Milan.

Cederna, A. (1981). Castello Sforzesco: Il restauro e la museografia moderna. Milan: Electa.

Garberi, M. (1980). La Pinacoteca del Castello Sforzesco: Catalogo delle collezioni fiammingo-olandesi. Milan: Comune di Milano.

Montaner, J. M. (1998). Museums for a New Millennium: Concepts, Projects, Buildings. Basel: Birkhäuser.

SHEET 17

Ciucci, G. (2002). The Italian Design Culture: Objects and Strategies from 1945 to 2000. Milan: Electa.

Polato, P. (1999). 100 Oggetti del Design Italiano: Exhibition Catalogue. Milan: Triennale di Milano.

Triennale di Milano. (1999). 100 Objects of Italian Design. Milan: Triennale di Milano.

Verganti, R. (2003). Design-Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean. Boston, MA: Harvard Business Press.

SHEET 18

Migliore, I., & Servetto, M. (2004). Thonet Exhibition Stand, Salone del Mobile. Milan.

Ambasz, E. (1981). The Architecture of Exhibitions. New York: The Museum of Modern Art.

Riccetti, G. (2005). Designing for Brand Experience: The Role of Exhibition Architecture. Milan: Domus.

Coles, A., & House, R. (Eds.). (2007). Design and the Elastic Mind. New York: The Museum of Modern Art.

SHEET 19

Ryan, Z. (2006). The Good Life: New Public Spaces for Recreation. New York: Van Alen Institute.

WORKac. (2006). Exhibition Design for The Good Life: New Public Spaces for Recreation. Retrieved from https://work.ac

Lerner, J. (2014). Urban Acupuncture: Celebrating Pinpricks of Change That Enrich City Life. Washington, DC: Island Press.

Gehl, J. (2011). Life Between Buildings: Using Public Space (6th ed.). Washington, DC: Island Press.

SHEET 20

Scandurra, A. (2009). Exhibition design for Massimiliano and Doriana Fuksas. Triennale di Milano. Retrieved from https://www.triennale.org

Fuksas, M., & Fuksas, D. (2006). Architecture and Innovation. Milan: Skira.

Triennale di Milano. (2009). Medaglia d'Oro all'Architettura Italiana.

Moussavi, F. (2006). The Function of Ornament. Barcelona: Actar.

SHEET 21

Nendo. (2022). The Current State of Kanazawa Crafts – Exhibition Design.

21st Century Museum of Contemporary Art, Kanazawa. (2022). Kanazawa Crafts Triennale 2022. Retrieved from https://www.kanazawa21.jp

Ponti, G. (1952). In Praise of Architecture. Milan: Domus.

Moussavi, F. (2006). The Function of Form. Barcelona: Actar.

Sudjic, D. (2009). The Language of Things. London: Penguin.

SHEET 22

Brambilla, P., & Calvi, F. (2013). FontanaArte Flagship Store Exhibition Design. FontanaArte Archive.

Ciucci, G., & Dal Co, F. (1994). The Architecture of Italy. New York: Electa/Rizzoli.

Ponti, G. (1952). Amate l'architettura. Milan: Editoriale Domus.

Rasmussen, S. E. (1959). Experiencing Architecture. Cambridge, MA: MIT Press.

Sparke, P. (2013). An Introduction to Design and Culture: 1900 to the Present. London: Routledge.

SHEET 23

Collina, L., & Zucchi, C. (Eds.). (2014). Innesti/Grafting: Padiglione Italia alla 14. Mostra Internazionale di Architettura della Biennale di Venezia. Milan: Mondadori Electa.

Frampton, K. (1995). Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture. Cambridge, MA: MIT Press.

Latour, B., & Weibel, P. (Eds.). (2005). Making Things Public: Atmospheres of Democracy. Cambridge, MA: MIT Press.

Studio Azzurro. (2015). Expo Milano 2015: A Laboratory for the Environment. Milan.

Zucchi, C. (2014). On the concept of grafting in architecture. In Innesti/Grafting, pp. 11–21. Milan: Electa.

Zucchi, C. (2014). On architectural detail and the role of infrastructure in exhibition design. In Innesti/Grafting, pp. 45–55. Milan: Electa.

SHEET 24

Collina, L., & Zucchi, C. (2016). Sempering. Process and Pattern in Architecture and Design. Milan: Electa.

Semper, G. (2004). Style in the Technical and Tectonic Arts; or, Practical Aesthetics (H. F. Mallgrave & M. Robinson, Trans.). Los Angeles: Getty Research Institute. (Original work published 1860)

Triennale di Milano. (2016). XXI Triennale International Exhibition: 21st Century. Design After Design.

McQuaid, M. (2005). Shaping Design: A History of Tectonic Thinking in Architecture and Design. London: Thames & Hudson.

Sudjic, D. (2009). The Language of Things. New York: W. W. Norton & Company.

SHEET 25

Claudia Zevi & Partners. (2016). La Leonardiana – Una nuova esperienza museale dedicata a Leonardo da Vinci. Vigevano: Comune di Vigevano.

Fondazione ADI. (2018). Compasso d'Oro 2018 Award Catalogue. Milan: ADI Design Museum.

Migliore, I., & Servetto, M. (2016). Exhibition Design as Interactive Theater: La Leonardiana in Vigevano. Domus, 1009, 82–87.

Pedretti, C. (2016). Leonardo da Vinci: Studies for a New Era of Interpretation. Milan: Giunti Editore.

Studio Migliore+Servetto. (2016). Leonardiana: Exhibition Project Documentation. Milan: Internal Archive.

SHEET 26

Blanchaert, J., & Boeri, S. (2016). 50 Manga Chairs by Nendo. Milan Design Week. Retrieved from https://www.nendo.jp/en/works/50-manga-chairs

Coles, A. (2007). DesignArt. London: Tate Publishing.

Friedman Benda. (2016). Nendo: 50 Manga Chairs Exhibition Catalogue. New York: Friedman Benda.

Montaner, J. M. (2010). Museography: Use and Reuse of Museum Spaces. Barcelona: Actar.

Picon, A. (2016). Smart Cities: A Spatialised Intelligence. Chichester: Wiley.

SHEET 27

Molinari, L. (2017). Architecture as Civil Commitment: Lucio Costa and Lina Bo Bardi. Milan: Skira.

Manzini, E. (2015). Design, When Everybody Designs: An Introduction to Design for Social Innovation. Cambridge, MA: MIT Press.

Zecchi, B., & Bianchini, F. (2020). Reggio Emilia: Collective Memory and Civic Imagination. Milan: Electa.

McDonough, W., & Braungart, M. (2002). Cradle to Cradle: Remaking the Way We Make Things. New York: North Point Press.

Fuad-Luke, A. (2009). The Eco-Design Handbook: A Complete Sourcebook for the Home and Office. London: Thames & Hudson.

SHEET 28

Antonelli, P. (2011). Talk to Me: Design and the Communication between People and Objects. New York, NY: Museum of Modern Art.

Fondazione Vedova. (2018). Renzo Piano. Progetti d'acqua. Venice: Fondazione Emilio e Annabianca Vedova.

Piano, R. (1997). Pieces of Architecture. London: Thames & Hudson.

Studio Azzurro. (2020). Sensitive Environments: Between Art and Technology. Milan: Silvana Editoriale.

Traldi, A. (2018). Interview in "Progetti d'acqua" technical dossier [Unpublished exhibition material].

SHEET 29

Bennett, T. (2015). Museums, Power, Knowledge: Selected Essays. London: Routledge.

Cotton, C. (2014). The Photograph as Contemporary Art (3rd ed.). London: Thames & Hudson.

Edwards, E., & Hart, J. (Eds.). (2004). Photographs Objects Histories: On the Materiality of Images. London: Routledge.

Fondazione MAST. (2019). Foto/Industria 2019: The Fourth Biennial of Photography on Industry and Work. Bologna: MAST Foundation.

Zanot, F. (2019). Tires: André Kertész. In Fondazione MAST (Ed.), Foto/Industria 2019 Exhibition Catalogue (pp. 42–45). Bologna: MAST.

SHEET 30

Bandai, Y. (2019). A Certain Collector, B [Exhibition]. Foto/Industria 2019, Palazzo Sanguinetti, Bologna,

Fondazione MAST. (2019). Foto/Industria 2019. Biennale di fotografia dell'industria e del lavoro. Bologna: Fondazione MAST. Retrieved from https://www.fotoindustria.it/

Zanot, F. (2019). Curatorial notes on A Certain Collector, B [Curator's commentary]. In Fondazione MAST (Ed.), Foto/Industria 2019 (pp. xx–xx). Bologna: Fondazione MAST.

Cotton, C. (2014). The photograph as contemporary art (3rd ed.). London: Thames & Hudson.

Batchen, G. (2001). Each wild idea: Writing, photography, history. Cambridge, MA: MIT Press.

SHEET 31

Antonelli, P. (Ed.). (2019). Broken Nature: Design Takes on Human Survival. Milan: Electa.

Cassani, M., & Studio Folder. (2019). Exhibition design for Broken Nature.

La Triennale di Milano. (2019). XXII Triennale di Milano: Broken Nature.

Kulachek, A. (2019). Graphic identity for Broken Nature. Retrieved from https://annakulachek.com

Oxman, N., Formafantasma, & Sigil Collective. (2019). Project contributions in Broken Nature. In Antonelli, P. (Ed.), Broken Nature: Design Takes on Human Survival (pp. 120–245). Milan: Electa.

Ginsberg, A., & Chachra, D. (2020). Rethinking design in the Anthropocene. Design Issues, 36(4), 30–45.

SHEET 32

Alemani, C., Formafantasma, & La Biennale di Venezia. (2020). Le muse inquiete. La Biennale di Venezia di fronte alla storia [Exhibition catalog]. Venice: La Biennale di Venezia.

Formafantasma. (2020). Le muse inquiete: Exhibition Design Project.

La Biennale di Venezia. (2020). Le muse inquiete: 125 anni della Biennale.

Zucchi, C., & Collina, L. (2016). Design After Design: XXI Triennale. Milan: Electa.

Sbriglio, J. (2021). Exhibiting the archive: A structural approach. Design Issues, 37(4), 68–81.

SHEET 33

Dotdotdot. (2020). Domus Aurea Exhibition Design: Raffaello and the Grotesques. Milan: Dotdotdot Studio. Retrieved from https://www.dotdotdot.it

Dotdotdot. (2020). Teca del Laocoonte e Pannello di Proiezione per la Mostra alla Domus Aurea. Milan: Dotdotdot Studio. Retrieved from https://www.dotdotdot.it

Farinella, V., & Russo, A. (2020). Raffaello e le Grottesche: L'eredità della Domus Aurea. Rome: Electa.

Parco Archeologico del Colosseo. (2020). Official Guide to the Raffaello Exhibition at Domus Aurea. Rome: Ministero della Cultura.

SHEET 34

Boeri, S., & Blanchaert, J. (2022). Next of Europe. Homo Faber 2022, Venice.

Fondazione Cologni dei Mestieri d'Arte. (2022). Homo Faber: Crafting a more human future. Retrieved from https://www.homofaber.com

SHEET 35

Dotdotdot. (2023). Rodin e la danza: Exhibition design. Retrieved from https://dotdotdot.it

Museo Rodin. (2023). Rodin and the Dance. Retrieved from https://www.musee-rodin.fr

Musée Rodin & Palazzo Reale. (2023). Rodin e la danza: Il corpo in movimento. Milan: Silvana Editoriale.

Graw, I. (2018). The Love of Art: European Art Institutions and Their Public. Cambridge: Polity Press.

Moussion, Y. (2022). The scenography of motion: Displaying sculpture and dance. Journal of Exhibition Studies, 18(2), 145–159.

Images credits

SHEET 1
Images created by Luciana Rubino within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 2
Images created by Leonardo Bettini within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 3
Images created by Dhenielle Dave Soriben within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 4
Images created by Margerita Galvan within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 5
Images created by Benedette Pavan and Sofia Centinaro within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 6
Images processed by Maria Luisa De Giorgi within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 7
Images created by Giacomo Barchi within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 8
Images created by Evelyn Modica within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 9
Images created by Annachiara Accorsi within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 10
Images created by Cristina Simonato within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 11
Images created by Stefano Fornasari within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 12
Images created by Silvia Rossi within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 13
Images created by Alice Chiuso within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 14
Images processed by Gaia Marchionni within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 15
Images created by Riccardo Lipparini within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 16
Images created by Viola Trinca within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 17
Images created by Valentina Travaglini within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 18
Images created by Anna Visentin within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 19
Images created by Sara Giunta within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 20
Images created by Greta Rossi Galante within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 21
Images created by Elisa Pigella within the “Interior Laboratory” at Università Iuav di Venezia, academic year 2024–25.

SHEET 22
Images created by Gaia Tasso within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 23
Images created by Benedetta Manara and Alessia Battipaglia within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 24
Images created by Elisa Robin within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 25
Images processed by Nicola Zanellato within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 26
Images created by Valentina Menegaldo within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 27
Images created by Mariadomenica Natale within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 28
Images processed by Maya Ranieri within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 29
Images created by Giulia Pasca within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 30
Images created by Carlotta Di Petti within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 31
Images created by Ramya Monti within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 32
Images created by Laura Eleonora Castiglione within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 33
Images created by Virginia Raimondi within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 34
Images created by Federico Busco and Carlotta Vignati within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

SHEET 35
Images created by Anastasia Martinetti within the "Interior Laboratory" at Università Iuav di Venezia, academic year 2024–25.

This volume gathers a curated selection of construction details drawn from exemplary exhibition experiences, exploring how exhibition design can become fertile ground for sustainable, replicable, and culturally meaningful practices. Through historical and contemporary case studies, the book highlights how materials, assembly systems, and spatial strategies are not merely technical solutions but true narrative devices. In the context of the ecological and digital transition, accurate, open-source documentation of details—accompanied by downloadable QR codes—constitutes a concrete contribution to a new design culture: one founded on circularity, care, and process transparency.
The hope is that this collection may inspire designers, curators, students, and cultural operators to think of the detail not as a minor part, but as a critical and creative node in the construction of more responsible spaces.

Davide Crippa, architect and PhD in Interior Architecture and Exhibition Design, studied with leading figures of Italian design, completing his education with an interdisciplinary outlook. In 2003 he founded the studio Ghigos and since then has carried out wide-ranging research across exhibitions, installations, and projects of international relevance. From 2007 to 2021 he taught at the Politecnico di Milano and at the Nuova Accademia di Belle Arti in Milan; today he is Associate Professor at Università Iuav di Venezia, where he explores the potential of interaction design and new digital-fabrication technologies from a circular-economy perspective, with a specific focus on the sustainability of exhibition design.

Barbara Di Prete, architect and PhD in Interior Architecture and Exhibition Design, is Associate Professor in the Department of Design at the Politecnico di Milano, where she conducts research between exhibition and interior design. In 2003 she co-founded the studio Ghigos, realizing projects for museums and institutions of international standing (MAXXI, Expo 2015, MoMA, Triennale di Milano). She is currently investigating the role of design from a sustainability perspective with the research groups Reside, Places+, and NSBVN.

NsBvi
CLUSTER SUSTAINABLE EXHIBIT IUAV

ISBN 978-88-3294-253-8

Open Source: 0,00€