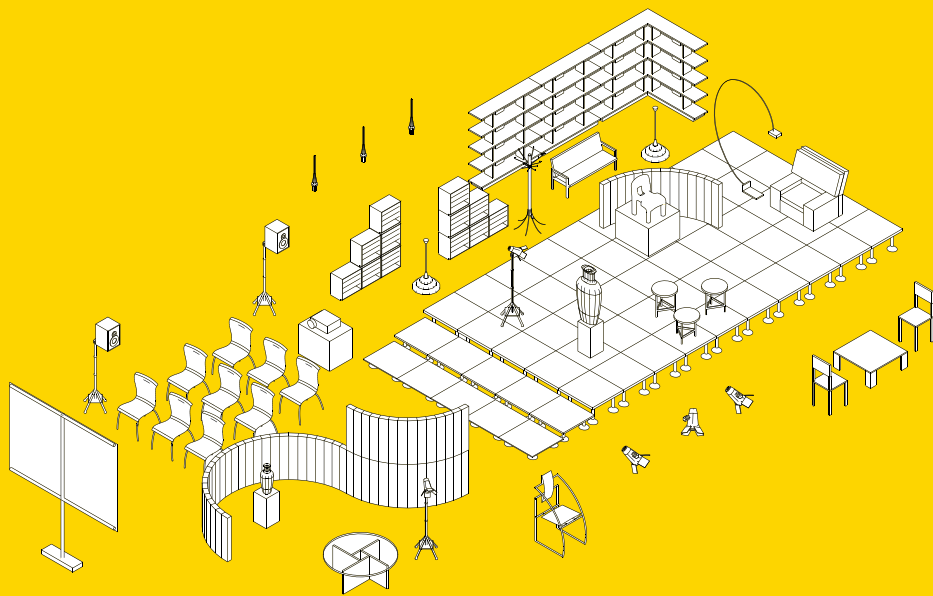


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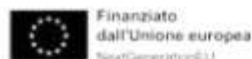
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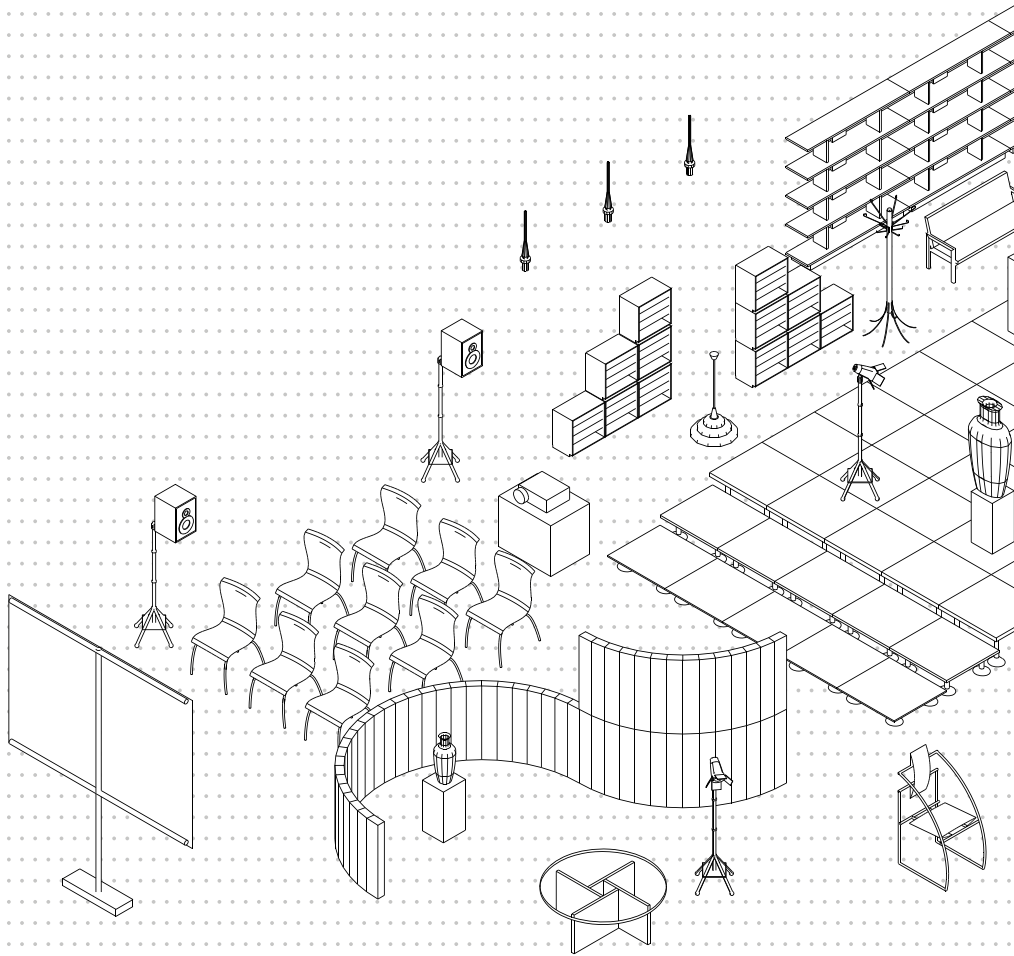
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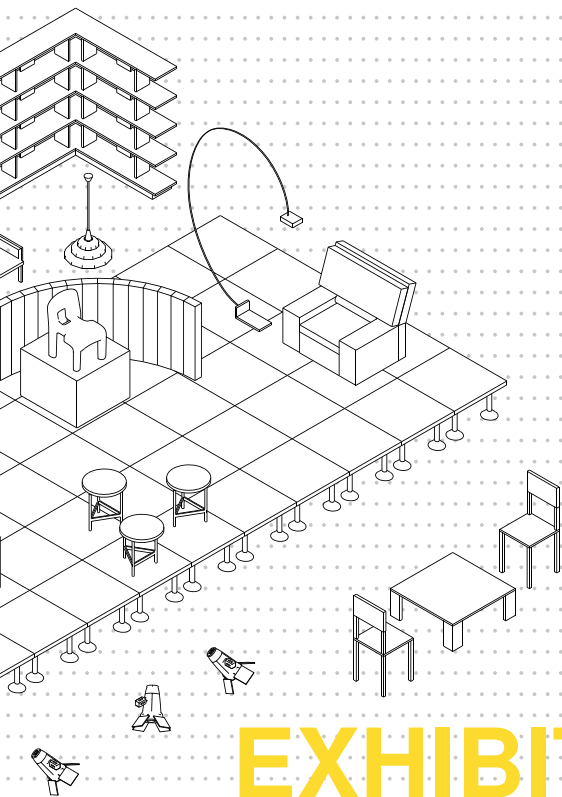


EXHIBIT DESIGN IN A DIFFERENT TRADITION

Reasonings on a possible
counter-history of exhibiting.

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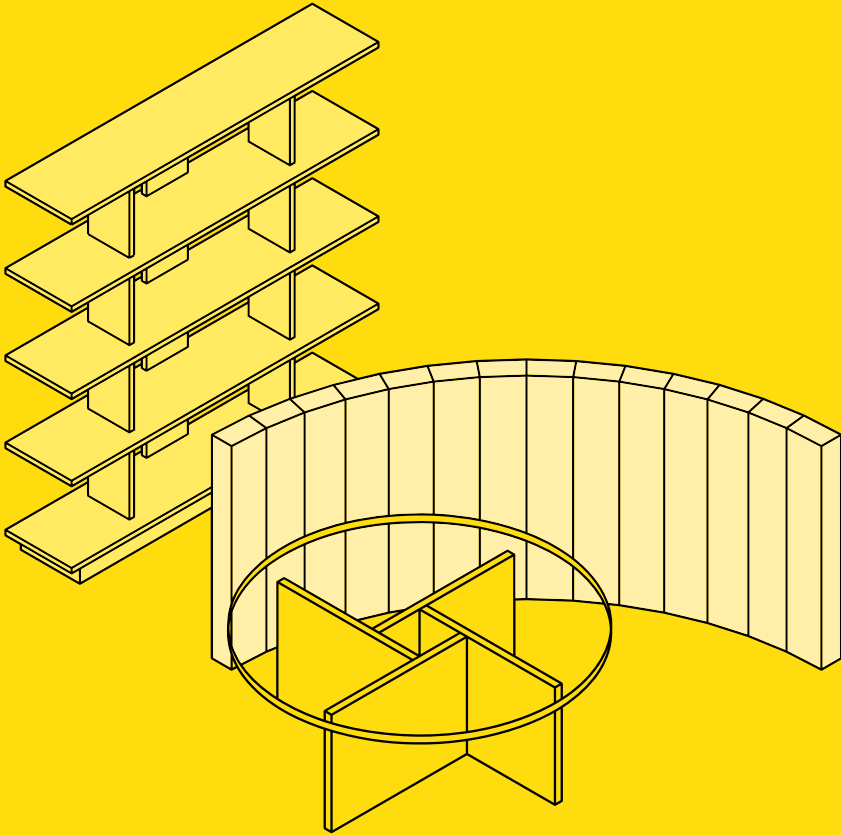
EXHIBIT DESIGN IN A DIFFERENT TRADITION

Reasoning on a possible
counter-history of exhibiting.

D. Crippa, F. Ambrogio

The following text investigates a central and problematic issue of the contemporary such as the sustainability of exhibition artifacts; indeed, the current design debate demonstrates the urgency of disciplinary awareness (and revision) in this direction. In light of this need, it seems useful to define a counter-history of the exhibiting sector with the aim of (re)reading the case studies of the tradition (Docchi and Chiavoni, 2017), identifying some virtuous models in order to define, downstream, guiding principles capable of directing a correct design methodology to be applied on the contemporary and to be codified for the near future.

In this context, the essay thus aims to understand whether there can subsist in the history of “showing” [1] that “different tradition” outlined by Corrado Levi [2] that today’s contemporaneity demands from the design world with ever-increasing insistence. The need for a disciplinary rethinking of display, in particular, can no longer be postponed, and indeed already appears to be lagging far behind other disciplinary fields; consider, for example, how architecture (the discipline closest to design) has changed



and is changing in the last few, complicated as it is revolutionary, decades.

In particular, sustainability - with the declinations it entails in the cultural, environmental, economic, and social spheres, in light of the 17 SDGs for sustainable development of the United Nations' Agenda 2030 (Agenda 2030, 2021) - is an open challenge with which many museums have yet to grapple systematically. Inevitably, for climate, economic and social reasons being unsustainable is no longer possible (Epifani, 2020).

THE INSTITUTIONAL AND CULTURAL CONTEXT OF REFERENCE

In this context, the question posed by the European Union to German museums in relation to the sustainability factor of the arrangements made appears to be of fundamental importance; the data collected so far are not able to quantify this impact, and the deafening silence coming from the institutions makes it clear that this specific issue has not yet been evaded by scientific research nor by the cultural system in general.

Subsequently, a survey was constructed to quantify, and consequently limit, the level of footprint of the museum sector; other systemic actions have been initiated at the European level, testifying to an awareness that is slowly permeating the institutional and political level as well: "recently launched are the New European Bauhaus (2020) - a sustainable and inclusive project promoted by the European Union and inspired by the school founded by Walter Gropius in Weimar in 1919 (European Commission, 2020) - and the Gallery Climate Coalition, a nonprofit organization founded by a group of gallery owners based in London with the aim of offering an industry response to the climate crisis, thanks in part to a special online tool (the carbon calculator) that allows them to calculate the impact galleries have on the environment in terms of CO₂ production" (Maida, 2021). The Federal Cultural Foundation, in Germany, has also moved in this direction, offe-

ring museums and affiliated organizations a project to minimize the impact of their carbon emissions. It seems clear, however, that the climate change goals of the Paris Agreement, in effect since 2015, can only be achieved if they are understood as a task for society as a whole, in which all its actors must necessarily participate.

A few years ahead of its time, Michela Rota (2019) proposed an investigation into the sustainability of the museum apparatus, albeit highlighting the degree of economic and environmental sustainability of architectural shells and still giving little breathing space to research on the temporary arrangements contained therein. In fact, the goal pursued by the author is to build a *green management* that operates both on the current management of the museum sector and on the structuring of projects for the transformation and redevelopment of the existing.

The author proposes a range of possible approaches to start the path toward sustainability of the numerous and heterogeneous Italian museum experiences, but the fundamental contribution of her volume is that of having fostered a significant increase in awareness of the sector and, at the same time, that of having introduced professional tools, orienting the technical skills of operators and providing support to museum directors. Thanks to Michela Rota's text, for the first time in Italy, the problem of sustainability in the exhibition system has thus been addressed, migrating the reasoning that has been instructing architectural design choices for years and imagining their application to the museum system. To the virtue of having brought the good practices already in place to a new context, and of having highlighted the need for a systemic approach to the issue of sustainability, there subsists perhaps the limitation of not having addressed the typical peculiarities of temporary exhibiting: the solutions proposed are at times still generic, often not easily adaptable to the museum reality, and above all, a look at the building rather than at the activities that are carried out in it seems to prevail in the investigation.

In any case, the profound sense of this volume remains evident and valuable, as it has made it possible to initiate a scientific debate capable of raising awareness of the importance and urgency of a concrete activation of an entire compartment with respect to ecological-environmental instances (Lanziger, 2021).

THE SySTEM OF EXHIBITING AND THE ECONOMIC ImPACT IN mUSEUmS

The impact that a sustainable design of exhibiting can have in the life of exhibition spaces can be easily measured by looking at the budget items of major museums such as the Triennale or Maxxi, which show, for example, that in 2019 alone in Milan about 1.820 million euros were invested annually [3] in exhibition set-ups [4] that were then, in almost their entirety, decommissioned and destined for landfill.

Giving concrete examples, for the following exhibitions, items related only to set-up costs are inserted in parentheses:

* **Enzo Mari** exhibition, Milan Triennale, from October 17, 2020, to September 12, 2021 (€137.500);

* **Vico Magistretti. Milanese architect.** exhibition Milan Triennale, from May 11 to September 12, 2021 (€68.415);

* **The State of Art of Architecture** exhibition, Milan Triennale, from February 16 to March 29, 2020, (€86.407);

* **Giancarlo De Carlo's notebooks. 1966 - 2005.** exhibition, Triennale di Milano, Milan Triennale, from Jan. 24 to March 29, 2020, (€32.432).

Analyzing the exhibitions set up during the previous year, the figures do not decrease: considering **Play Skatepark** (€280.000), the setting up of the **Museum of Design** (€184.849) and that for the large exhibition **Broken Nature** (€760.717), the impact of this item of expenditure is confirmed to be high, especially if we consider that these are out-of-pocket costs.

The numbers mentioned make it easy to guess why the Milan Triennale, a museum that has design culture as its main skill,

wants to build a special project by dedicating an observatory to these issues, a place of research to foster a sharing of set-ups and thus transform what at the moment are mere cost-lives into an opportunity for other museums, even smaller ones. Innovation, which passes through the visionary "*Non Si Butta Via Niente*" project (2022), here takes on the character of a process innovation, with multiple positive impacts on both economic management and the competitiveness of the facility. It will be an interdisciplinary observatory that will see the involvement of various actors, both public and private, in which to converge the skills and needs, sometimes complementary, of both corporate subjects such as Social Factory, NSBVN and Gimac (Maida, 2022) and institutional subjects such as museums, but in perspective also research bodies and universities, including the Luav University of Venice, in order to experiment with new good practices that will enrich the sharing of set-ups already started.

THE EXHIBIT SySTEm AND ITS ENvIRONmENTAL I mPACT

As previously illustrated, the economic impact that gravitates around the construction of temporary set-ups for exhibitions and events is huge and is difficult to minimize (Ronchi, 2021); currently, the set-up devices made for these events - often, moreover, necessarily scenographic, of great visual and communicative impact - determine a situation of not only economic but also environmental unsustainability: exhibitions, fairs, sets for fashion, music or film shows (in general we could say all those serving the cultural and creative industry) make use of materials that are often not very recyclable and that are used only for the specific time of the event, in total contrast to the principles of eco-design.

"The environmental issue, understood as the impact of production and consumption systems on the balance of ecosystems" (Vezzoli, 2017), appeared in the second half of the 1960s

as an emergency associated with the major ecological disasters recorded in the West. Although the issue is thus now rooted in time, unfortunately it seems clear that we are still unprepared today: exhibition apparatuses and devices would require storage that is often too burdensome for museums and art galleries, which rarely have ample free space to allocate for this purpose; consequently, the displays feed landfills, creating high masses of complex waste, paradoxically on par with heavy industries.

As one of the leading scholars of sustainability, John Thackara, stated in 2008, “Eighty percent of the environmental impact exerted by products [...] is determined at the design stage” (Thackara, 2008), so in recent decades there has been a gradual awareness that design activity must systematically consider the impact that the artifact, the object of design activity, has on the environment and its balance. As Ingrid Paoletti also suggests, it is therefore necessary to think about waste already upstream of design activity, anticipating the use of what she calls “remainder,” hence the reflection on “designing with remainder” (Paoletti, 2021).

Although this awareness has now been acquired by practitioners, we still witness, constantly, a general “design malpractice,” that is, the lack of a design focus capable of codifying from the origin of the creative act, with predictive capacity, a circular and sustainable process both economically and environmentally, without delegating it to choices to be made a posteriori (often in situations of emergency and necessity).

As a result of what has been analyzed, it therefore appears fundamental to attempt to construct a “different tradition of exhibiting,” one that is enriched with content and meanings drawn from the



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open day of the Exhibit Design laboratory of the Master's Degree course on the theme of sustainable exhibiting.

Stand project for Euroluca according to the principles of eco-design. (Source: @Davide Crippa)

history of exhibiting-or rather from a “counter-history” of it-so as to be able to concretely reverse this design malpractice, founding it on a specific body of knowledge and reflections, anchored in a solid body of reference literature and some contemporary episodes of particular relevance.

TOWARD A COUNTER-HISTORY IN EXHIBITING

Is it possible to identify a counter-history of exhibiting from the sustainability point of view?

How useful might it be for more informed design, or how much might it turn out to be simply theoretical speculation?

What would be the implications for design?

These are important questions for this essay, which considers it a priority first and foremost to reform the design culture in such a way as to increase the environmental awareness of designers and their clients, consequently inducing greater attention to the end-of-life of fittings.



In seeking to pursue this goal, history can also make a valuable contribution, as some authors, including Bruno Zevi, with their brilliant analyses of spatial design, still demonstrate. Zevi's thought is marked by an exploratory direction different from his contemporaries, because he proposes to us a reverse writing of architectural history, starting from the present in order to construct an investigation backwards in time.

Imagining, therefore, a chronologically reversed history of architecture, Zevi codifies seven invariant principles (Zevi, 1997) for correct design; the following is a brief summary of the meaning of these invariants, which are defined as "methodological synthesis suitable for the formation of new generations of designers capable of grasping, through a heretical reading of the history of the project, the guidelines and references that can be implemented in contemporary behavior."

The seven invariants can be summarized as follows:

- * "List of functions: zeroing out the semantics of signs and forms by creating new ones. This is a procedure that leads to the reformulation of the relationship between form and function;
- * "Asymmetries and dissonances": if symmetry is the basis of the classical code, asymmetry is of the modern one;
- * "Anti-perspective three-dimensionality": reducing buildings to regular prisms reveals an immense visual heritage composed of curves, asymmetries, deviations, modulations, angles other than 90°;
- * "Four-dimensional decomposition": unitary space is shattered into its compositional planes. The static nature of classicism is succeeded by a dynamic, temporalized vision;
- * "Overhanging structures, shells and membranes": concerns the possibility of building in a more daring way, at the limit of the possibilities provided by the technique of modern construction, in new materials and with unprecedented capabilities;
- * "Temporality of space": it is the possibility of exploring a building in a temporal sense, moving within and through it;

* "Reintegration building, city, territory": this principle leads the analysis beyond the building, which, reintegrated to the city, sees traditional facades disappear and any distinction between interior and exterior space, between architecture and urbanism, collapse. From the fusion of the building-city-territory systems comes the concept of "urbatecture."

Zevi, thus, teaches how history represents a great reservoir of fundamental information in order to be able to read (and reread) the present and the future; with his counter-history, he provocatively breaks critical patterns to allow us to glimpse how backward analysis can be decisive in taking a correct point of view and an effective design method.

The same disruptive charge can be traced in the short text Corrado Levi developed to explain the fundamentals of architectural composition at the Milan Polytechnic. *A Different Tradition* (1985) is a book in which Levi interrogates musicians, artists and a single architect - Franco Albini - with the aim of interpreting the specific design method of each and thus identifying in contemporary design culture an alternative tradition, based on play, paradox, inexactness and nonsense. The volume is articulated by juxtaposing ten writings on different interpreters and an explanatory theoretical afterword; the writings reveal the methodological mechanisms underlying the poetics of each designer, so this book assumes both an informative role, thanks to the transcription of real monographs, and a formative one, aimed at illustrating the so-called "processes of making." The volume over the years - and perhaps even unexpectedly for its author himself - has become a fundamental and multigenerational text on design methodology.

In the insight of Bruno Zevi and Corrado Levi can be traced the presuppositions of this same essay, which aims to constitute a first basis for "a different tradition of exposition" yet to be written.

A COUNTER-HISTORY FROM A SUSTAINABLE PERSPECTIVE: AN INITIAL COMPARATIVE

INTERPRETATION



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sequence of the six models of the "sustainable" stands designed for Euroluca in the Exhibit Design studio.
(Source: @Davide Crippa)

The usefulness of a counter-historical reading of exhibiting from a sustainable perspective can be easily discerned by analyzing the work of one of the masters of exhibiting, Achille Castiglioni, in particular by taking two of his emblematic works - Chemistry Tomorrow and Today (1967) and the 1956 RAI pavilion installation; reading them from a sustainable perspective, that is, evaluating their economic-environmental impact and potential waste, they emerge as two antithetical models. Castiglioni, a master among masters, in his long career demonstrated his ability to use the codes of display with lightness and irony, choosing from time to time to privilege the code-fitting, the code-background or the code-object [5] in order to achieve the most immediate result as fruition and the most

persistent as memory; to him we owe many of the masterpieces of the discipline of display. The reading that is proposed here is therefore obviously not intended to question its value, it simply wants to add a variable (which was not contemplated at the time) for an evaluation that integrates the new instances of contemporaneity and helps us to draw from the past virtuous solutions to be taken up today, updating them.

The two cases mentioned above could be taken as conceptual extremes: the 1967 exhibition represents a disarming case in terms of its communicative effectiveness and ability to engage the

viewer, because it was able to bring a “poetics of discovery” into the system of exhibiting; through the use of false ceilings, space is compressed and thus created a seemingly infinite neutral landscape, in which the contents “rain down” from above catching the viewer unawares, amid visual deceptions and skillful mirror games. The exhibition, an undisputed masterpiece in terms of narrative power and scenographic charge, makes skillful use of the three codes of display, but if the parameter of sustainability were also introduced, the judgment would have to change.

In the light of this fourth code, in fact, *Chemistry Tomorrow and Today* could not be included among the most virtuous examples of exhibit design, as the critical use of high quantities of materials (e.g., to build the ceiling over the entire space), which besides being wasteful were not recoverable after the exhibition was closed, emerges clearly.

Conversely, the set-up of the 1956 RAI Pavilion turns out to be a positive example because, although adopting, as in the previous case, a very pushed code-fitting, the logic that guided its design choices follows principles that today we might call *ecodesign*. The project, in fact, focuses on the study of a single joint with which to assemble in ever-changing ways a series of shaped tops that can flexibly accommodate graphic content, become display tops or even turn into ready-to-use furniture systems. The solution thus favors the use of a widely reconfigurable element capable of using

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sequence of the six models of the
“sustainable” stands designed for Euroluca
in the Exhibit Design studio.
(Source: @Davide Crippa)



“less matter and more intelligence.” This design system has resulted in significant savings on many fronts, from the purchase of materials to the construction process, allowing easy disassembly and reuse for subsequent fittings; definitely, in terms of environmental sustainability this second design is more efficient. This simple comparative analysis thus provides insight into how the use of the sustainability code could rewrite the value hierarchies that history has ascribed.

CONCLUSIONS

In conclusion, the reasons why the definition of a counter-history of exhibiting has been briefly introduced here would allow us to (re)read the case studies of the tradition, especially those representatives of a different tradition, interpreting them as more or less virtuous models in order to define downstream guiding principles capable of directing a correct design methodology to be applied in the contemporary and in the future.

Constructing this counter-history through an obviously broad and articulate treatment would allow to redefine the role of the designer (capable of managing the afterlife of installations), the sense of design (increasingly systemic) and the same design methodological principles, more adequate to the new *Sustainable Development Goals* (SDGs) of the UN Agenda 2030.

It is therefore deemed desirable to build this new counter-history, to be written by many hands, capable of making that now so urgently needed contribution to the field of exhibit design, which for too long has seemed immobilized by disciplinary myopia.

Notes

1- "Mostrare" is an expression introduced by Sergio Polano in the book *Mostrare. The exhibition in Italy from the 1920s to the 1980s* (1988), which today represents one of the few publications on the history of exhibitions in Italy.

2- Expression taken from C. Levi's book *A different tradition* (1985), in which the Milanese master proposes a new design manual valorising those masters who in his opinion can trace an alternative trajectory to the "main story", to instead build a "playful and gentle" tradition.

3- Aggregate data, in reference to the transparency and financial statements section on the Triennale di Milano website (<https://triennale.org/trasparenza/bandi>)

4- The numerical data refers to the aggregate of costs deriving from the related activities of the museum system: from the setup itself to the movement of works of art, from structural maintenance to the construction of new systems, from design to the purchase of material.

5- The three codes of the installation, which are part of the lessons held by the prof. Davide Crippa, were developed to illustrate the design poetics of the various authors. The use of these codes as a criterion for reading their design attitudes is also found in various publications, including *Design of the Ephemeral in Urban Space* (Crippa, 2022) and *Body. Spatial Transitions in the Scene Architecture between Space, Event and Movement* (Crippa, 2020).

Bibliography

Crippa, D. (2022). Design of the Ephemeral in Urban Spaces. In Anzani A., (edit by), *Conscious Dwelling*. Collana Design and Innovation. Cham: Springer.

Crippa, D. (2020). Body. Spatial Transitions in the Scene Architecture between Space, Event and Movement. In Anzani A., (edit by), *Mind and Places. Body and Consciousness in the Design of Contemporary City*. Collana Design and Innovation. Cham: Springer.

Docci, M., Chiavoni, E. (2017). *Saper leggere l'architettura*. Bari: Laterza.

Epifani, S. (2020). *Sostenibilità Digitale: Perché la sostenibilità non può fare a meno della trasformazione digitale*, Digital Transformation Institute, Rome.

European Commission. (2020). *New European Bauhaus*. In [europa.eu](https://europa.eu/new-european-bauhaus/index_en), https://europa.eu/new-european-bauhaus/index_en, consulted on September 20, 2022.

Icom Italia, (n.d.). *Riciclo allestimenti museali. L'indagine avviata dal Gruppo di Lavoro del Coordinamento Regionale Lombardia*. In icom-italia.org, www.icom-italia.org/riciclo-allestimenti-museali-lindagine-avviata-dal-gruppo-di-lavoro-del-coordinamento-regionale-lombardia, consulted on July 20, 2022.

Lanziger, M. (2021). *Musei e crisi ambientale*. In AgCult, www.agenziacult.it/interni/sviluppo-sostenibile-musei-e-crisi-ambientale, consulted on July 25, 2022.

Levi, C. (1985). *Una diversa tradizione*, Milan: Clup.

Maida, D. (2022). *Nonsibuttavianiente. La startup che ricicla allestimenti di mostre e li condivide con altri musei*. In artribune.com, www.artribune.com/progettazione/design/2022/06/nonsibuttavianiente-startup-ricicla-allestimenti-mostrate, consulted on September 20, 2022

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, consulted on May 4, 2022.

Melani, L. (2021). Cultura e climate change: esperienze virtuose in Toscana. In AgCult, www.agenziaacult.it/interni/sviluppo-sostenibile-cultura-e-climate-change-esperienze-virtuose-in-toscana, consulted on May 10, 2022.

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

Polano, S. (1988). *Mostrare. L'allestimento in Italia dagli anni Venti agli anni Ottanta*. Milan: Lybra Immagine.

Ronchi, G. (2021). Spazio META a Milano. Riciclo, riuso e rivendita dei materiali di scarto di mostre e allestimenti. In artribune.com, www.artribune.com/progettazione/2021/12/spazio-meta-milano-riciclo-materiali-mostre-allestimenti, consulted on May 18, 2022.

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

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

Triennale di Milano. (2022). Bilanci. In triennale.org, <https://triennale.org/trasparenza/bilanci>, consulted on April 27, 2022.

VV. AA. (2021). Cultura, ICCROM: evidenziare l'impatto su benessere e sviluppo sostenibile. CulTurMedia. In culturmedia.legacoop.coop, <https://culturmedia.legacoop.coop/agcult-cultura-iccrom-evidenziare-limpatto-benessere-sviluppo-sostenibile>, consulted on April 12, 2022.

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

Zevi, B. (1978). *Il linguaggio moderno dell'architettura*, Einaudi, Milan.

Zevi, B. (1997). *Leggere, scrivere, parlare architettura*, Marsilio, Venice.

www.nonsibuttavianiente.it.





The book investigates the exhibition sector by analyzing how it, with guilty inertia, is finally starting to address the issue of sustainability; until now, in fact, this topic has paradoxically been little considered by the exhibition discipline. However, it is a category of thought and project which, in light of the environmental crisis we are experiencing, now requires urgent and new consideration.

The text, one of the first to systematically investigate the topic - considering its economic, social and productive, as well as environmental implications - offers a detailed reading of the Italian and European context, identifying some reference best practices that can be applicable to different dimensions planning. Analyzing the museum sector in a privileged way, but also opening the perspective to the trade fair, artistic and large events sector, the book therefore aims to provide new research trajectories, pilot projects, innovative governance and management models, in order to make the system's actors fully aware of the issues at stake and equipped with new strategic and operational tools.

Davide Crippa is an architect by training and a designer by choice. After graduating he obtained a PhD in Interior Architecture and Interior Design at the Polytechnic of Milan.

From 2007 to 2021 he taught continuously at the Polytechnic of Milan and at the Nuova Accademia di Belle Arti in Milan. Head of the ADI designers commission until 2012, he is now a researcher at the IUAV University of Venice - Department of Design Cultures; he writes articles and publishes books on project theory and criticism, projecting his attention towards evolving scenarios.

In 2004 he founded the Ghigos studio with Barbara Di Prete and since then has carried out wide-ranging research: he has created exhibitions, installations and projects that have been highlighted in international competitions and exhibited in prestigious museums (including Maxxi, Expo2015, MoMA, Triennale of Milan, Venice Biennale). He is currently investigating the impact of the ecological and digital transition on design disciplines.