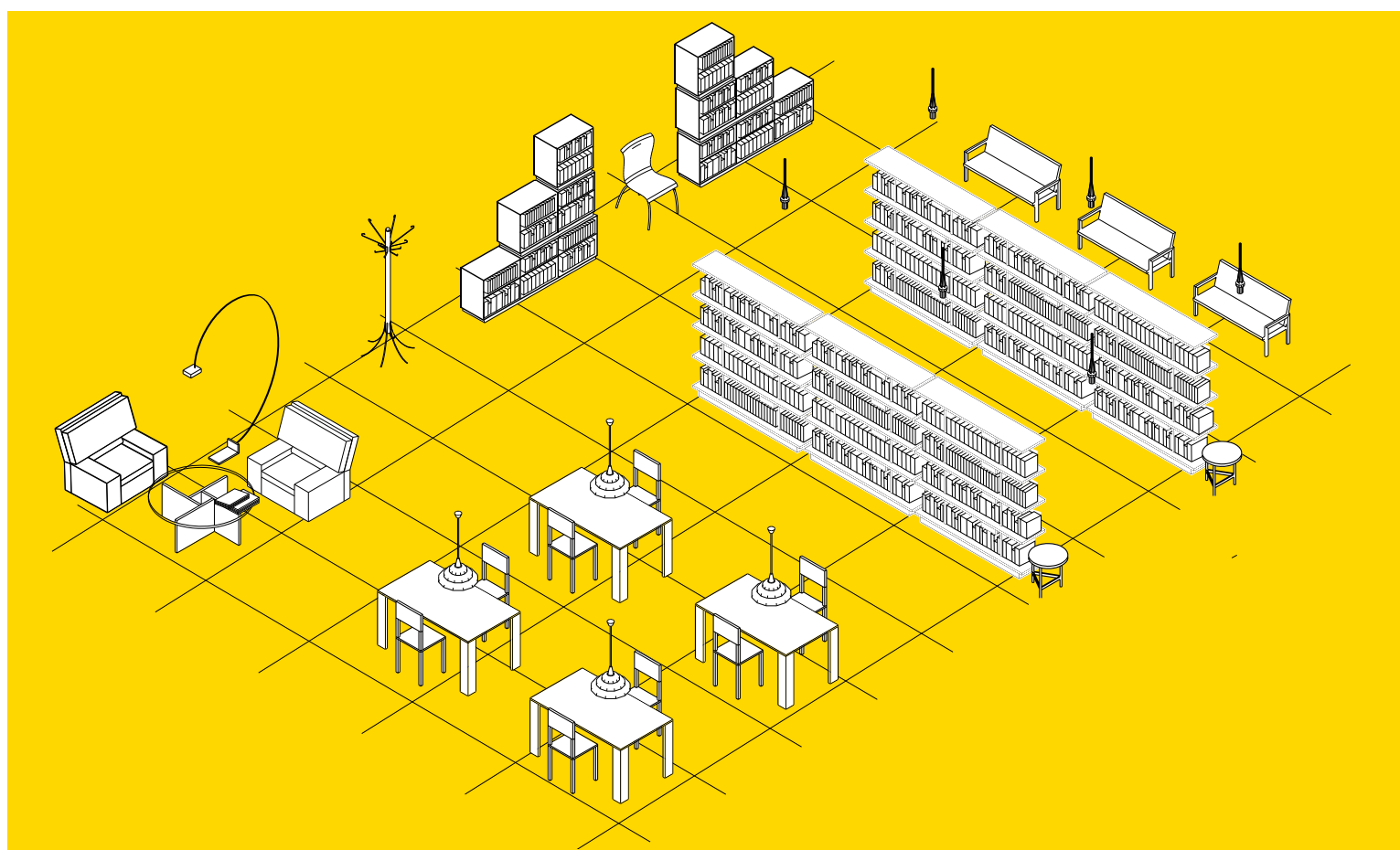


Towards the figure of the eco-exhibition designer

Editors
Davide Crippa
Barbara Di Prete



EDIZIONI
IL PAPAVERO

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of Bruno Martina
Via Francesco De Sanctis, 32
83030 Manocalzati (AV)

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Editors:

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

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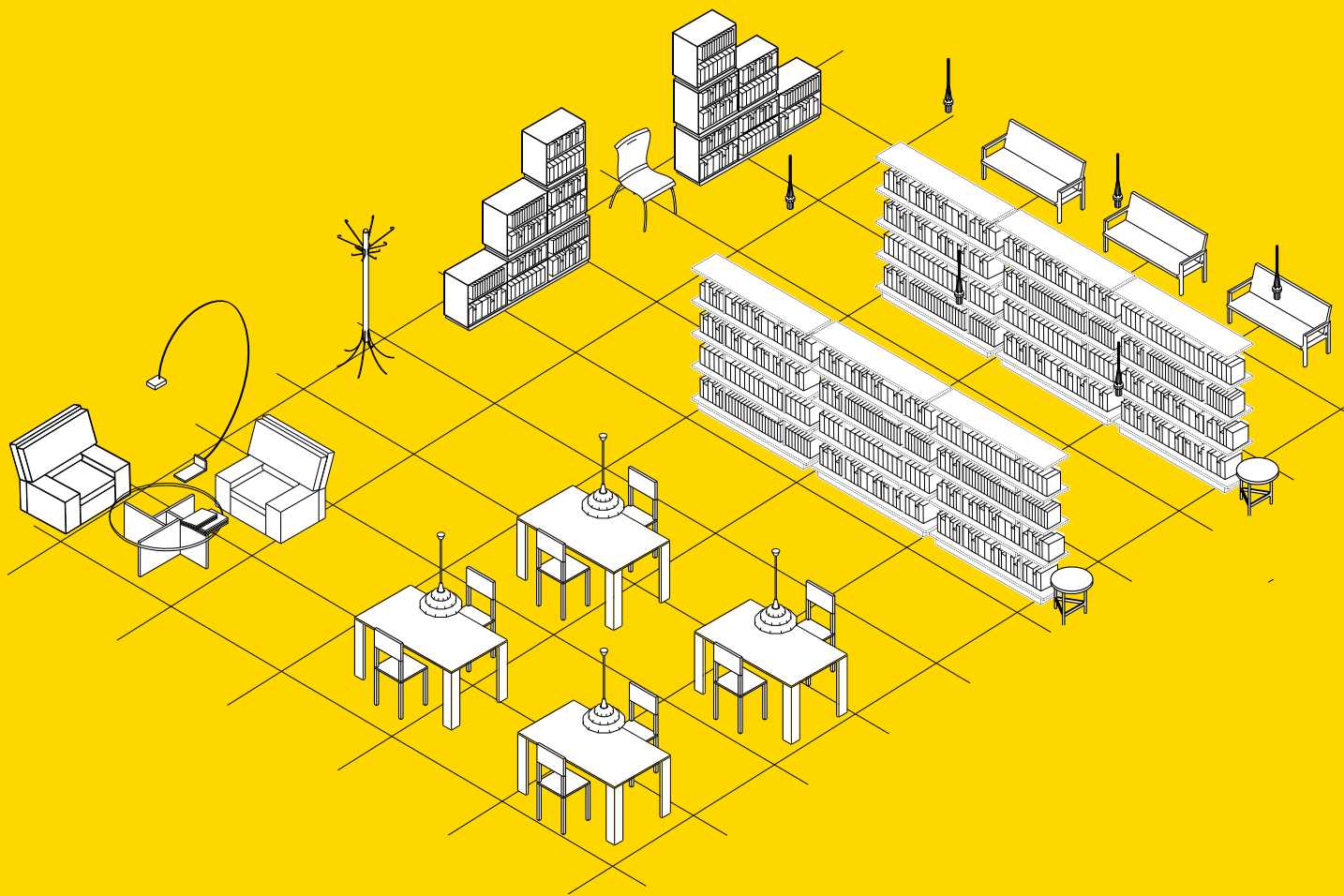
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Introduction

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

B. Di Prete | Politecnico di Milano
Department of Design



Fig. 1. Photograph of the First NSBVN Cluster Conference dedicated to the sustainable exhibit — 18 June 2024. Photo: ClusterNSBVN_Iuav.

Introduction

There are books born from the urgency to recount change, and others that aspire to accompany it, to guide it, and, if possible, to accelerate it. towards the Figure of the Eco-Exhibition Designer pursues both aims: on one hand, it captures a crucial transition in the history of exhibition design — a contemporary urgency reflecting a widespread awareness of sustainability — and on the other, it positions itself as a tool for reflection and action within a field that, today more than ever, needs new visions.

The book emerges from the experience of the “NSBVN Cluster – Non Si Butta Via Niente,” launched by Università Iuav di Venezia and supported by a broad partnership of institutions and professionals. Venice is not only the backdrop but also the symbolic key to this journey: for centuries a city of water and of fragile balance with nature, today it stands as a laboratory for sustainability applied to design, a place where the tradition of exhibition-making intertwines with the urgent need to reduce the ecological impact of cultural practices.

The project Exhibit 2.0: The Ecological Turn, funded through the “TOCC – Capacity Building” program, provided the operational framework for concrete actions including material-sharing platforms, workshops on reuse and digital fabrication, training programs for students and professionals, guidelines for institutions, and, not least, this volume — conceived to outline the theoretical and



Fig. 2. View of a portion of the installation characterized by sustainable, reversible self-supporting structures. Photo: ClusterNSBVN_Iuav.

operational foundations for defining a new professional figure: the eco-exhibition designer.

This first book in the Sustainable Exhibit series gathers the initial outcomes of these synergic actions, reworking observations that emerged during the “NSBVN” conference (2024) and transforming them into critical reflection and cultural proposition.

Here, exhibition design is analyzed in its dual projectual and practical dimensions, in the creation of temporary spaces for exhibitions, events, fairs, and installations. The discipline is interpreted by preserving its many facets, aware that it moves in delicate balance between art and science, between creativity and rigorous technical rationalization, between skillful improvisation and precise logistical planning, between replication and adaptability in site-specific solutions.

In its attempt to accompany the content on display — a work, a product, a story — through an engaging and memorable experience, exhibition design has often aimed to construct evocative narratives which, especially in their more commercial forms, have led to spectacular, yet costly and hardly sustainable installations. The issue, however, is not merely economic: the ephemeral nature of exhibitions has for decades fostered wasteful practices, short production cycles, and an inten-

sive use of resources not always easily recyclable.

Today, amid a global environmental crisis, the field can no longer avoid a radical rethinking. If every exhibition entails material consumption, transport, energy use, waste production — and, not least, the involvement of extensive human and technical resources — one question inevitably arises: how can we make sustainable what is, by nature, short-lived? It is within this context that the concept of the eco-exhibition designer takes shape — a figure who, building upon new collective awareness and sensibilities, as well as on project practices and methodologies yet to be codified, can overcome the contradictions of the past without renouncing the essential nature of exhibition design: a technical and communicative artifact, specific to its context and subject, containing multiple narratives capable of speaking to diverse audiences, adaptable to the story it stages.

From this perspective, the eco-exhibition designer should not be understood merely as a skilled technician or a designer capable of producing optimized solutions, but rather as a “cultural and operational mediator,” able to connect different worlds and reconcile their often opposing needs — the innovation of academic research, the ambitions of cultural institutions, the challenges of enterprises, and the expectations of audiences. Their mission is to integrate creativity and ethics, beauty and efficiency, imagination and responsibility, pursuing a broad-spectrum sustainability — economic, environmental, and social.

A hybrid professional, capable of both vision and action, a bridge between institutions, enterprises, and communities, the eco-exhibition designer represents not only a new professional profile but also the emblem of a cultural paradigm shift: that of an exhibition practice which, though temporary, leaves enduring legacies — of ideas, practices, and relationships — rather than residues, waste, and excess. In this sense, *Towards the Figure of the Eco-Exhibition Designer* is not intended as a simple manual nor as a collection of academic essays: it is rather an invitation to dialogue. Each chapter opens a space for exchange — between past and future, theory and practice, aesthetics and responsibility. The reader is invited to take part in this dialogue, to imagine how the principles outlined here might translate into concrete actions within their own work, institution, or community.

In a world where sustainability has become a shared urgency, the eco-exhibition designer stands as both a practical response and a symbol — of a profession that has the courage to change, to reinvent itself, and to assume its responsibilities without relinquishing creativity. The future of exhibition design depends on our ability to embrace this challenge.

Thus, as one turns the pages of this volume, what unfolds is not only the story

of a transforming field, but also the emergence of a new way of conceiving the ephemeral — no longer as dissipation, but as an act of care; no longer as consumption, but as relationship; no longer as a fleeting gesture, but as a cultural act.



Fig. 3. Davide Crippa presents the conference and sets out the main themes concerning the sustainable exhibit. Photo: ClusterNSBVN_Iuav.



Fig. 4. Digitally printed joints to highlight sustainability in production and assembly, as well as the reversibility of the installation. Photo: ClusterNSBVN_Iuav.

On Display

*Exhibit design, Università Iuav di Venezia,
new paradigms of sustainability*

A. Bassi | Università Iuav di Venezia
Department of Culture del Progetto



Fig. 5. Presentation given by Albero Bassi during the first conference of the NSB-VN Cluster - Sustainable Exhibit. Ca' Tron, Venice, 2024.

On display

Exhibit design, Università Iuav di Venezia, new paradigms of sustainability

This contribution aims to provide a reconstruction—necessarily partial and shaped by a specific systemic and connective perspective on the dynamics of Exhibiting (Polano, 2000)—of certain episodes that have connected and continue to connect theories, histories, and practices around the themes of exhibit design in the city of Venice. It focuses particularly on the academic and scientific environments where the discipline has been taught and developed, first within the Istituto Universitario di Architettura di Venezia (IUAV) and, since the early 2000s, within the Università Iuav di Venezia.

After outlining some historical elements concerning the peculiar context of the Venetian university, attention is focused on paradigmatic situations. The first concerns an exhibition that served as a synthesis of the exhibit design's capacity to shape and represent the material culture of its time—an event animated by figures connected, in various ways, to Iuav and to Venice. The second relates to the renewal of the field of interior and exhibit design within Università Iuav di Venezia, and the scientific, cultural, and disciplinary conditions that made this possible.

Exhibit design in Venice: profession and education

Since the postwar period, the Istituto Universitario di Architettura di Venezia has

developed a strongly contemporary and innovative approach to the role of design, one that may be summarized through at least two key factors. On one hand, an advanced theoretical, historical, and critical elaboration, carried forward by figures such as Giuseppe Samonà, Bruno Zevi, Manfredo Tafuri, Francesco Dal Co, Sergio Polano, and Massimo Cacciari. On the other, the decisive contribution of practitioners—along a geographical axis that initially linked Venice with Rome and later with Milan—and the presence of architects such as Carlo Scarpa, Franco Albini, Ignazio Gardella, Ludovico Belgiojoso and Ernesto Rogers, Gino Valle, Giancarlo De Carlo, Carlo Aymonino, Vittorio Gregotti, and Aldo Rossi, not to mention urban planners like Giovanni Astengo and Leonardo Benevolo (Ciribini, Pupi, & Romano, 1961; Carullo, 2009; Zucconi, 2012; Pastore, 2007; Rizzo, 2007; Bulegato, 2016; Bulegato & Pastore, 2017; Bassi & Bulegato, 2024). The work of many of these architects engaged deeply with the design of various types of interior spaces—from domestic environments to exhibition spaces, both permanent and temporary—through both practical design and historical-critical reflection, closely linked to their educational activities.

A particularly significant initiative in this respect was the inter-university Doctoral Program in Interior Design, directed and animated by Adriano Cornoldi of Università Iuav di Venezia (Cafiero, Flora, & Giardiello, 2020). For many years, this program nurtured expertise and supported the academic and disciplinary development of the field.

One of the fundamental milestones of Iuav's role in exhibit design is undoubtedly the historical-critical reconstruction presented by Sergio Polano in his seminal volume *Mostrare* (Exhibiting, 2000), which remains a foundational reference for the discipline.

This work—like much of Polano's scholarship, from his studies on Dutch architects to those on visual communication—opened new paths of research while providing synthetic frameworks derived from historically and critically grounded analysis. Decades later, *Mostrare* continues to be an essential reference on exhibit design, aligning the cornerstones of the field's history with methodological and substantive insights that help orient contemporary practice.

Within Venice's rich artistic, cultural, and economic context—enlivened by the presence of a scientific and academic community such as Iuav, and by a design and educational culture shaped by figures of national and international prominence—it is possible to identify a number of emblematic episodes that marked their respective eras and introduced innovative turning points.

A paradigmatic example of building a design system through disciplinary dialogue: the Murano glass exhibition (1953–1959) and the exhibit project

Temporary or permanent exhibitions—whether institutional, cultural-scientific, or commercial—have long served as significant instruments for expressing the broader context of an era, revealing the configurations that embody, in the broadest sense, representations of material culture (Bassi, 2018a; Bassi, 2018b).

Each exhibition, made possible by favorable conditions and contexts and developed across its scientific and curatorial dimensions, finds synthesis within a high-quality design framework. Around such an exhibition, key figures from cultural, artistic, and design circles gather, creating a crucible of intentions, skills, and productive outcomes.

The 1950s were particularly fertile in this regard. In postwar Italy, the fervor of economic, political, and socio-cultural reconstruction—coupled with the growth of industry and enterprise, the emergence of a consumer market, and the establishment of design’s public role—offered fertile ground for experimentation and innovation. For Venice, an exemplary case of this process was the *Mostra del vetro muranese* (Murano Glass Exhibition, 1953–1959) (Bassi, 2021), which involved numerous figures active in the city’s artistic, design, and academic scenes, many of whom were directly or indirectly connected to Iuav University.

This exhibition was shaped through a network of historians and curators, designers such as Carlo Scarpa and Arrigo Drudi, and artisans and designers from the Murano glassmaking district—one of Italy’s most vital production centers and a key force in defining the identity and international recognition of Italian design. The initiative was strongly supported by a public institution, the Istituto Veneto del Lavoro (IVL), representing one of the earliest and most striking examples of the potential of a “Design System”: an integrated mode of action involving historians, designers, specialized professionals (including photographers), companies, and institutions, capable of producing significant cultural and market impact.

In 1953, on the occasion of the Third International Glass Congress held in Venice, the *Mostra del vetro muranese* was staged at Palazzo Vendramin Calergi (July–August 1953). The exhibition—organized by Virgilio Vallot and Dell’Oro, promoted by the National Glass Association, and set up by the IVL (Sartori, 1989; Rigon, 2006)—was conceived as a traveling event.

Between 1953 and 1959, the IVL supported a cycle of traveling exhibitions across Europe, offering a major overview of the state of the art in Italian craftsmanship

and an innovative approach to promoting “Made in Italy.” These exhibitions featured architects and designers such as Carlo Scarpa and the glass artist Vini-
cizio Vianello, who alternated as curators and exhibit designers.

The series began with Venetiansk Kunsthåndverk in Oslo (May 1953), primarily dedicated to Venetian glassworks but also including sections on textiles, mosaics, and ceramics. The objects were selected by a commission composed of Dell’Oro, painters Carlo Zorza and Vianello, and architects Carlo Scarpa and Amelia Morassutti, with the latter two also responsible for the exhibition design. The sequence continued with *Les artisans vénitiens* at the Musée de l’Athénée in Geneva (1954), curated by Guido Perocco, Scarpa, and Vianello, and with *Modernt Muranoglas* at the Röhsska Konstslöjdmuseet in Gothenburg, Sweden (7–27 April 1956), where Vianello designed the installation, displaying the glass pieces directly on low tables to enhance the luminosity of the space.

Later that same year, *Les nouveaux verres de Murano* opened at the Musée des Arts Décoratifs in Paris, where Vianello and Scarpa were invited to produce new glass designs alongside other creators.

The exhibitions continued through 1958–1959 with the traveling showcase *Ausstellung der dekorativen Kunst in Venetien* (Kassel, Köln, Dortmund,

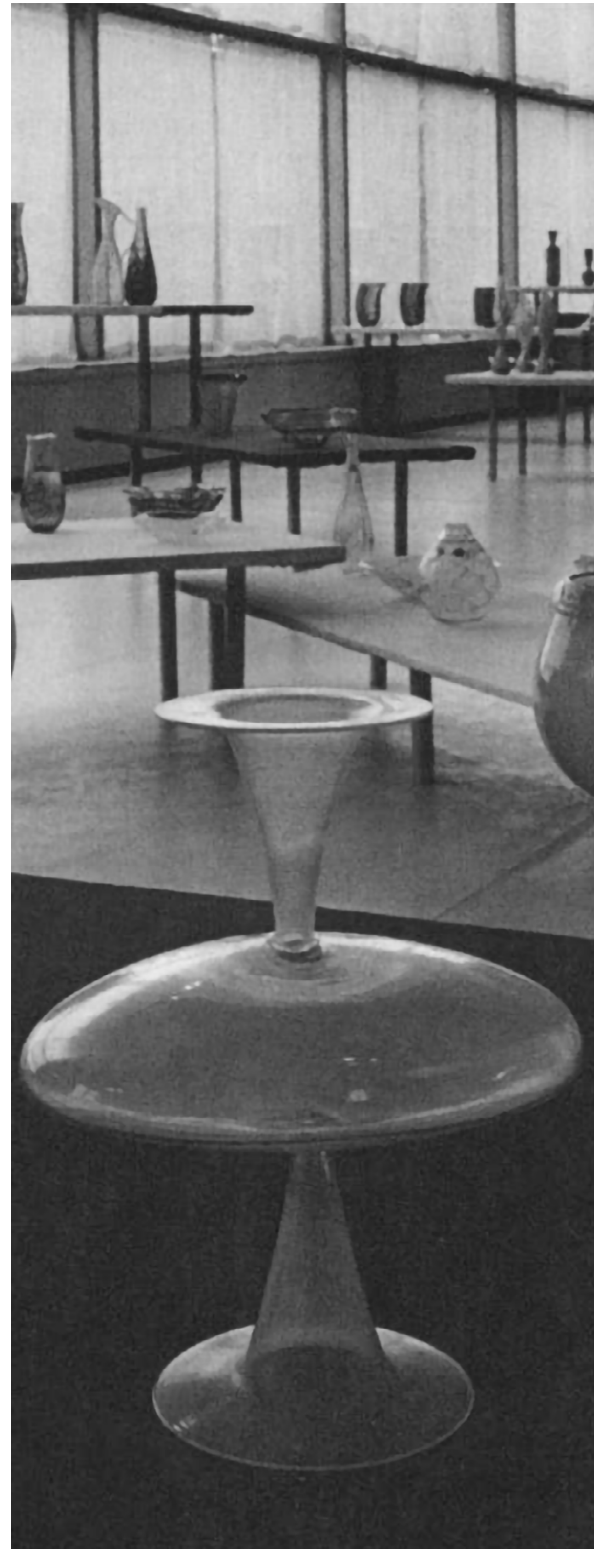


Fig. 6. Exhibition design by Vini-
cizio Vianello for *Modernt Muranoglas*, Röhsska Konstslöjdmuseet,
Gothenburg, 1956. Photo: Fondazione
Giorgio Cini.

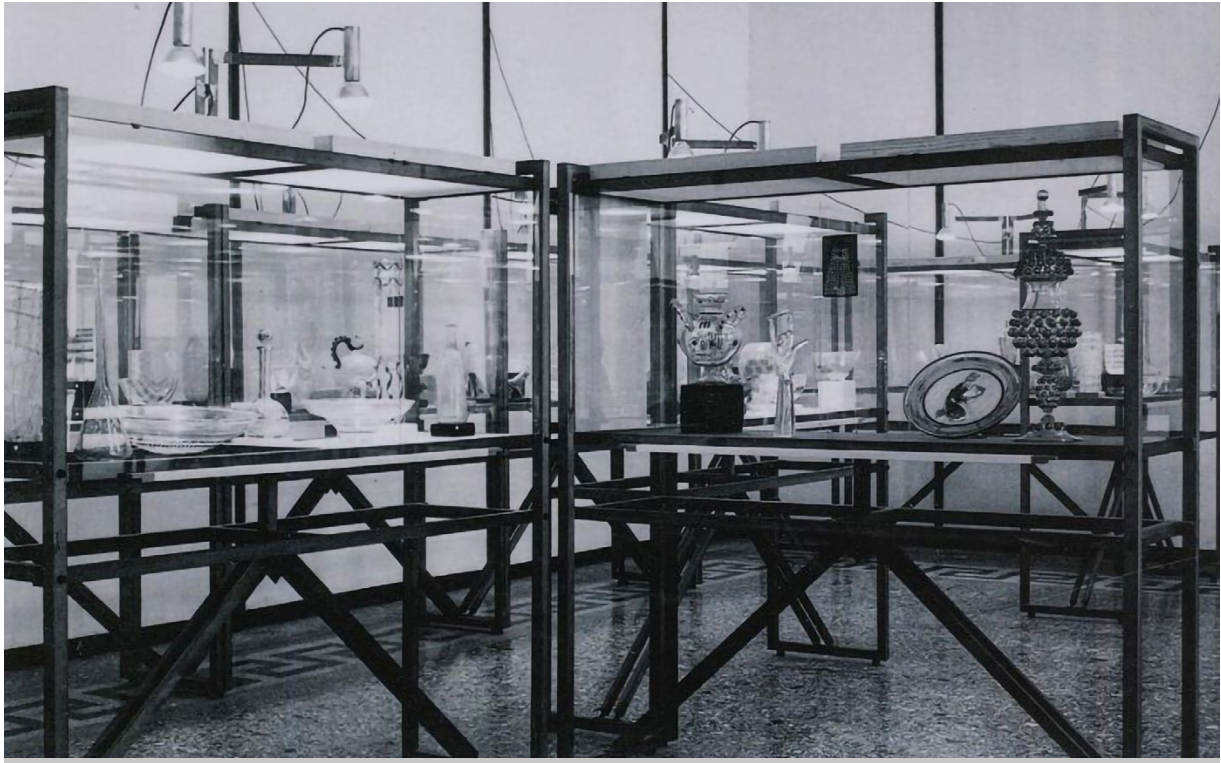


Fig. 7. Installation view of the exhibition *Vetri di Murano 1860–1960*, curated by Rudi and Scarpa, Palazzo della Gran Guardia. Photo: Fondazione Giorgio Cini.

Frankfurt am Main, Würzburg), dedicated to Venetian decorative arts. In this case, Scarpa handled the selection of works, while Vianello curated the exhibition layout, reiterating the idea of unprotected, open display surfaces first used in Sweden.

Beginning with the glass exhibition at the IX Triennale di Milano in 1951 (and its subsequent presentation in Paris) and continuing through the IVL exhibitions organized for the Venice Glass Congress in 1953, more than a dozen traveling exhibitions were staged across Europe in the following decade, aimed at promoting the design and production of Murano glass.

In addition to those promoted by the IVL, other relevant exhibitions included *Nitida Italiensk Konst* (Liljevalchs Konsthall, Stockholm, 1953; later in Helsinki, Oslo, and Copenhagen), curated by the Venice Biennale; *Forme nuove in Italia* (Zürich, Kunstgewerbemuseum; Düsseldorf, Kunstverein, 1954) and *Italian Contemporary Handicrafts* (London, The Italian Institute; Dublin, St. Anthony's Hall, Merchants' Quay, 1956), organized by the Compagnia Nazionale Artigiana. This itinerary ideally culminated in Italy in 1960 with *Vetri di Murano 1860–1960* (Palazzo della Gran Guardia, Verona), curated by Scarpa together with Licisco Magagnato and Astone Gasparetto. Working with Arrigo

Rudi, Scarpa designed an exhibition system composed of minimalist glass display cases that highlighted small, delicate glass objects, arranged on shelves covered in white, black, gray, and red fabric. Some were complemented by parallelepipeds of the same material, while lighting came from two symmetrical spotlights above, diffused across the objects through a stretched canvas.

The cases—designed to provide reusable museum equipment, and still in use today—were built with lightweight spruce frames, easily dismantled and recomposed. They were arranged in ordered orthogonal lines, grouped in twos and threes to satisfy curatorial needs and give rhythm to the exhibition, while a red band running along the junction between wall and ceiling visually tied together the exhibition route. Fittingly, at the Castelvecchio Museum in Verona—restored and reinstalled by Scarpa between 1958 and 1972 using similar structures—this “ideal reprise” of a virtuous model was revisited in 2007 with the exhibition Vini- cio Vianello. *Il design del vetro* (Bassi, Marini, & Di Lieto, 2007).

Interior (and Exhibit) Design at Università Iuav di Venezia: a re-foundation

Another foundational episode related to the centrality of Iuav University and of Venice took shape in the early 2010s, when a wide-ranging debate emerged within Iuav’s design area. This dialogue led, among other outcomes, to the establishment of a specific interior design track within both the undergraduate and graduate degree programs — launched respectively in the 2017–18 and 2021–22 academic years.

This new focus redefined interior design through different areas of intervention, while also repositioning it in light of contemporary conditions and the critical and operational specificities of design practice. The initiative achieved broad resonance, both scientifically — becoming a new national reference model — and educationally, generating strong interest among students and stakeholders.

The direction taken, both critical and pragmatic with respect to the current state of professional practices, clearly extends the Venetian tradition of research and teaching, animated by theorists, historians, and designers of interior spaces who have been actively involved in education and research.

Physical and Communicative Artifacts, People, and the Design of Space

The contemporary conception of artifacts has profound implications for how we understand and design different types of interior spaces — from domestic en-

vironments to exhibition spaces, from exhibit to retail design, and to temporary contexts such as events, performances, and installations.

Today's spatial landscape is dominated by what Marc Augé termed non-places: interiors and environments of living and consumption that appear, from a design perspective, incomplete or generic. This condition reflects both the difficulty of communicating the cultural and social value of design intervention, and the limitations — even the “distraction” — of design culture itself when dealing with what is often perceived as a “minor” domain.

Many interior spaces today are equipped with functional yet basic furnishing solutions — a condition evident both in the “virtuous but homogenizing” democratic design of Ikea, and in public spaces realized under low-budget procurement logics. Conversely, another trend focuses on status (rather than style) symbols, where space organization and management express economic and social position more than cultural meaning.

The struggle to construct an identity reflecting the people who inhabit and use these spaces — and the transformations of contemporary life — has led to regressive tendencies. Retro and conservative approaches revive stylistic codes and aesthetic languages of memory, or indiscriminately re-propose evergreen and vintage objects within environments that appear old-fashioned, outdated, and self-consoling. Others, driven by cost or context, resort to standardized and impoverished solutions that disregard disciplinary expertise and aesthetic quality.

Against this backdrop, the issue of living and inhabiting — both in private and collective spaces — and the quality of those experiences emerge with striking clarity. This underscores the need for design disciplines, from product design to interior design, to move beyond their self-imposed constraints and to resist the passive acceptance of market-driven logics that fail to consider users' real needs.

The design of architecture, interior and exterior spaces, furnishings, and physical–digital tools for communication and service must be understood as part of an integral and integrated project, in which each component interacts with the others. The ultimate goal is the effectiveness of cognitive and experiential processes and the cultural satisfaction of diverse users.

Intervening in interior spaces thus means creating environments suited to specific activities but also capable of evolutionary and adaptive change, employing increasingly complex systems of furnishings and equipment that allow for flexibility.

It is worth reiterating — a point so obvious yet so often forgotten — that any scientific and cultural endeavor concerning design disciplines must be based on dialogue, respect, and collaboration between different areas of expertise. This ap-

proach must transcend unprofessional shortcuts, bureaucratic simplifications, and disciplinary isolation.

Such a dialectical process must foster a flexible yet visionary form of design practice — one that respects existing conditions while also opening pathways for experimentation and for possible, imagined, or projectable futures.

Alongside appropriate furnishings and technologies — designed for functionality, ergonomics, and aesthetic quality — a wide range of technical devices and tools plays a key role. These provide accessible, user-friendly forms of interaction that accommodate diverse user needs.

Spaces and functions can also benefit from the potential of physical and digital tools aimed at communication, information, and the generation of both individual and shared knowledge processes. The overarching objective of design is to enhance learning experiences and to foster social relations conducive to safety, serenity, and well-being.

The current technological–digital transition, both necessary and inevitable, holds vast potential but must be aligned with human thought and purpose. Exhibition and spatial systems should be reframed as instruments serving the needs, desires, and aspirations of human beings. Transitions must be not only technological but also cultural and cognitive, fostering socio-cultural, economic, and environmental sustainability.

The design of different types of spaces — and their functional and aesthetic organization — must reclaim its own specific contents and values. Beyond mere instrumental efficiency, hyper-performance, and the energy unsustainability of today's commodified environments (and even commodified humanity), design must once again address enduring themes: reflection and thought, knowledge and truth, time and ethics.

In contrast to the performance-oriented, efficiency-driven, and corporate models that dominate much of current design practice, it is necessary to explore new paths that place human needs — physical, mental, and consequently cultural and instrumental — at the center. These must be supported by a system of values that combines timeless principles with new forms of awareness. Within this framework, design solutions at all scales can embody explicit and meaningful educational programs.

Such design reflection and practice should emerge from an interdisciplinary and community-based elaboration, capable of proposing and enacting, through appropriate choices and skills, renewed or rediscovered values such as ethics, sustainability, inclusivity, a right sense of time, a renewed relationship with the body,

and a “calm technology.” These become paradigmatic tools for interpreting and practicing the contemporary dialectic between the artificial and the human–natural.

In this vision, buildings, interiors, installations, services, and tools — interpreted and implemented through the various design disciplines, from planning to architecture, from product design to visual communication — must become, implicitly or explicitly, texts within a broader and integrated discourse.

New Conditions, New Teaching

In light of these considerations, at the beginning of the second decade of the new century, within the design area of Università Iuav di Venezia, it became evident that the Italian educational landscape offered only a partial and outdated approach to the design of interior spaces — whether domestic, working, or exhibition environments, both public and private. This gap concerned not only physical and real spaces but also the possible, interactive, and digital ones that have emerged from new technologies and media.

Traditional theories and practices appeared increasingly inadequate, while contemporary and more complex approaches — already consolidated in the professional context — struggled to find academic and institutional recognition.

Given this situation — with new conditions already active and the partial development of an academic interest in the topic — a new opportunity was created for theoretical reflection, for reviewing relevant professional experiences, and for proposing an innovative educational model.

Among the issues addressed was the fact that interior and spatial design operates at the intersection of different disciplines, drawing upon broad and diversified areas of expertise that are not always manageable within a narrowly disciplinary logic, but neither fully acknowledged within an expanded and “diffused” conception of presumed interdisciplinary competence.

The scientific and educational proposal developed within the design area of Iuav University sought to rethink interior design through a different interpretive lens than the traditional one.

The starting point was a broad conception — informed by contemporary conditions of life — of the relationship between people and various kinds of physical, digital, and interactive spaces, as well as with the physical and communicative artifacts that populate them.

In addition to the interiors of domestic and work spaces, attention extended to spaces dedicated to exhibiting — from exhibition design to retail environments

— and to situations in which the physical environment is replaced or integrated by digital or multimedia project and representation systems.

The innovative design approach proposed here is to consider spatial design as inherently integrated with the various types of physical and communicative artifacts that inhabit it, and above all, as responsive to specific modes of user experience.

Thus, the focus is not only on space itself but on what it contains and on the conditions of its use.

This comprehensive and process-oriented attention, spanning multiple scales and design modalities, combined with the primary objective of addressing users' needs, repositions the educational proposal within the methodologies and domain of design.

The contemporary condition of design must now engage with profound transformations in scientific, technological, economic, social, and cultural systems.

Widespread access to resources and tools for design, production, communication, distribution, sales, consumption, and product life-cycle management often creates the illusion that design can be “diffused” — a practice not requiring specific expertise or training.

The issue is not to deny the richness of such potential, but rather to reaffirm the necessity of defining design's role as a builder of meaning, requiring the identification and formation of a specialist designer.

For a scientific and educational trajectory such as the one envisioned here, several aspects are crucial.

First, design must be understood as a comprehensive and collaborative process, governed by cultural, cognitive, and critical tools developed alongside technical and instrumental ones. It is about “thinking for design” as much as — or more than — “doing for design.”

This concise principle is crucial for addressing, on one hand, the proliferation of professionally oriented or self-taught design courses, and on the other, for reinforcing design's scientific and cultural identity — as well as its socio-economic recognition — based on its ability to offer a high-level intellectual contribution within a global knowledge-based system. These reflections orient the educational approach towards the necessity of maintaining dialogue with the professional world (a hallmark of Iuav design since its beginnings), while also strengthening broad and synthetic knowledge competencies — capacities that can only be developed through theoretical, historical, and critical foundations. These are the prerequisites for constructing meaning in design.

Education Towards New Professions

The breadth of topics and diversity of skills involved has made it possible to outline multiple roles, paths, and professional outcomes — ranging from spatial design for physical, interactive, and virtual environments to historically, critically, and curatorially oriented roles.

The latter particularly benefit from training within a design-based educational pathway, where knowing, designing, and making are integrated in ways unavailable in other university programs.

These articulated and complex profiles correspond to new professional figures — some already emerging in the labor market and destined for further development — while also repositioning traditional professions, redefining their accreditation and roles in response to new demands and opportunities generated by contemporary conditions.

A distinctive feature of the undergraduate and graduate courses in Interior Design at Università Iuav di Venezia is their focus on deepening both theoretical and design competencies in relation to a new framework for intervening in diverse types of interior spaces. Particular attention is given to exhibiting environments — such as museums, exhibitions, and events — which are increasingly characteri-



Fig. 8. Participants of the First NSBVN Cluster Conference, with the sustainable exhibition set up behind the audience – 17 June 2024. Photo: ClusterNSBVN_Iuav.



Fig. 9. Installation view of the exhibition “Design. Una Mostra” set up by NSBVN during the First NSBVN Cluster Conference. Photo: ClusterNSBVN_Iuav.

zed by hybrid conditions, where spatial composition, organization, and management are indissolubly linked with digital and immaterial dimensions.

This occurs both in how users relate to physical space and in how they access communicative and service-based content. The program specifically aims to train professionals in interior, exhibit, and retail design who, within interdisciplinary teams, are capable of contributing to an integrated and inclusive approach — one that ensures equitable access and effective experience for diverse audiences.

*From the Conferences *Mostrare* (2018) and *Design esposto* (2021) to the NSBVN Research Cluster (2020)*

Within the broader scientific and cultural conditions shaped by the debates and by the renewed educational offerings previously discussed, several significant initiatives have emerged — research activities, design experiments, and third-mission projects that have fostered territorial dissemination and academic collaboration. Among these, particularly noteworthy are the scientific and research-based events that have explored exhibition design in its various forms, and that have strengthened Iuav’s position within the national and international discourse on design culture.

A milestone in this context was the 2018 conference *Mostrare. Design integrato dell’allestimento temporaneo* (Exhibiting: The Integrated Design of Temporary Installations), organized by Università Iuav di Venezia. The event presented a series of exemplary exhibition projects and addressed, through case-based discussions, the design of temporary exhibitions — highlighting two interrelated aspects: first, the multiple intersections between the diverse professional figures collaborating in the act of “exhibiting”; second, the potential of new or renewed technologies to communicate the content on display.

Most of the conference contributions consisted of case analyses. Through a dialogue between the professionals involved in each project and a designer or scholar acting as discussant, the conference examined the entire process of exhibition design and realization — from conceptualization to material execution.

Another significant national event was the Fifth AIS/Design Conference, *Design esposto. Mostrare la storia / la storia delle mostre* (Design Exposed. Exhibiting History / The History of Exhibitions), curated by Fiorella Bulegato, Maddalena Dalla Mura, and Gabriele Monti, and held in Venice on 26–27 November 2021 (Bulegato, Dalla Mura, & Monti, 2021).

The conference program featured leading scholars and practitioners and was articulated across several thematic sessions: At the Origins of Design; Promoting Design Culture; Exhibiting and Exposing Oneself; Interpreting Fashion; Disciplinary Intersections; Expanding Design; Documenting to Narrate; and Between the Real and the Virtual (Doimo & Pogacnik, 2020).

Within this rich and multifaceted scientific, design, and educational environment — which has flourished over less than a decade — the *Non Si Butta Via Niente* (Nothing Goes to Waste, NSBVN) research cluster was established in 2023 within Iuav University’s research system. The cluster, initiated and coordinated by Davide Crippa in collaboration with numerous faculty members and researchers, has identified the theme of the sustainable exhibit as one of its most prominent and strategic areas of investigation (Università Iuav di Venezia, 2023).

This theme has long been central to discussions surrounding exhibitions of all kinds — from temporary shows to trade fairs and retail displays — and underscores the importance of developing an organic, integrated approach supported by shared methodologies. One of NSBVN’s distinctive strengths lies precisely in its ability to build connections among diverse stakeholders involved in exhibition-related initiatives — creating critical mass and fostering awareness, collaboration, and access to national and international competitive research funding. These activities, in turn, sustain both scientific and theoretical-historical research while

informing guidelines and operational practices.

At the heart of this dynamic system stands Università Iuav di Venezia, acting as the driving force of an on-going process aimed at defining the theoretical, methodological, and practical foundations of a truly sustainable culture of exhibition design.

Notes

¹ For recent references, the exhibition *Design & Territories in Agrigento (2025)* presented two outcomes of the 2024 collaborations with local Venetian museums (curated respectively by A. Bosco and L. Calogero, and by E. Bonini Lessing and G. Toneguzzi), as well as the joint project between Università Iuav di Venezia and the University of Calabria (curated by D. Crippa, A. P. Vacanti, and A. Bertacchini) for an immersive, interactive, and multimedia experience of corporate museums, supported by experimentation with Artificial Intelligence tools. In the summer of 2025, an exhibition dedicated to the craftsman, entrepreneur, and designer Paolo De Poli (whose extensive archive is preserved in the Iuav Project Archive) is scheduled to open in collaboration with the City of Padua at the Museo degli Eremitani, realized also thanks to funding from the regional FSE program (curated by A. Bosco, L. Calogero, and P. Lora).

² Curated by A. Bassi, F. Bulegato, and L. Calogero, Università Iuav di Venezia – Tolentini, 2018.



Fig. 10. Exhibition setup for “Alive and Kicking: 30 Years of Iuav Design”, curated by NSBVN for the SID 2025 conference. Photo: ClusterNSBVN_Iuav.



Fig. 11. Exhibition setup for “Alive and Kicking: 30 Years of Iuav Design”, curated by NSBVN for the SID 2025 conference. Photo: ClusterNSBVN_Iuav.

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The profession facing the challenge of change

The strategic role of the project

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



Fig. 12. Davide Crippa presents the principles of sustainable exhibit design during the First NSBVN Cluster Conference. Photo: ClusterNSBVN_Iuav.

The profession facing the challenge of change

The strategic role of the project

We live in a society characterized by constant change — a condition that also affects the field of exhibition design. Today, we find ourselves in a crucial phase of transition, in which the temporary and ephemeral nature of exhibition setups must confront the imperatives of ecological transition — a transformation now essential in every sphere of life in order to mitigate the environmental effects of climate change, whose urgency is increasingly evident.

Within this framework, a wide range of tools, practices, and regulations has emerged: from the toolkits promoted by ICOM Italia to the Sustainable Operational Museum Toolkit developed by CIMAM (2021), from the Creative Green Tools created by Julie’s Bicycle (2020) to the Creative Carbon Scotland package (2019), as well as the Carbon Calculator and the Criteri Minimi Ambientali (CAM) for Events introduced by the Italian government.

Several exhibitions have also addressed sustainability in cultural production from a critical perspective — among them *Waste Age* (2021), curated by the URGE collective at the Design Museum in London, which explored the ecological implications of exhibition-making.

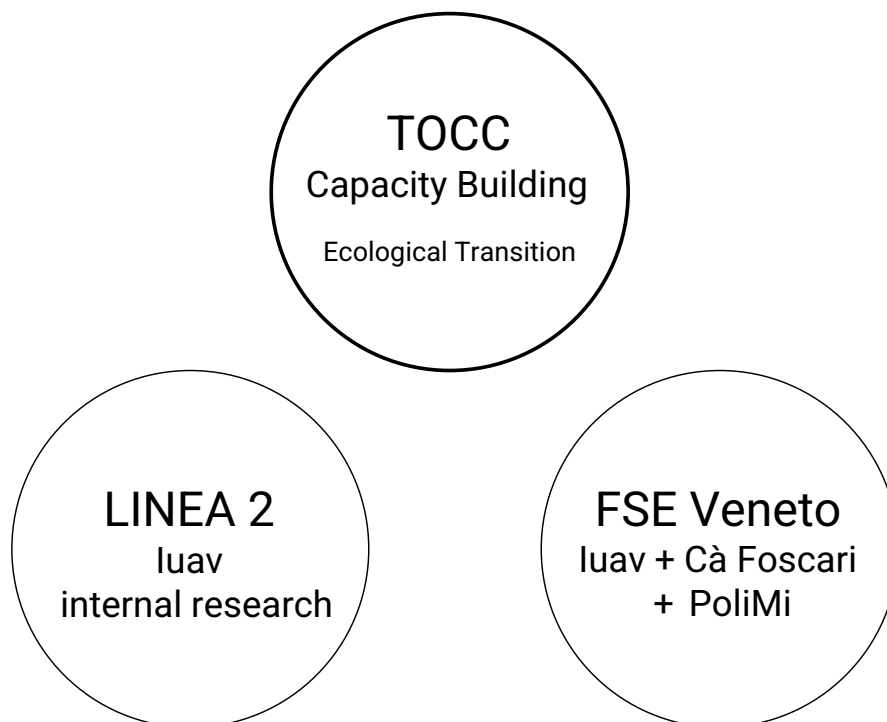
Within this evolving scenario lies the “NSBVN – Sustainable Exhibit” Cluster and the proposal submitted by Università Iuav di Venezia to the TOCC – Capacity Building program on ecological transition. This initiative led to the funding

of the project Exhibit 2.0: The Ecological Turn, structured into three lines of research and action, and to the organization of the first national conference in Italy dedicated to the themes of sustainable exhibition design.

This three-year project, through targeted tools and actions, aims to foster ecological transition within the field of exhibition design, contributing to the definition of a new hybrid professional profile equipped with the skills needed to face contemporary challenges.

The TOCC – Capacity Building Project

Exhibit2.0: The Ecological Turn, funded under the TOCC – Capacity Building call, is a structured initiative designed to accompany the exhibition sector through the ecological transition. The proposal, promoted by Università Iuav di Venezia, received support for three complementary lines of action: the building of a network and dissemination tools (Project 1), the experimentation of innovative practices and eco-design models (Project 2), and training to support the transition (Project 3). Taken together, these actions aim to create a platform for sharing reusable materials and components, to develop guidelines and libraries



Tab. 1. Actions implemented by the project “Exhibit2.0: The Ecological Turn” within the three proposals funded under the TOCC – Capacity Building / Ecological Transition program.

of construction details for reuse and recycling, and to train new professional figures—eco-exhibition designers—capable of integrating design, technical, and managerial competencies.

The project unfolds through activities of research, experimentation, training, and dissemination: from workshops on recycling and digital fabrication to the publication of open-access educational materials and guidelines, and the development of e-learning courses and modules addressed to students, professionals, and cultural institutions. The overarching goal is to transform a sector traditionally marked by ephemerality and resource consumption into one able to combine creativity, sustainability, and international competitiveness, positioning Venice and the NSBVN Cluster as an advanced laboratory for sustainable innovation in exhibiting.

The “NSBVN – Sustainable Exhibit” Cluster

To address a disciplinary transformation of such magnitude, the first step was to create a shared space for dialogue and coordination—one capable of bringing together all the different representatives of the exhibition field: on one side, the wor-

<p>SHARING PLATFORM</p> <p>from the museum system to the events system</p>	<p>E-LEARNING PLATFORM</p> <p>remote / in-person training pathway for the ECO-EXHIBITION DESIGNER</p>
<p>EDITORIAL SERIES</p> <p>an Italian series with an English edition, distributed open access</p>	<p>THEMATIC CLUSTER</p> <p>a venue for dialogue and co-creation of transition content with all stakeholders</p>

Tab. 2. Actions implemented by the project “*Exhibit2.0: La svolta Ecologica*” in the applications funded under TOCC - Capacity Building/Ecological Transition call.

ld of research, with the participation of several universities; on the other, the market and its many stakeholders. Within this perspective, Università Iuav di Venezia took advantage of an institutional opportunity to establish a thematic vertical cluster dedicated to sustainable exhibition design.

Thus, the NSBVN – Sustainable Exhibit Cluster was founded, promoted by founding members including ICOM Italia, Triennale di Milano, Università Iuav di Venezia, Politecnico di Milano, and the Civic Museums of Venice and Padua. Today, the cluster also includes trade associations (Federlegno Asal, ADI, AIAP), museums and foundations (Fondazione Prada, Ocean Space), representatives of the Regional Directorate for Museums of Veneto, the Lombardy and Veneto regional administrations, as well as companies and professionals in the sector.

It is conceived as a model of integrated work that seeks to connect all operational dimensions of a field characterized by multiple forms of expertise and know-how: from technological and systems aspects (lighting, sound, and technical infrastructures), to construction (exhibition-building companies), logistics (transport and handling), and finally to spatial and visual communication design. The act of exhibition-making itself takes different forms depending on the context and the commissioning body—museums,

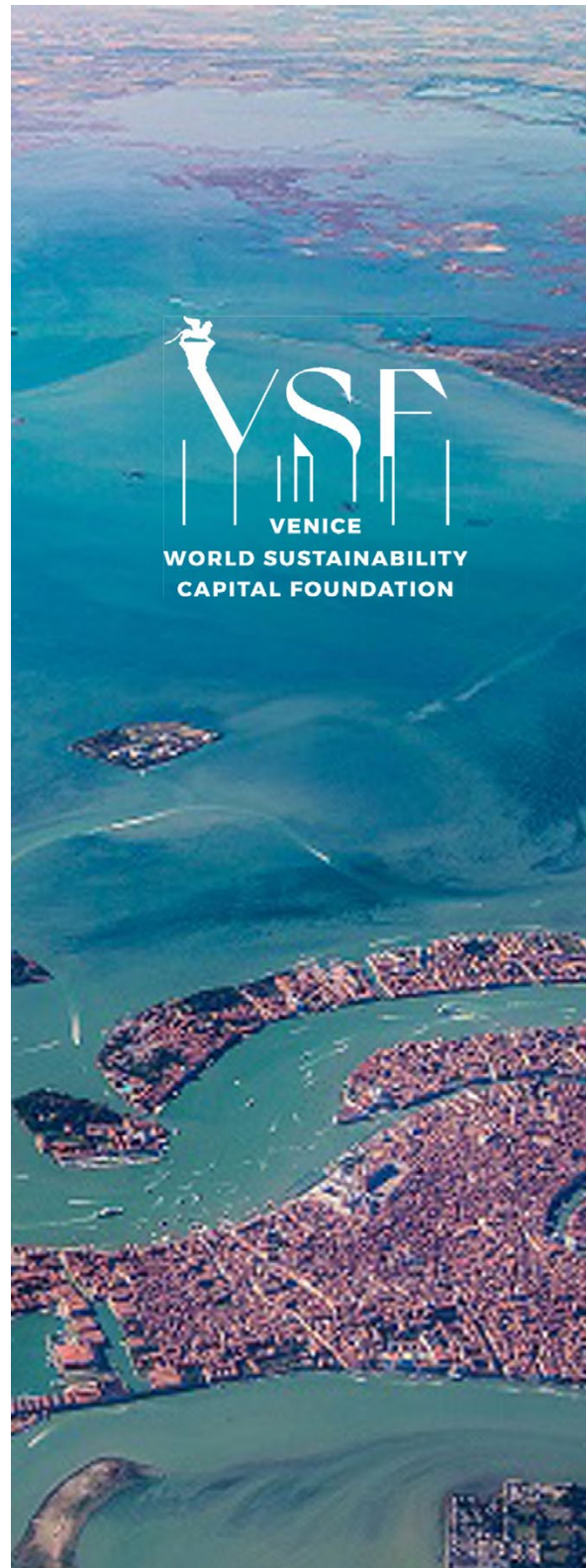


Fig. 13. A deep connection with the themes of exhibiting and sustainability makes Venice an ideal city for studying sustainable exhibition design.

fairs, festivals, or “temporary interiors” such as retail spaces.

This plurality of actors and skills demonstrates the inherent complexity of exhibition design—an area that, in Italy, boasts a long-established tradition of high cultural value.

The decision to promote the cluster starting from Venice was anything but accidental: the city has always played a central role in the history of exhibiting, thanks in part to figures such as Sergio Polano, author of the foundational book *Mostrare* (Exhibiting), and because Venice today represents one of the most active Italian contexts in the field of sustainability. It is no coincidence that the city has recently applied for recognition as the world capital of sustainability, reaffirming its distinctive relationship with nature—a defining element of its history since its foundation.

The cluster’s mission is to foster dialogue among diverse stakeholders, with the goal of building shared conditions and tools to initiate a genuine ecological transition in the exhibition sector. From this perspective, its first initiative was the establishment of an annual open meeting bringing together all the parties involved—an opportunity for exchange that allows multiple forms of expertise and vision to converge, generating a shared body of knowledge and collective foresight for the future.

Two Days on Sustainable Exhibiting

Within this framework of alliances and new synergies, it became necessary to create moments of public dialogue capable of translating the cluster’s intentions into shared practices. With this aim, the first national conference on sustainable exhibition design was organized and hosted in Venice, at Palazzo Ca’ Tron, on 17–18 June 2024.

The event represented a foundational moment for both the academic and professional communities, with the objective of creating a platform where research institutions, cultural organizations, and industry could meet and discuss strategies and tools for fostering a real ecological transition in exhibition practices.

The chosen format alternated morning sessions devoted to presentations of reflections and best practices with afternoon sessions organized as collaborative workshops around thematic tables. This approach made it possible to integrate two complementary dimensions: on one hand, the transmission of knowledge and experiences developed in different contexts; on the other, the collaborative construction of shared visions and practical solutions.

The first day featured presentations by representatives of ADI – Associazione per il Disegno Industriale, Federlegno Asal, and Centrocot, who offered complementary perspectives on sustainable exhibition design—from issues of design experimentation to those of manufacturing companies and technological solutions for material reuse and recycling. The morning concluded with the presentation of a publishing initiative, curated by a specialized publisher, aimed at collecting and disseminating scientific and professional contributions on sustainable exhibition design.

In the afternoon, thematic tables addressed the relationships between the economic system and exhibitions, the environmental impact and monitoring of “exhibition pollution” in cities with high event density, and finally the role of digital fabrication as an opportunity for eco-design.

The second day broadened the analytical field with contributions from ICOM Italia, which offered the perspective of museum institutions, and AIAP – Associazione italiana design della comunicazione visiva, which discussed the relationship between sustainability and communication in exhibition design. These discussions were followed by the presentation of the educational project developed by NonSiButtaViaNiente, aimed at promoting new interdisciplinary skills and



Fig. 14. Presentation of the Training section on the NSBVN platform, designed to increase knowledge of sustainability in exhibition design. Photo: ClusterNSBVN_Iuav.

approaches in design education.

During the afternoon workshops, participants addressed regulatory questions and the limits of applying Criteri Minimi Ambientali (CAM), explored opportunities for implementing circular economy practices in the sector, and examined a case study from the Civic Museums of Venice, which illustrated how principles of sustainability can translate into concrete actions.

The conference functioned as a laboratory of reflection and experimentation, providing a space in which critical issues could emerge alongside new operational perspectives. It became clear that the ecological transition of exhibition design requires not only technical tools but also a profound cultural paradigm shift—one capable of integrating economic factors, environmental responsibility, and aesthetic quality.

In this sense, the initiative laid the foundations for a network of collaboration which, beginning with the NSBVN Cluster, can guide the evolution of the sector in the coming years towards more sustainable, inclusive, and innovative models. The discussions also made it evident that the issue of sustainability cannot be addressed without considering in greater depth the professional figure of the exhibition builder (*allestitore*) and the regulatory framework that defines their



Fig. 15. Thematic table: Digital Fabrication for Eco-Design. Discussions on the opportunities offered by new production technologies. Photo: ClusterNSBVN_Iuav.

role. From this dialogue with professional associations emerged the persistent gap between the institutional definition of the *allestitore* and the real complexity of their functions.

This reflection therefore extended to the relationship between regulations, industry practices, and instruments such as the Criteri Minimi Ambientali (CAM), highlighting the need for an integrated approach that combines safety, efficiency, and environmental responsibility.

At the same time, the experiences presented showed that the drive towards change stems not only from regulations but also from clients and from the sector's capacity to imagine new design methodologies—approaches more attentive to reuse, to material life cycles, and to structured dialogue between designers and builders.

Training Activities Towards the Figure of the Eco-Exhibition Designer

While reflection on the role of the *allestitore* (exhibition builder) has revealed the limits of its current regulatory definition and the need to acknowledge its professional complexity—as discussed in the contribution by Marco Fogarolo of ASAL—it has also made clear that education and training must be rethought to address the challenges of ecological transition. It is not enough to redefine the *allestitore*'s profile in legal or contractual terms: it is necessary to provide those working in the field with cultural, technical, and design tools that enable them to develop new skills and genuinely sustainable practices.

It is precisely within this perspective that the work of the NSBVN – Sustainable Exhibit project is situated, placing at its center the figure of the eco-exhibition designer, conceived as an evolution and broadening of the traditional role.

Training for this new professional profile is structured around a system of open-access resources and tools available on the platform NonSiButtaViaNiente.it, creating a digital ecosystem that integrates research, teaching, and professional practice. The contents are organized into thematic sections covering the full spectrum of required competencies: from online courses to scientific articles, from downloadable 3D libraries of construction details to the editorial series, as well as regulatory resources and operational toolkits.

A first level of learning is provided by e-learning courses offering specific modules for cultural operators, designers, and students. These courses address both the theoretical foundations of sustainability applied to exhibition design and the ope-

QUALITATIVE TOOLS

refine critical instruments to deliver more responsible, high-quality projects

- quality of decision-making processes
- quality of design solutions
- quality of technological solutions
- quality of the project's systemic impact (process + outcome)
- quality of the final outcome within a "beyond the event" model
- ...

QUANTITATIVE TOOLS

refine quantitative instruments to monitor and verify choices

- CO₂ impact
- Reversibility impact
- Measurement of climate impact
- Quantitative design-verification toolkit
- Open-source parametric library of construction details
- ...

Tab. 3. The two main Design approaches are qualitative and quantitative in nature, allowing for control of the project at every stage.

rational practices related to reuse, environmental impact assessment, modular design, and digital fabrication. Courses such as History of Sustainable Exhibition Design or Foundations of Eco-Design introduce the cultural and historical basis of the discipline, while others—such as Fundamentals of Environmental Impact Assessment or Introduction to Grasshopper for Digital Fabrication—provide immediately applicable technical skills. Each course is enriched with exercises, assessment tests, and case studies, aiming to combine critical reflection with design capability.

Complementing the educational component is a substantial body of articles and in-depth materials organized into different sections. Learning from the Masters collects over one hundred analyses of historical and contemporary exhibitions, complete with texts and technical drawings that illustrate the logic of exhibition design through the four codes of the exhibit—background, installation, object, and environment. This section forms a fundamental repertoire for contemporary designers, enabling them to observe how great masters have addressed issues of spatiality, materials, and visual communication.

Research Progress documents the experimental advancements of the NSBVN Cluster: from investigations into biomaterials to circular economy practices, from conference reports to focus groups on regulations. It functions as a con-

stantly updated observatory of the most relevant innovations in the field.

Of particular significance is the section Regulations and Toolkits, which brings together key regulatory and operational references—from Italy’s *Criteri Minimi Ambientali (CAM)* to European regulations, as well as calculation tools such as the Carbon Calculator and international toolkits promoted by CIMAM or Julie’s Bicycle. This repository serves not only as an informational resource but also as a practical toolbox for anyone involved in the design and management of sustainable exhibitions.

Added to these resources is the Eco-Design Libraries section, which provides open-source, downloadable 3D construction details and joint systems. These technical solutions—developed largely within the project’s research framework—enable the experimentation of reversible, modular, and reusable design methods. In this way, the eco-exhibition designer can integrate tested components into new projects, reducing waste and promoting circularity. The availability of 3D files further allows immediate use within design software, facilitating processes of co-design and distributed prototyping.

Another key element is the editorial series dedicated to sustainable exhibition design, published in open access and conceived as both a scientific and outreach tool. The volumes collect peer-reviewed contributions from researchers, professionals, and institutions, organized around key topics and aimed at building a shared lexicon of sustainability in the exhibition field. The series therefore has a dual value: consolidating academic research while disseminating a critical culture capable of dialoguing with the production sector (Crippa et al., 2022).

The training offer is further expanded by a large archive of thematic articles and case studies, ranging from major historical exhibitions to contemporary experiments, from construction techniques to innovative materials, and from reflections on digitalization to issues of technological obsolescence. Together, these contents form a continuous learning pathway that allows professionals to stay aligned with the rapid evolution of the sector.

Finally, the platform also integrates sharing and networking tools: through a dedicated section, users can exchange and redistribute disused materials and components, fostering reuse and collaboration among museums, fairs, companies, and designers. In parallel, communication through social media, newsletters, and webinars expands the reference community and makes the results accessible to a broader audience.

Training for the eco-exhibition designer, thus conceived, is not merely a transfer of knowledge but the construction of a new cultural and professional approa-

ch. Through courses, technical libraries, articles, toolkits, and editorial series, the NSBVN project provides concrete instruments to face the challenges of sustainability while simultaneously building a community of practice oriented towards circularity. The eco-exhibition designer therefore becomes the emblem of a field that, traditionally associated with the ephemeral, can now redefine itself as a site of innovation—capable of integrating aesthetics, functionality, and environmental responsibility.

Conclusions

The reflections presented throughout this paper reveal how the exhibition design sector in Italy is currently in a phase of transition—caught between a regulatory framework that remains fragmented and reductive, long-standing practices often dictated by emergency logic, and emerging demands for sustainability that are becoming increasingly urgent.

The role of the *allestitore*, long confined to a merely technical and operational function, emerges instead as a strategic actor endowed with multiple competencies and capable of influencing the overall quality of events—both in terms of safety and environmental responsibility.

The experience of the project Exhibit 2.0: The Ecological Turn and the establishment of the NSBVN – Sustainable Exhibit Cluster have demonstrated that it is possible to create spaces of dialogue among research, institutions, and industry—spaces capable of generating new practices and guiding the sector towards more inclusive and circular models. The first national conference on sustainable exhibiting marked a foundational step in this process, bringing to light both critical issues and practical perspectives while underscoring the need for a genuine cultural paradigm shift.

Within this framework, the proposal of the eco-exhibition designer as an evolution of the traditional role stands out—a figure capable of integrating regulatory knowledge, technical skills, and ecological awareness. The open-access resources made available on the NSBVN platform—ranging from online courses and articles to 3D libraries, regulatory toolkits, and the editorial series—constitute not only training tools but also a shared heritage for collectively imagining the future of the discipline.

A field historically linked to the ephemeral can thus become a terrain for innovation and experimentation, where sustainability and aesthetics are no longer opposing forces but complementary components of a complex project. Recognizing

the exhibition designer as a cultural, rather than solely technical, actor means assigning this figure a central role in constructing an exhibition ecosystem capable of confronting the challenges of climate change and ecological transition.

The prospects opened by the NSBVN Cluster suggest that this transformation is not only desirable but already underway—a collective process aimed at redesigning the practices of exhibiting towards more responsible, innovative, and enduring models.



Fig. 16. Thematic table The Economic System of Exhibiting: Market Snapshots.
Photo: ClusterNSBVN_Iuav.

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Designing for the future

Museography, sustainability, and the life cycle of exhibitions

V. Arrabito | ICOM Italia
Secretary-General of the Italian Committee



Fig. 17. Photograph of speaker Valeria Arrabito during her talk at the First NSB-VN Cluster Conference. Photo: ClusterNSBVN_Iuav.

Designing for the future

Museography, sustainability, and the life cycle of exhibitions

For centuries, the museum has embodied an entity in which the concept of time assumes multiple and fascinating dimensions, engaging in a constant dialogue between past, present, and future. It is a permanent institution—as stated in the opening paragraph of ICOM’s museum definition¹—just as its collection may be permanent. At the same time, however, the museum is also the place of impermanence, animated by temporary exhibitions and by the numerous activities and events that enliven its indoor and outdoor spaces, continually reshaping the identity of this ever-evolving institution.

Time and duration therefore represent two essential variables in the life of the museum, and particularly in exhibition design—both in relation to the type of exhibition (whether temporary or permanent) (Migliore, 2019), and to the life cycle of the structures and materials employed.

This paper seeks to offer a critical reflection on the evolution of the concept of the sustainable exhibit, exploring the interconnections between museology, museography, and expography in light of the cultural, environmental, and digital transformations affecting the contemporary museum. Specifically, it examines the challenges posed by the reuse and recycling of materials, the legal constraints linked to the authorship of exhibition design, and the critical issues arising from the rapid obsolescence of digital devices.

Starting from a semantic mapping of the terminology and from the institutional recognition of exhibiting as a central museum function—first included in the ICOM definition in 1974 and reaffirmed in the 2022 definition—the contribution investigates the design and professional implications that stem from the integration of sustainability principles into exhibition processes. These issues call for a critical reinterpretation not only of the role of the museum within contemporary society, but also of museum practices themselves, urging their evolution towards more responsible, self-aware, and long-term models.

In recent years, there has been a significant increase in both academic and popular publications dedicated to sustainability in museums. At the same time, numerous initiatives have been promoted by museums, research institutions, public administrations, and other stakeholders in the field, aimed at experimenting with and promoting sustainable practices. Nevertheless, despite the growing attention and the wealth of experiences developed, much remains to be done to translate these good practices—often limited to isolated or short-term projects—into structural and systemic approaches capable of permeating all areas of museum management, from conservation to exhibition design, from governance to cultural mediation.

The objective of this paper is therefore to propose a critical reflection on the application of sustainability principles to museum exhibition design, situating them within a broader perspective that considers the evolving role of museums in contemporary society. Rather than simply articulating programmatic intentions or general declarations of principle, the aim is to realistically analyze the design, economic, managerial, and cultural implications associated with the reuse and sustainability of exhibition systems—highlighting the opportunities, constraints, and contradictions that accompany the shift from theoretical aspirations to practices that can be effectively implemented within museums.

Semantic Mapping

This contribution does not aim to explore in detail the genealogy of certain terms, whose evolution is often long and complex. Rather, its goal is to provide readers with a semantic map, acknowledging that such a framework cannot possibly satisfy all interpretative perspectives within the scholarly community (Champmartin, 2016).

The boundaries between the terms museology and museography have always been difficult to delineate. As defined by André Desvallées and François Mairesse

in their seminal work *Key Concepts of Museology* (2010):

“Museography is currently understood as the practical or applied aspect of museology, that is, the set of techniques developed to perform museum functions, particularly those concerning museum management, conservation, restoration, security, and exhibition.

In contrast to the term museology, museography has long been used to identify both the intellectual and practical activities associated with museums. The term is commonly used in the French-speaking world but rarely in the English-speaking context, where the expression museum practice is preferred. Many museologists in Central and Eastern Europe have adopted the notion of applied museology, that is, the practical application of the techniques derived from the study of museology as an evolving science.

In French [and in Italian, author’s note], museography generally refers to the art (or techniques) of exhibiting. In recent years [in France, author’s note], the term expography has been introduced to designate the techniques related to exhibitions, whether within a museum or in a non-museum space. Generally, what we call a ‘museographic program’ corresponds to the definition of the exhibition’s content and requirements, as well as the functional links between exhibition spaces and other museum areas. This usage does not mean that museography is limited to the visible part of the museum [...].”

As we have seen, the terms museography and museology have occasionally been associated with neologisms such as expography—“the art of exhibiting” (in French *expographie*, in English *expography*)—a concept coined by André Desvallées (1993, p. 174). This term refers exclusively to the spatial layout of the exhibition, excluding museographic aspects such as conservation or security.

The word exhibit also has deep roots in the history of the museum concept and has gradually accumulated new meanings. To exhibit is not merely to show. To exhibit implies a process of cultural mediation and public communication in which content, objects, spaces, technologies, and languages intertwine within a complex device aimed at constructing meaning.

The exhibition—whether permanent or temporary—is therefore not an accessory activity but a structural component of the museum’s identity. It is the process through which heritage is interpreted and made accessible to society

As the product of the act of exhibiting, the exhibition today stands as one of the museum’s core functions, formally incorporated into ICOM’s official definition of the museum in 1974, during the General Conference held in Copenhagen.

The decision to include the term within the ICOM definition not only recognizes the communicative and social function of the museum but also reaffirms its public responsibility: to exhibit means to take a position, to construct narratives, and to offer tools for the critical understanding of both past and present.

In an era marked by cultural, environmental, and digital transformation, the act of exhibiting thus remains a privileged arena for articulating the dialogue between the museum and society.

From the analysis of the concepts of museology, museography, expography, and exhibit/exhibition, the polysemic nature of these terms becomes evident—reflecting the intrinsic complexity of a field in continuous transformation, not only scientifically but also in relation to the evolving practices and technologies of display.

The juxtaposition of the terms exhibit and sustainable—which forms the conceptual foundation of this volume—therefore calls for a reflection that seeks to conceptually reconcile the two dimensions. Their integration is not merely the sum of meanings but the genesis of new semantic frameworks and renewed museum practices.

Museums and Sustainability: The Role of ICOM

Since the early 2000s, the International Council of Museums (ICOM) has progressively consolidated a structured commitment to sustainability—both at the international level and through its national committees.

The year 2015 marked a key moment for the affirmation of the global agenda on sustainable development, with the adoption of both the United Na-



Fig. 18. Cover of the volume ICOM Code of Ethics for Museums / ICOM Codice Etico per i Musei. Photo: ICOM UK.

tions Sustainable Development Goals and the Paris Agreement on climate change. In that same year, ICOM dedicated the International Museum Day to the theme Museums for a Sustainable Society. This choice represented not only a symbolic moment of global reflection but also a turning point in developing a museum vision oriented towards social, environmental, and cultural responsibility, anticipating the institution's subsequent strategic developments in the field of sustainability (Rota, 2019, p. 110).

The principles of Agenda 2030 thus became fully integrated into ICOM's policies, finding formal acknowledgment within its Strategic Plan 2016–2022²:

“Protection of culture and the natural world is a moral duty of individuals, communities and governments, regional and national [...]. Since its foundation in 1946, ICOM has been at the forefront of the protection of cultural and natural heritage and is still at the cutting edge of this great enterprise in a world that is dangerously unstable and marked by economic, social, cultural, educational, and health inequalities.”

In 2019, during ICOM's General Assembly in Kyoto, the organization adopted Resolution No. 1: On Sustainability and the Implementation of Agenda 2030, Transforming our World. This document represents a crucial institutional milestone in ICOM's journey towards the structured integration of sustainability into museum policies and practices worldwide. It urges museums to commit structurally to sustainability, embedding it across all dimensions of their activity—from daily management to exhibition strategies, from curatorial practices to educational programs.

The approval of ICOM's new museum definition in 2022, during the 26th General Conference held in Prague, marked a historic moment in the organization's reflection on the aims and responsibilities of the contemporary museum. For the first time, sustainability was explicitly recognized as a structural element of the museum's identity—not merely as an aspiration or good practice, but as a founding principle.

In 2023, ICOM took a further strategic step in its institutional evolution towards sustainability by establishing the International Committee ICOM SUSTAIN, in direct continuity with the Sustainability Working Group active from 2018 to 2022³. Through coordinated actions, collaborative networks, and processes of shared knowledge, ICOM SUSTAIN seeks to strengthen museums' capacity to address the climate and environmental crisis, contributing to the development of a new cultural paradigm grounded in the ethics of responsibility, durability, and equity. In the Italian context, 2023 saw the creation of the National Working Group on Sustainability (GdLS) of ICOM Italia, coordinated by Michela Rota,

with the goal of monitoring and guiding the debate on Agenda 2030 within the museum sector, promoting a museology and museography of sustainability aligned with emerging international directions.

That same year, within the Regional Coordination of ICOM Lombardia, the Working Group on the Recycling of Museum Installations was established, coordinated by Maria Cristina Vannini.

The path undertaken by ICOM over the past decade demonstrates how sustainability has become a strategic and identity-defining axis of museum action on a global scale. The commitment of ICOM and its territorial branches now constitutes an essential foundation for redefining museum policies in light of today's environmental and social challenges—providing concrete support to museum professionals through guidelines, training resources, networking opportunities, and by facilitating the sharing of good practices, webinars, and national and international events.

The Sustainable Exhibit: The Challenges of Reuse and the Question of Authorship

The emergence of the concept of the sustainable exhibit as a design and cultural paradigm has triggered a profound transformation of exhibition practices, affecting not only operational methods and methodological approaches but also the structure of the professional skills involved in exhibition-making. Exhibition design within a museum is, by its very nature, a collaborative and multidisciplinary activity requiring careful orchestration of diverse competences within a coherent and unified design vision.

This process unfolds through continuous negotiation among curators, architects, educators, social scientists, and, not least, the visiting public, whose needs, expectations, and modes of engagement must constantly be taken into account (Peressut in François, 2023, p. 187).

Within this framework, the reuse of exhibition installations cannot be understood merely as a practice borrowed from the applied sciences or as a simple technical exercise in efficiency and cost reduction. Rather, it must be regarded as a conscious cultural and design choice that calls for a critical revision of the production logics underlying exhibition apparatuses, as well as a reconsideration of the evaluative criteria used in selecting design options.

This entails incorporating sustainability parameters among the criteria of design quality, and ensuring coherence between the language of the exhibit and the



Fig. 19. Extraordinary General Assembly of ICOM during its 26th General Conference in Prague, 24 August 2022. Photo: ICOM IT NEWS.

environmental and social responsibilities of the institution promoting it—consistent with Italy’s *Criteri Minimi Ambientali (CAM)* for exhibitions and cultural events. These criteria require the adoption of low-impact solutions, the reduction of resource consumption, and the enhancement of material reuse and recycling. Adopting a reuse-oriented perspective means reconsidering the value of exhibition design not solely in terms of formal originality, but in light of its durability, adaptability, disassemblability, and traceability over time. This approach represents an essential component of responsible design, in line with the *Do No Significant Harm (DNSH)* principle—a central pillar of the Next Generation EU program, which aims to support actions consistent with the Paris Agreement and the United Nations Sustainable Development Goals, in coherence with the European Green Deal.

Reuse, therefore, is not merely a “good practice” to be applied secondarily, but a transformative principle that redefines how we think about, design, and perceive museum installations. To reuse means to think in modular and reversible terms, to select low-impact or easily reusable materials, but also to rethink the concept of originality and authorship in museographic design—opening it to practices of adaptation, regeneration, and sharing, even at the formal level.

Reflections on the reuse of installations also require reconsidering the processes of historicization related to the notion of exhibition design: is it possible to reuse individual display structures outside their original contexts? Are authorizations required? If so, which ones?

Curatorship—understood as the personalization of exhibitions—is the result of a transformation that extends far beyond the present. Its roots can be traced back at least to the final third of the nineteenth century, through the historical avant-gardes of the twentieth century, and into the post-war decades, when numerous architects progressively redefined the role of exhibition design, overcoming the functional conception of the exhibition space as a mere neutral frame. Examining the history of twentieth-century Italian museography reveals how, for designers active between the 1950s and 1960s, the relationship between architecture, artworks, and exhibition design was deep and almost inseparable. In this design context, the installation was not conceived as a simple display device but as an integral part of the museum narrative—capable of shaping the visitor’s experience and actively engaging with the surrounding space, amplifying the relationship between container and content.

Their intention was to create spaces that were both clear and rarefied, defined by the interplay of artworks, spaces, light, and materials—where the architect’s creative act was comparable to that of the artist (*ibid.*, p. 188). As extensively documented in the history of contemporary exhibition-making, the conception of exhibition systems has never been the exclusive prerogative of architects, exhibition designers, or curators; it has also significantly involved artists themselves. In the volume *Copyright, Author’s Rights, and Open Licenses for Culture on the Web – 100 Questions and Answers for Museums, Archives and Libraries* published by ICOM Italia and edited by the Digital Cultural Heritage research group (2021), the authors clarify (*ibid.*, p. 12)⁴:

“Copyright includes a set of legal norms regulating the relationship between the author and the work, recognizing the former a series of exclusive rights over the latter. It falls within the broader discipline of intellectual property, which encompasses both copyright and industrial property [...]. [...] Copyright arises at the moment of the work’s creation, without the need for any formal registration, and protects ‘literary and artistic works,’ regardless of their form or mode of expression [...]. [...] Originality manifests itself through free and creative choices that allow the author to imprint their personality on the work.”

If, as established, copyright arises at the moment of the work’s creation—regardless of its form or mode of expression—are historical exhibition designs conceived by renowned architects, curators, and collectives also subject to copyright

protection?

As specified by the research group coordinated by Sarah Dominique Orlandi, the Berne Convention requires signatory states to recognize two fundamental moral rights of the author: the right of authorship, ensuring recognition of the creator's identity, and the right of integrity, allowing the author to oppose any distortion, mutilation, or modification of the work, as well as any act that may harm their honor or artistic reputation. These rights, distinct from economic rights, safeguard the personal and intellectual bond between author and creation.

Which professional figure, then, can exercise moral and economic rights over exhibition design projects? Is their authorization necessary for reuse? Any unauthorized modification may infringe the right to integrity of the work. However, if the project was commissioned by a public or private institution, the economic rights may be contractually regulated, including any consent to reuse.

Under Italian cultural heritage law, historic exhibition installations designed by established architects, designers, and curators may be subject to protection by the Soprintendenza (Superintendency) as cultural properties under Legislative Decree 42/2004, known as the Code of Cultural Heritage and Landscape. Article 10 of the Code defines as cultural properties:

“Immovable and movable items that [...] possess particular artistic, historical, archaeological, or ethno-anthropological importance.”

This formulation allows for the inclusion of exhibition installations when they represent significant expressions of design thinking and of the cultural context of their time. In this perspective, exhibition projects can be recognized not only as functional instruments of museum accessibility but also as autonomous works of art—capable of expressing a complete synthesis between architectural space, displayed object, and museal narrative.

The protection of museographic projects thus remains an evolving field, where museum and administrative practices intersect. The key to legitimate and sustainable reuse lies in contractual transparency, the recognition of authorship, and the shared management of creative and production processes.

Designing the Sustainable Exhibit: A Critical Reflection Between Life Cycle and Digital Transformation

In recent years, the integration of digital technologies into museums has radically transformed how cultural heritage is experienced, generating new opportunities for access, interpretation, and participation. The use of interactive devices, onli-

ne platforms, augmented reality, virtual tours, and personalized mediation tools has redefined the visitor experience, expanding opportunities for engagement and breaking down many of the spatial, physical, and cognitive barriers often associated with the museum visit.

This transformation is part of a broader digital and green transition that has recently accelerated thanks to Italy's National Recovery and Resilience Plan (PNRR), in alignment with the objectives of the European Next Generation EU⁵ program. In particular, the digitization of cultural heritage and services represents one of the pillars of Mission 1 of the PNRR, which aims to strengthen innovation and competitiveness within the Italian cultural system through an integrated vision combining environmental sustainability, energy efficiency, and digital transformation.

The adoption of sustainable digital solutions, the assessment of technological obsolescence, and the optimization of the life cycle of exhibition apparatuses have thus become central components in the design of visitor experiences—posing new challenges also at the administrative and managerial levels. The ability to correctly determine depreciation rates and plan long-term investments is essential to ensure that innovations do not translate into excessive costs or medium-term inefficiencies. This underscores the urgency of developing economic, technical, and cultural models capable of sustaining the digital infrastructure of museums over time, making it consistent with the principles of the European Green Deal and the Do No Significant Harm (DNSH) approach that underpins current public policies on sustainable development.

One of the most pressing issues is the rapid obsolescence of digital media, which drastically shortens the useful life of devices and content and requires continuous updates, replacements, and maintenance. Technologies implemented in museums often become outdated just a few years after their introduction, making it difficult to ensure continuity of use or a lasting return on investment.

Moreover, administrative systems frequently struggle to assign accurate financial values and depreciation coefficients to hybrid assets—both material and immaterial—that do not fit within the traditional economic evaluation models used by public institutions. In many cases, digital assets are managed as durable equipment, without considering their much faster rate of obsolescence or the need for ongoing software updates and license renewals. This results in inadequate economic planning that fails to account for the complexity of management costs, making it difficult to allocate specific resources for maintaining and developing the digital offer. The lack of cross-disciplinary skills between design and manage-

ment further contributes to the fragmentation of digital strategies and hinders the ability to assess the real benefits relative to the costs incurred. Yet, the advantages of digital integration in museum experiences are evident: digital technologies enhance content accessibility, enable personalized visits, promote more engaging experiences, and provide useful tools for audience monitoring and data collection.

The challenge, therefore, does not lie in the use of technology per se, but in its non-systemic management, the absence of a strategic vision, and insufficient attention to the life cycle of adopted solutions.

It would therefore be desirable to define national and international guidelines for the economic management of digital technologies in museums, along with the training of professional figures capable of operating at the intersection of technological innovation and economic sustainability. Only in this way can digital innovation become a stable and enduring component of museum practice, ensuring effective, inclusive cultural engagement that respects the economic and environmental resources of cultural institutions.

Analyzing the life cycle of museum exhibitions thus requires a critical reflection on the possible options available at the end of their intended use. It is no longer sustainable to regard exhibition design as an ephemeral or transient element without environmental or cultural consequences. On the contrary, it becomes essential to consider, from the earliest stages of design, the possibilities for reuse and recycling of materials, as well as the medium- and long-term impacts of technical, aesthetic, and functional choices.

In a cultural context increasingly oriented towards sustainability and responsibility, these aspects cannot be left to chance. They must instead be integrated as qualifying criteria of museographic design, with the awareness that every exhibit is destined to have a second life—or, at the very least, an end consistent with the principles of circular design.

Notes

¹ ICOM Statute (2023), Article 3, Section 1 – Museum

Italian translation: “A museum is a permanent, non-profit institution in the service of society that researches, collects, conserves, interprets, and exhibits tangible and intangible heritage. Open to the public, accessible, and inclusive, museums promote diversity and sustainability. They operate and communicate ethically, professionally, and with the participation of communities, offering diverse experiences for education, enjoyment, reflection, and the sharing of knowledge.”

² ICOM Strategic Plan (2016–2022).

³ ICOM Statute (2023), Article 3, Section 1 – Museum.

⁴ The topic has been extensively discussed by ICOM Italia on several occasions, in particular by the Working Group on the Recycling of Museum Installations of the Regional Coordination ICOM Lombardia, during the webinar Circular Economy of Exhibition Design and Inclusive Planning, organized in collaboration among ICOM Italia, the Emilia-Romagna and Lombardy Regional Coordinations, the Cultural Heritage Department of the Emilia-Romagna Region, and the Municipality of Milan.

⁵ Retrieved from <https://pnrr.cultura.gov.it/>



Fig. 20. Photograph of the 24th ICOM General Conference in Milan, 3 July 2016.
Photo: ICOM Committee for Conservation.

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