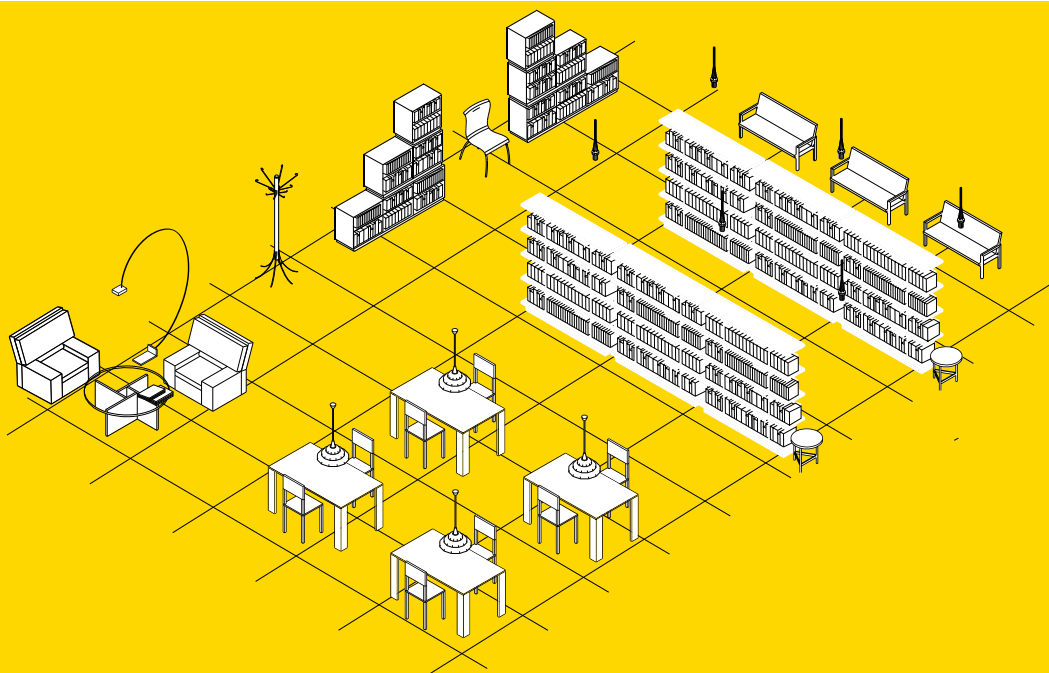


Towards the figure of the eco-exhibition designer

Editors
Davide Crippa
Barbara Di Prete



EDIZIONI
IL PAPAVERO

Towards the figure of the eco-exhibition designer

Editors

Davide Crippa

Barbara Di Prete

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

ISBN 978-88-3294-254-5

© Copyright EDIZIONI IL PAPAVERO

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

EDIZIONI IL PAPAVERO - MARKETING D'AUTORE

of Bruno Martina

Via Francesco De Sanctis, 32

83030 Manocalzati (AV)

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

Editors:

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

The work is published in a digital E-Book version only ISBN 978-88-3294-254-5

Copies of this limited edition were produced for the exclusive use of the Authors. The publication is not commercially available in the print version.

Series under the patronage of:



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

Graphics and layout:
Riccardo Palomba

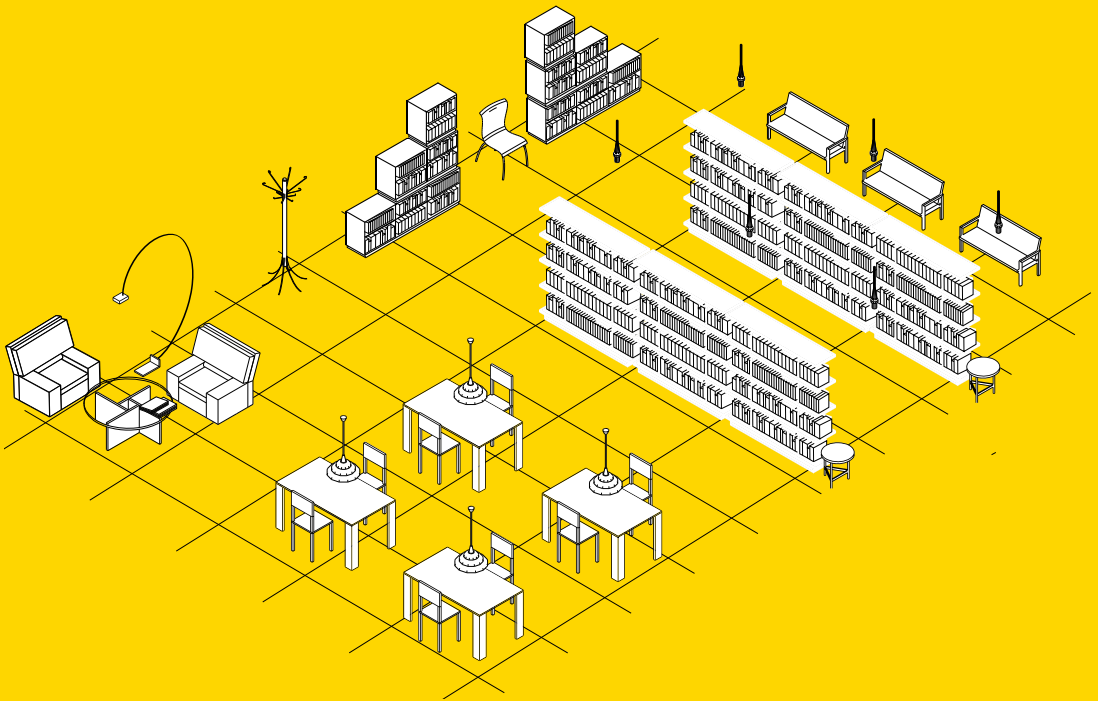
In collaboration with ICOM Italia



Research funded through the Public Notice for the submission of project proposals for capacity building for cultural operators, within the framework of the PNRR, Mission 1 – Digitalization, Innovation, Competitiveness, Culture and Tourism, COMPONENT 3 – Tourism and Culture 4.0, MEASURE 3 – Cultural and Creative Industries, INVESTMENT 3.3 – “Capacity building for cultural operators to manage the digital and green transition,” Sub-investment 3.3.3 – “Promoting the reduction of the ecological footprint of cultural events by encouraging the inclusion of social and environmental criteria in public procurement policies, thus guiding the supply chain towards the eco-innovation of products and services” (Action B I), funded by the European Union – NextGenerationEU and managed by the Ministry of Culture.

Index

Introduction	Pag. 08
D. Crippa, B. Di Prete	
Mostrare	Pag. 16
<i>Exhibit at Università Iuav di Venezia, new paradigms of sustainability</i>	A. Bassi
The profession facing the challenge of change	Pag. 34
<i>The strategic role of the project</i>	D. Crippa
Designing for the future	Pag. 51
<i>Museography, sustainability, and the life cycle of exhibitions</i>	V. Arrabito
Towards sustainable exhibiting	Pag. 68
<i>A conversation with Marco Fogarolo</i>	D. Crippa, M. Cason Villa, L. Migliori
Designing for change	Pag. 84
<i>The designer as a facilitator of sustainable processes</i>	L. Bortoloni, M. Tortoioli Ricci
Reflections for drafting the CAM Allestimenti	Pag. 99
<i>A legacy of the first conference on sustainable exhibit promoted by the NSBVN Cluster</i>	B. Di Prete, R. Palomba
Abstracts and Authors' Biographies	Pag. 118



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_luav.

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 “NSB-VN” 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.

Mostrare

*Exhibit at 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.

Mostrare

Exhibit at 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-
cio 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 Konstslojd museet 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,

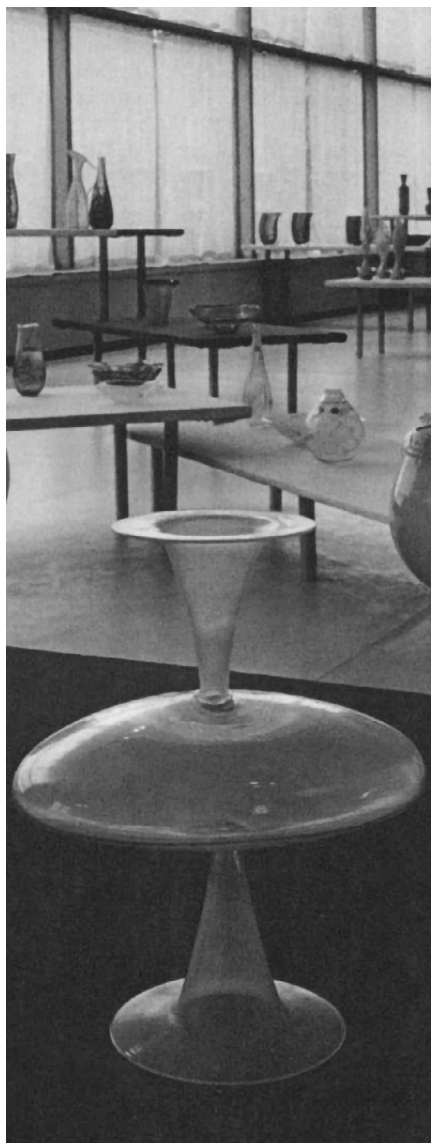


Fig. 6. Exhibition design by Vini-
cio Vianello for *Modernt Murano-
glas*, Röhsska Konstslojdmuseet,
Gothenburg, 1956. Photo: Fondazione
Giorgio Cini.

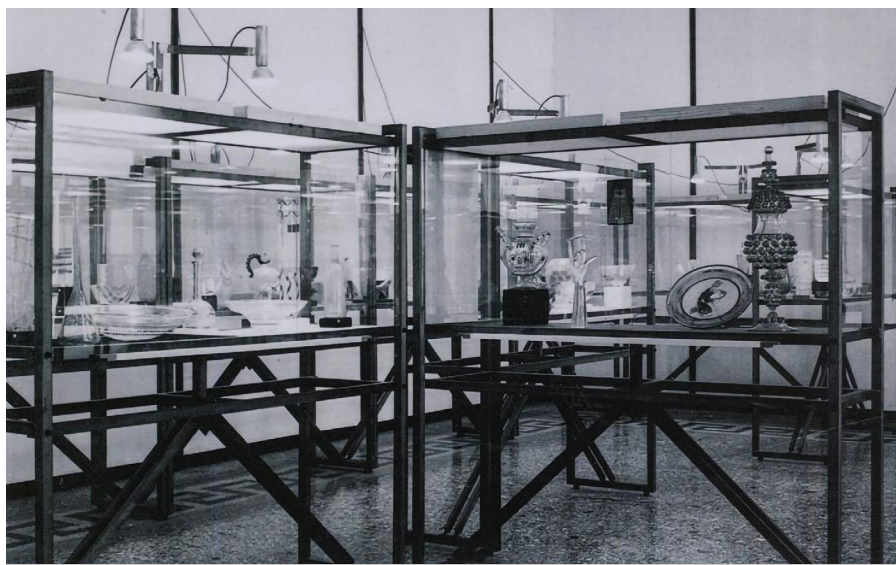


Fig. 7. Installation view of the exhibition *Vetri di Murano 1860–1960*, curated by Rudi and Scarpa, Palazzo della Gran Guardia. Photo: Fondazione Giorgio Cini.

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 Castelvechio 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 *Vinicio 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 Ivav 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.

Bibliography and Online Sources

Bassi, A. (2018a). Storia della cultura materiale, design histories, progetto “senza aggettivi” (pp. 112–125). In M. Bulgarelli, A. De Rosa, & C. Marabello (Eds.), *Utilità e danno della storia*. Milano: Mimesis.

Bassi, A. (2018b). Nuovo dialogo fra storia, critica e progetto per una didattica contemporanea del design. *QuAD. Quaderni di Architettura e Design*, 1, 351–360.

Bassi, A., & Bulegato, F. (2024). Interior design all'Università Iuav di Venezia. In E. Bonini Lessing, A. Bosco, L. Calogero, & M. Dalla Mura (Eds.), *Interior/Design. Espandere il campo*. Vicenza: Ronzani.

Bassi, A., Marini, P., & Di Lieto, A. (Eds.). (2007). *Vinicio Vianello e il design del vetro*. Venezia: Marsilio.

Bulegato, F. (2016). La formazione dei designer nell'Italia del secondo dopoguerra. In M. T. Guerrini, R. Lupi, & M. Malatesta (Eds.), *Un monopolio imperfetto: Titoli di studio, professioni, università (secc. XIV–XXI)* (pp. 189–200). Bologna: Clueb.

Bulegato, F., & Pastore, M. (2017). La formazione del designer: Il corso superiore di disegno industriale di Venezia, 1960–1972. *QuAD. Quaderni di Architettura e Design*, 1, 261–284.

Bulegato, F., Dalla Mura, M., & Monti, G. (Eds.). (2021, November 26–27). Design esposto. Mostrare la storia, la storia delle mostre. AIS/Design. <https://www.aisdesign.org/v2/atti-del-v-convegno-ais-design/>

Cafiero, G., Flora, N., & Giardiello, P. (Eds.). (2020). *Costruire l'abitare contemporaneo*. Padova: Il Poligrafo.

Carullo, R. (2009). *Iuav. Didattica dell'architettura dal 1926 al 1963*. Bari: Poliba Press.

Ciribini, G., Pupi, A., & Romano, G. (1961). *La Scuola di Venezia*. *Stile Industria*, 34, 27–28.

Doimo, M., & Pogacnik, M. (Eds.). (2020). *Fare mostre. Italia, 1920–2020: scena e messa in scena*. Milano: Mimesis.

Pastore, M. (2007). *Il Corso superiore di disegno industriale di Venezia 1960–1972: La comunicazione visiva nell'offerta didattica e il suo ruolo nella formazione di nuove figure professionali (Master's thesis)*. Università Iuav di Venezia.

Polano, S. (2000). *Mostrare: l'allestimento in Italia dagli anni Venti agli Ottanta*. Milano: Lybra.

Rigon, M. (2006). *L'Istituto veneto per il lavoro e la cultura del progetto a Venezia negli anni cinquanta (Master's thesis)*. Università Iuav di Venezia.

Rizzo, C. (2007). *Il Corso superiore di disegno industriale di Venezia 1960–1972: Il contributo per la formazione del designer (Master's thesis)*. Università Iuav di Venezia.

Sartori, L. (1989). *Istituto veneto per il lavoro: Una presenza per lo sviluppo 1919–1989*. Venezia: Istituto Veneto per il Lavoro.

Università Iuav di Venezia. (2023). NSBVN | Sustainable Exhibit: per lo studio e la promozione di una transizione ecologica nel sistema degli eventi e delle esposizioni [Research cluster]. <https://iuav.unifind.cineca.it/individual?uri=http%3A%2F%2Firises.iuav.it%2Fresource%2Fworkgroup%2FWKG-0032>

Zucconi, G. (Ed.). (2012). *Officina Iuav, 1925–1980. Saggi sulla scuola di architettura di Venezia*. Venezia: Marsilio.

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.

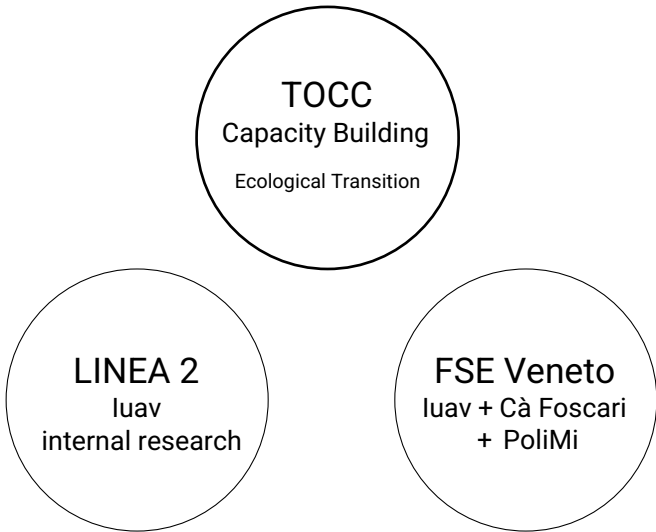
Within this evolving scenario lies the “NSBVN – Sustainable Exhibit” Cluster and the proposal submitted by Università Iuav di Venezia to the TOCC – Capacity Building program on ecological transition. This initiative led to the funding

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-

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

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,

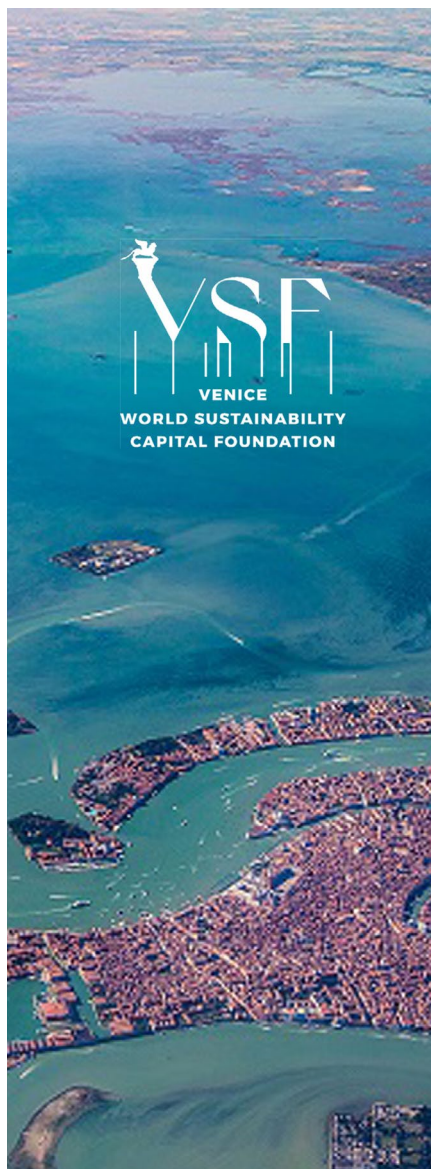


Fig. 13. A deep connection with the themes of exhibiting and sustainability makes Venice an ideal city for studying sustainable exhibition design.

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_luav.

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 approach.

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.

Bibliography and Online Sources

CIMAM. (2021). Toolkit on Sustainability in Museum Practice. Barcelona: International Committee for Museums and Collections of Modern Art.

Creative Carbon Scotland. (2019). Carbon Management for Cultural Organizations. Edinburgh: CCS.

Crippa, D., Di Prete, B., Rebaglio, A., Ratti, L., & Cason Villa, M. (2022). Exhibit design towards an ecological transition. *MD Journal*, 14, 198–209.

Gallery Climate Coalition. (n.d.). GCC Carbon Calculator. Retrieved from <https://measure.galleryclimatecoalition.org/>

INAIL, Asal-Assoallestimenti, AEFI, & CFI. (2020). Trade Fair Events: Guidelines for the Management of Health and Safety at Work. Rome: INAIL.

International Association of Exhibitions and Events. (2024). How-to Guide to Sustainable Exhibitions. Retrieved from <https://www.iaee.com/sustainability-toolkit/>

Julie's Bicycle. (2020). Creative Green Tools. London: Julie's Bicycle.

Ministry of the Environment and Energy Security. (2022a). Adoption of Criteri Minimi Ambientali for Cultural Events. Retrieved from <https://www.mase.gov.it/portale/-/riforma-3.1-adozione-di-criteri-ambientali-minimi-per-eventi-culturali>

Ministry of the Environment and Energy Security. (2022b). Criteri Minimi Ambientali for Cultural Events. Retrieved from https://gpp.mase.gov.it/sites/default/files/2023-01/CAM_Eventi.pdf

Trivellini, E., & Mancini, M. (2024). The sustainable temporary exhibition: The role of design in the context of trade fair exhibitions. *AND Architettura, Città e Architetti*, 10(2).

URGE Collective. (2021). Waste Age: What Can Design Do? London: Design Museum.

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

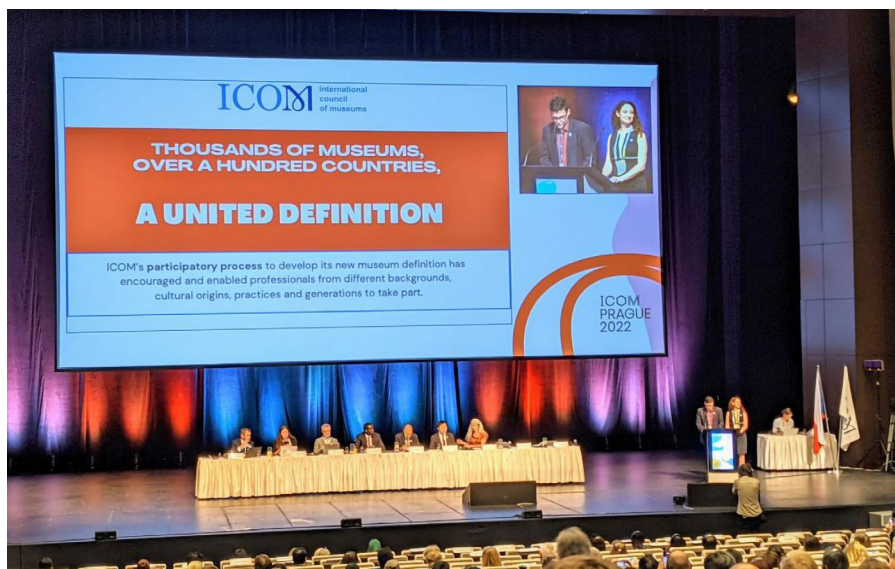


Fig. 19. Extraordinary General Assembly of ICOM during its 26th General Conference in Prague, 24 August 2022. Photo: ICOM IT NEWS.

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.

Bibliography and Online Sources

Brizzi, F. (2021). Lezione italiana: Allestimento e museografia nelle opere e nei progetti dei maestri del dopoguerra.

Champmartin, M. (2016). *L'expographie dans son plus simple appareil. Les regroupements d'œuvres comme aide à la visite* (Vol. 1, Texte). Paris: École du Louvre.

Desvallées, A., & Mairesse, F. (2010). *Key Concepts of Museology* (Italian translation). Paris: Armand Colin.

Desvallées, A. (1993). L'expression muséographique, introduction. In *Actes des premières rencontres européennes des musées d'ethnographie* (1993). Paris: Musée National des Arts et Traditions Populaires / École du Louvre, 1996.

Fiorio, M. T. (2011). *Il Museo nella storia*. Milan.

François, M. (2023). *Dictionary of Museology*. London: Routledge.

ICOM Italia – Digital Cultural Heritage Research Group. (2021). *Copyright, Author's Rights, and Open Licenses for Culture on the Web: 100 Questions and Answers for Museums, Archives, and Libraries*. Milan: ICOM Italia.

Migliore, I. (2019). *Time to Exhibit: Directing Spatial Design and New Narrative Pathways*. Milan: FrancoAngeli.

Poulot, D. (2008). *Musei e museologia*. Milan.

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

Italian Ministry of Culture. (2024). *National Recovery and Resilience Plan (PNRR)*. Retrieved from <https://pnrr.cultura.gov.it/>

Towards sustainable exhibiting

A conversation with Marco Fogarolo

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

M. Cason Villa | Università Iuav di Venezia
Department of Culture del Progetto

L. Migliori | Università Iuav di Venezia
Department of Culture del Progetto



Fig. 21. Photograph of speaker Marco Fogarolo presenting at the First NSBVN Cluster Conference. Photo: ClusterNSBVN_Iuav.

Towards sustainable exhibiting

A conversation with Marco Fogarolo

The field of trade fair and exhibition design represents a complex and multidisciplinary sector, where technical, logistical, and design expertise converge, with significant economic and cultural implications.

Although it is a profession with more than half a century of history and growing importance—both from a technical and an economic perspective—the figure of the *allestitore* (exhibition contractor) continues, however, to be framed by legislation in reductive terms, especially following the Palchi e Fiere Decree (2014), which limits the role to its purely executive dimension.

This regulatory approach fails to reflect the actual dynamics of the sector, in which the *allestitore* takes on broader and more transversal functions.

Through the dialogue with Marco Fogarolo, Vice President of Asal Assoallestimenti, several central aspects emerge: the gap between normative definition and professional practice, the regulatory fragmentation that characterizes the field, ongoing experiments in sustainability, and the often nonlinear relationship between design and execution.

The analysis highlights how the *allestitore*, far from being a mere executor, acts as a strategic figure for managing safety, ensuring process efficiency, and promoting practices oriented Towards circularity and reuse.

From this perspective arises the need to rethink the regulatory and cultural fra-

mework in order to recognize the complexity of this professional role and foster closer integration between design, realization, and environmental sustainability.

The “Allestitore” Between Design, Regulation, and Sustainability

The exhibition sector is a complex, dynamic, and multidisciplinary reality in which technical, creative, logistical, and cultural expertise intersect. Exhibition design, understood as the set of practices and processes aimed at creating temporary spaces for fairs, events, exhibitions, and cultural manifestations, occupies an intermediate position between architecture, design, and industrial production. While it plays a strategic role—economically, as a driver of a significant industry, and communicatively, as a means of constructing corporate and institutional identity—it has never enjoyed adequate recognition, either normative or cultural. The temporary and ephemeral nature of exhibitions represents both the distinctive feature and the main challenge of the field: spaces have a short lifespan, often limited to the duration of a single event, yet during that time they must meet high demands of functionality, safety, communicative efficiency, and experiential quality. The contradiction between temporariness and the need for structural and aesthetic quality creates specific challenges that require diverse skills and a design approach capable of integrating technical precision and creativity. Within this context stands the figure of the *allestitore*, a central yet often underestimated actor.

The lack of a clear institutional definition, combined with a fragmented regulatory system, has contributed to constructing a partial and reductive image of this profession, even though it constitutes an essential link in the functioning of the entire exhibition and trade fair system.

The *allestitore* is not only the person responsible for assembling and dismantling structures, but also an operator who manages production processes, logistics, coordination of workers, safety regulations, and, in many cases, contributes directly to the technical design of installations.

This work aims to explore the role of this professional figure through an interview with Marco Fogarolo, a practitioner with long-standing experience and an active member of Assoallestimenti.

The conversation focuses on several key areas: the legal definition of the *allestitore*, the regulatory framework that governs exhibition practices, sustainability initiatives and practices, and the relationship between the *allestitore* and the design process. Through the analysis of these topics, the goal is to contribute to a dee-

per understanding of this professional role, highlighting both its critical issues and potential, while providing insights useful for its normative, cultural, and design-oriented redefinition.

The Figure of the “Allestitore” in Italy

Based on the dialogue with Fogarolo (M. Fogarolo, personal communication, June 17, 2024), it is crucial to understand how legislation defines the figure of the *allestitore* and how this definition affects the daily practice of the field, including its relationship with complementary normative instruments such as the Criteri Minimi Ambientali (CAM) for cultural events (Ministry of the Environment and Energy Security, 2022), discussed during the conference.

Until 2014, there was no actual legal definition of the *allestitore* in Italy. The role was formally recognized only after a series of serious workplace accidents during public events led to the introduction of the Palchi e Fiere Decree (Ministry of Labour and Social Policies, 2014).

This law, created mainly to enhance workplace safety, marked a turning point, as for the first time the profession of *allestitore* was explicitly acknowledged and defined as “the entity holding the contract for the assembly, disassembly, and possible construction



Fig. 22. Booth for Faberluk srl — Host 2023 — Milan.

of exhibition structures” (Ministry of Labour and Social Policies, 2014).

Although innovative at the institutional level, this definition remains limiting, as it reduces the *allestitore*’s role to a contractual execution, ignoring the real complexity of their functions.

As Fogarolo explains, in practice the *allestitore* does not only handle assembly and disassembly operations but also oversees production, logistics, materials management, safety, coordination of workforces, and relations with institutions (M. Fogarolo, personal communication, June 17, 2024).

In many cases, the *allestitore* is also directly involved in the technical design of the exhibition. It is evident that the gap between legislation and daily reality contributes to a distorted perception of this profession: although indispensable for the success of fairs and exhibitions, the *allestitore* remains marginal in institutional and academic recognition.

From this discrepancy arises the urgency of a more articulated legal framework that can reflect the breadth of required skills and position this figure within a more appropriate system of professional and cultural recognition.

Beyond the decree mentioned above, the regulatory context of the exhibition sector remains fragmented and externally derived. Most applicable norms come from the field of construction, as in the Consolidated Building Act (Italy, 2001), which contains no specific references to exhibitions but must be applied when these are comparable to building structures, even if temporary. Similarly, safety regulations for construction sites (Ministerial Decree, August 19, 1996) apply to exhibitions involving work at height or other high-risk operations (Italy, 1996).

The existing regulation, therefore, developed from an emergency-oriented perspective, reveals the lack of a systematic and long-term vision. This has resulted in a non-homogeneous framework poorly aligned with the temporary nature of exhibitions. The documentation required to build a stand, for instance, can vary not only from one region to another but even among different fairgrounds. As pointed out by the INAIL guidelines (INAIL, Asal-Assoallestimenti, AEFI & CFI, 2020), this is due to the fact that the responsibilities of control authorities are organized on a regional basis; consequently, competent entities—such as fire brigades, local administrations, and fair organizations—apply non-uniform regulations, resulting in increased costs, delays, and bureaucratic complexity for companies in the sector. The risks arising from this regulatory fragmentation are explicitly identified in the document Trade Fair Events. Guidelines for the Management of Health and Safety at Work (INAIL, Asal-Assoallestimenti, AEFI & CFI, 2020), which stresses the need to simplify and harmonize the rules. As stated

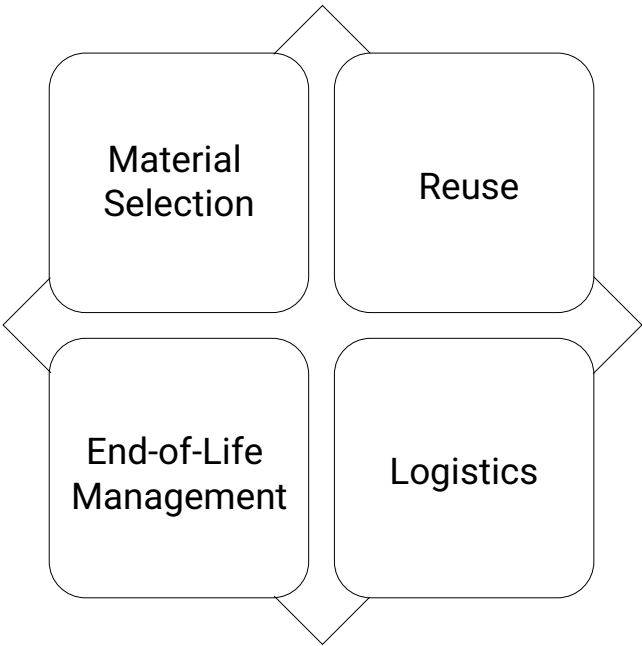
in section 3.6 of the same document:

“Inhomogeneity, fragmentation or, at times, lack of definition of the duties and competences of the figures involved in the multiple technical and organizational activities carried out by all the actors engaged in the planning, design, and realization of an event” (INAIL, Asal-Assoallestimenti, AEFI & CFI, 2020, p. 14).

Only a shared national regulatory framework could ensure uniform safety standards, greater efficiency for operators, and, at the same time, stronger international competitiveness for the Italian exhibition system.

Sustainability Initiatives – The “Push” from Clients

Within an evolving regulatory framework, the exhibition and trade fair sector is beginning to engage with the issue of sustainability, giving rise to experiments that also extend into curatorial aspects. Among the most significant examples



Tab. 4. Main strategic keywords for designing a trade fair stand in a sustainable way. Source: graphic reworking from the talk “Allestimenti: quale transizione ecologica?” by Marco Fogarolo, First NSBVN – Sustainable Exhibit Cluster Conference, 17–18 June 2024.

are the Carbon Calculator (Gallery Climate Coalition, n.d.), the various toolkits developed by institutions (International Association of Exhibitions and Events, 2024), and the adoption of standards such as the Criteri Minimi Ambientali (Ministry of the Environment and Energy Security, 2022), which are redefining the structure of the exhibition system. It is therefore legitimate to ask how the sector is changing and what concrete initiatives are being undertaken to enhance its sustainability.

The theme of sustainability is gradually penetrating the exhibition sector, although with different modes and timelines compared to other areas of design and temporary production (Crippa et al., 2022). One of the main drivers of this transformation lies in the figure of the client: certain companies, often referred to as “enlightened,” have begun to include environmental sustainability parameters among the evaluation criteria for projects, paying attention to material recovery, proper disposal, and, in some cases, opportunities for reuse.

This trend represents a positive signal, indicating a growing awareness among a portion of the market increasingly sensitive to corporate social responsibility and to the added value of “green” communication. However, this remains a limited phenomenon and has yet to become widespread. For the majority of clients, the economic variable remains dominant: the total cost of a project continues to outweigh environmental concerns, and sustainability criteria are still perceived as accessory elements rather than as essential and non-negotiable parameters.

In this scenario, the drive towards sustainability does not originate from an organic movement within the exhibition sector but rather from isolated initiatives of certain companies that, for ethical, reputational, or marketing reasons, choose to adopt more environmentally responsible practices. This represents a top-down form of change—generated externally rather than internally—which, however, can become a driver of innovation if properly received and developed.

In this respect, the role of client companies is crucial: through their project briefs and tender requirements, they can influence the choices of contractors and encourage the adoption of sustainable practices.

The main challenge for the future is to transform these experiences into widespread practice, ensuring that sustainability is no longer an optional component linked to a few exemplary projects but becomes an integral part of the operational model of the entire sector. Achieving this goal requires not only a cultural shift but also regulatory support and incentives that make sustainability not merely desirable but also economically viable and structurally embedded within production processes (Trivellin & Mancini, 2024).



Fig. 23. Booth for Contral srl — Host 2023 — Milan.

In this context, it is important to reflect on which actions can have the greatest impact and on what concrete steps and organizational strategies are needed to ensure effective and lasting implementation. During the interview, Marco Fogarolo identifies four key areas for sustainability within the sector: material selection, reuse, end-of-life management, and logistics (M. Fogarolo, personal communication, June 17, 2024). Among these dimensions, two stand out as particularly relevant and strategic: reuse and end-of-life management.

While end-of-life management is a regulatory requirement established by the Environmental Code (Italy, 2006, Part IV), and therefore represents a necessary step within the exhibition production chain, reuse emerges as a strategic practice capable of reconciling economic and environmental objectives in a virtuous way. Both strategies have significant potential for reducing the overall environmental impact of exhibition design, which by its very nature is ephemeral, temporary, and therefore structurally more impactful than permanent interventions.

Reuse did not originate in the exhibition sector as a direct expression of ecological awareness, but rather as a response to economic survival logic and profit maximization. A company that can reuse the same components multiple times gains a double competitive advantage: on one hand, it reduces production and

logistical costs; on the other, it increases profit margins, improving the financial sustainability of its business.

This logic of operational efficiency translates, albeit indirectly, into an environmental benefit, demonstrating how economic dynamics, when properly leveraged, can become drivers of ecological sustainability. In a context where environmental sustainability still struggles to establish itself as a real priority for clients and professionals, reuse thus represents a meeting point between economic rationality and environmental responsibility, opening pathways to circular economy models in a sector traditionally bound to a “use-and-dispose” logic.

A significant obstacle to the structural spread of reuse practices is the prevailing design culture, which continues to favor “custom” solutions characterized by bespoke elements created for single events or exhibitions. While this approach meets the client’s legitimate desire for uniqueness and personalization, it inevitably generates large quantities of materials that are difficult to reuse. This model increases waste, raises disposal costs, and drastically reduces the potential for circularity. This reveals a design paradox: the pursuit of communicative uniqueness—which often drives exhibition choices—ends up compromising both the environmental and economic efficiency of the system. Overcoming this limitation requires a paradigm shift in design, oriented Towards project engineering and the development of modular, flexible, and adaptable solutions.

In this view, design should no longer be understood solely as a creative exercise but as an integrated process that accounts for the durability and replicability of its components. Modular solutions—designed with compatibility and adaptability in mind—allow the reuse of elements across different contexts, reducing waste production and improving the overall efficiency of the exhibition life cycle.

Adopting such an approach also requires a cultural shift in the relationship between designers and clients. Designers must become aware of the environmental implications of their choices, while clients must be willing to embrace solutions that are less “customized” yet still visually impactful, achieving a balance between sustainability and experiential value.

In this sense, the transition Towards truly sustainable practices is not merely a technical matter but a process of cultural transformation that involves the entire ecosystem of the exhibition and event sector.

The way companies approach sustainability depends closely on their production background. Firms rooted in metalworking tend to favor modular systems in aluminum or steel, while those with carpentry traditions prefer wooden structures. There is therefore no material that is inherently more sustainable: what determi-

ness its environmental impact is the corporate know-how—the set of skills, expertise, and optimization capacities developed over time.

In recent years, numerous modular systems and solutions have been developed to renew the aesthetics and functionality of the traditional compositional structures of the 1980s. Although these introduce significant improvements in terms of aesthetics and sustainability—promoting material reuse—they generally fall short of meeting the demands of high-end installations characterized by a high degree of customization. Nevertheless, these innovations represent an important stimulus for the sector, and several companies are now experimenting with alternative approaches, developing diverse solutions that combine modularity, material reuse, and environmental awareness. The main limitation lies in the “closed” nature of many of these systems, which restrict the use of components to those within their proprietary frameworks.

This highlights the importance of developing hybrid solutions capable of integrating different technologies and ensuring greater flexibility. In the exhibition sector, sustainability has thus advanced more for economic than for ethical reasons; however, reuse demonstrates how efficiency-driven logics can yield environmental benefits, paving the way for a broader cultural transformation.

The Relationship between Exhibition Contractor and Design

It therefore becomes crucial to examine the relationship between the exhibition contractor (*allestitore*) and the design phase, to assess whether there is a genuine synergy between these two moments, and to identify which elements of the process could be improved to foster more effective integration and greater coherence between design and realization. During the interview, it emerged that the link between design and installation is one of the most significant and delicate junctions for understanding both the sector’s operational efficiency and the concrete possibilities for introducing sustainable practices (M. Fogarolo, personal communication, 17 June 2024). Design does not pertain only to the preliminary and creative phase; it decisively conditions fabrication processes, materials employed, logistics, and even end-of-event disposal costs. It follows that the quality of dialogue between designers and contractors becomes a critical factor for ensuring consistency, innovation, and the reduction of environmental impact.

At present, three scenarios chiefly characterize this relationship: in-house design; external design with collaboration; and external design carried out independently. The first occurs primarily in large exhibiting companies with a dedicated inter-

nal office, or in small and medium-sized firms that cannot outsource; the design phase is handled directly by the contractor, who may rely on an internal designer or on a trusted external professional with whom they regularly collaborate. This working model has the advantage of near-perfect adherence between the project and production capacity: solutions are conceived from the outset in relation to the systems and materials available, reducing conflicts and unforeseen events. In addition, in-house design tends to favor the use of modular, reusable components, with a consequent increase in both economic and environmental efficiency. When design is entrusted to external professionals but developed in constant dialogue with the contractor, virtuous dynamics tend to arise. In such cases, the designer can orient formal and communicative choices in light of the contractor's technical know-how, while the latter can propose alternative solutions able to optimize cost, time, and sustainability.

This model is the most balanced, as it combines design creativity with the practical experience of executing firms, allowing a genuine integration of aesthetic demands and operational responsibilities.

The most critical case occurs when the design is external and, in the initial phases, the designer works exclusively with the client, without any contact with the contractor. In this scenario the contractor receives a pre-defined concept or a rigid specification with little room for adaptation. This often makes it necessary to re-engineer the project to render it compatible with the contractor's techniques and resources, slowing processes and reducing the scope for introducing sustainability criteria. The lack of collaboration can also result in design solutions that are difficult to realize or economically untenable.

From this analysis, two distinct levels of sustainability emerge: upstream and downstream. The former is determined by initial design choices, which almost irreversibly set the degree of modularity, reuse, and circularity of materials; the latter is tied to the contractor's know-how, which can still intervene—even in the absence of a sustainably conceived project—by optimizing resources, reducing waste, and improving materials management. The distinction between these two levels highlights a crucial point: if sustainability is not integrated from the outset, the contractor is forced to operate within narrow margins, drastically limiting the effectiveness of possible practices. Only a structured and continuous dialogue among clients, designers, and contractors can enable a real transition Towards exhibition models that are simultaneously functional, aesthetically robust, and environmentally responsible.

Towards Integrated, Sustainable Installations

The interview outlines a sector in transition, marked by significant criticalities but also by emerging opportunities. On the regulatory front, there is an urgent need for a unified and coherent framework that overcomes the emergency-driven approach and recognizes the profession's complexity. In terms of sustainability, economic practices are progressively becoming environmental levers, opening spaces of convergence between efficiency and responsibility. Finally, the centrality of design underscores the need to strengthen collaboration among all actors involved, so as to combine creativity, feasibility, and environmental respect.

From the analysis of the current situation, three key points emerge: the legal definition of the *allestitore* is reductive and requires revision; sustainability constitutes a central challenge that demands alignment between economic and environmental objectives, as well as greater client involvement; and, ultimately, synergy between design and execution is a necessary condition for ensuring efficiency, quality, and the reduction of environmental impact. The sector's future will therefore depend on its capacity to build more adequate regulations, balanced economic models, and integrated design processes, recognizing the *allestitore* as a cultural actor and innovator.



Fig. 24. Booth for Longo Since 1961 — Vinitaly 2022 — Verona.

Bibliography and Online Sources

Crippa, D., Di Prete, B., Rebaglio, A., Ratti, L., & Cason Villa, M. (2022). Exhibit design towards an ecological transition. *MD Journal*, 14, 198–209.

Gallery Climate Coalition. (n.d.). GCC Carbon Calculator. <https://measure.galleryclimatecoalition.org/>

INAIL, Asal-Assoallestimenti, AEFI, & CFI. (2020). Trade Fair Events: Guidelines for the Management of Health and Safety at Work. https://www.inail.it/cs/internet/docs/linee_indirizzo_manifestazioni_fieristiche.pdf

International Association of Exhibitions and Events. (2024). How-to Guide to Sustainable Exhibitions. <https://www.iaee.com/sustainability-toolkit/>

Italy. (1996). Ministerial Decree of 19 August 1996. Safety regulations for temporary or mobile construction sites. *Gazzetta Ufficiale della Repubblica Italiana*. <https://www.normattiva.it>

Italy. (2001). Consolidated Law on Construction (D.P.R. 380/2001). *Gazzetta Ufficiale della Repubblica Italiana*. <https://www.normattiva.it>

Italy. (2006). Legislative Decree 3 April 2006, No. 152 – Environmental Code. *Gazzetta Ufficiale della Repubblica Italiana*, No. 88, 14 April 2006. <https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2006-04-03;152>

Ministry of the Environment and Energy Security. (2022a). Adoption of Criteri Minimi Ambientali for Cultural Events. <https://www.mase.gov.it/portale/-/riforma-3.1-adozione-di-criteri-ambientali-minimi-per-eventi-culturali>

Ministry of the Environment and Energy Security. (2022b). Criteri Minimi Ambientali for Cultural Events (CAM). https://gpp.mase.gov.it/sites/default/files/2023-01/CAM_Eventi.pdf

Ministry of Labour and Social Policies. (2014). Decree of 22 July 2014 — Safety measures for temporary structures for shows and public events (“Palchi e Fiere”). *Gazzetta Ufficiale della Repubblica Italiana*. <https://www.normattiva.it>

Trivellin, E., & Mancini, M. (2024). The sustainable temporary exhibition: The role of design in the context of trade fair exhibitions. *AND Architettura, Città e Architetti*, 10(2).

Designing for change

The designer as a facilitator of sustainable processes

L. Bortoloni | Università degli Studi di Ferrara
AIAP Associazione Italiana Design della Comunicazione Visiva

M. Tortoioli Ricci | Accademia di Belle Arti di Perugia
AIAP Associazione Italiana Design della Comunicazione Visiva



Fig. 25. Photograph of speaker Laura Bortoloni during her talk at the First NSBVN Cluster Conference. Photo: ClusterNSBVN_Iuav.

Designing for change

The designer as a facilitator of sustainable processes

This contribution examines the role of visual communication design in sustainable design processes, focusing on the responsibilities of the designer, particularly when he or she works across several competencies, as is the case in exhibit design. Through the analysis of statements and declarations taken from manifestos drawn up by designers or associations, the awareness of new requirements expressed by contexts, including regulatory ones, and the study of the processes underlying some case studies, the paper outlines possible guidelines towards the evolution of the visual communication design profession in the direction of sustainability.

Sustainability in design manifestos

Associations active in the valorisation and protection of the figure of the visual communication designer continue to question the responsibilities and role of the designer in relation ethical sustainability oriented design. The Montréal Design Declaration contains reflections that are the result of a collaborative effort with a global outlook. Signed on 24 October 2017 in Montréal by a group of representatives from the international community of designers, architects, planners and landscape architects, united in the ICoD International Council of Design,

the Declaration proclaims the potential of design to achieve global economic, social, environmental and cultural goals and includes a series of calls to action addressed to practitioners, educators and governments. The Declaration concludes by stating that all people deserve to live in a well-designed world. It sets out the qualities and capabilities of design in terms of the impact it can have in communities and identifies nine different calls to action, areas in which everyone working around design is called upon to act. These are design advocacy, design metrics development, design policy development, design standards development, improving design education, responsive design, responsible design, vigilant design, and design value recognition. The declaration recognises the need for strategic design leadership at local, regional, national and international levels, and the need for governance models and policy agendas to take design into account, recognising its ability to interplay on the path towards sustainability in its various domains: environmental, economic, social and cultural. Among these calls to action is therefore also the call to promote responsible design, defined here as the ability for designers to recognise the impact of their practice and to develop awareness of the potential for them to be both constructive and destructive in their work. The statement calls for a shift in focus from promoting consumption to improving people's lives.

Sustainability in the Carta del Progetto Grafico

In the claims expressed in the Montréal Design Declaration it is possible to recognise the echo of those already present in the historic reference document on the definition of identity and role of the visual communication designer in Italy, the Carta del Progetto Grafico formulated in 1989 by AIAP Associazione Italia Design della Comunicazione Visiva, in claiming a quality of design that is first and foremost a responsibility towards the user. Drafted at the end of the 1980s thanks to the effort of an editorial committee composed of Giovanni Anceschi, Giovanni Baule and Gianfranco Torri, appointed by a commission of drafters built within the association, the Carta del Progetto Grafico represents an essential reference for the statute of the discipline, the training of visual communication designers and the profession, while stimulating the redefinition of graphic design itself. The Carta emphasises the central role of the designer as a key figure in communication processes and social actor. The term sustainability, with the precise meaning as understood in contemporary thinking, is not present in the Carta, but several excerpts anticipate some of its fundamental aspects.

CARTA DEL PROGETTO GRAFICO

TESI PER UN DIBATTITO SUL PROGETTO DELLA COMUNICAZIONE

Il comitato di redazione della Carta del progetto grafico (Anonimo, Roma, Torino) è stato espresso dalla commissione degli editori formati da Luciano Accorci, Giovanni Basile, Ottomaro D'Onofrio, Franco Gennari, Giancarlo Ignazzi, Giovanni Luzzi, Alberto Marzulli, Giancarlo Tori, costituitosi ad Asolo in occasione della Presidenza nazionale Alap nel 24 giugno 1989.

La Carta del progetto grafico è stata presentata il 17 settembre alla scuola di architettura del Politecnico di Milano per l'occasione si è svolto un dibattito sul suo significato e sul suo ruolo in un'epoca di un dibattito con un sistema interdisciplinare.

La Carta del progetto grafico che viene presentata è così: per molti, viene concepita come un'appendice, successivamente, accanto ai momenti di rappresentazione che si acquisisce e espone in ordine del dibattito che sarà luogo di discussione nazionale.

Non a caso, la Carta è stata presentata al Politecnico di Milano, dove si svolgeva un convegno di studio e lavoro, tenuto da Mario Goffa la pubblicazione degli atti del Convegno, accoglie ogni eventuale contributo anche scritto.

La Carta è elaborata alla Carta del progetto grafico vengono raccolte prima le opinioni nazionali e poi le opinioni internazionali. La Carta del progetto grafico è la relazione di Goffa e Lina Gennari e durante i lavori del dibattito nazionale Alap di Bologna (giugno 1989).

1

Noi osserviamo che il sistema della comunicazione e dell'informazione dispone oggi di una presenza generalizzata, di una diffusione capillare, di un assetto poderoso.

È l'industria della comunicazione e dell'informazione a porre come trento nello scenario contemporaneo.

Peraltro sono riscontrabili in parallelo inquietanti fenomeni di inquinamento visivo e di saturazione comunicativa, sintomi di un sistema in cui tecnologie e apparati, lontani dall'essere auto sufficienti, sono bisognosi di direzioni, di scelte e orientamenti progettuali.

La grafica è ormai una presenza trasversale. Dove c'è comunicazione c'è grafica. Come la comunicazione essa è dappertutto.

La grafica è là dove la cultura si fa editoria. La grafica è là dove i sistemi di trasporto si stanno informatizzando.

La grafica interviene nell'assetto multimediale della politica.

La grafica è presente non solo nella divulgazione ma anche nella modellizzazione della scienza.

La grafica è in azione là dove il prodotto industriale interagisce con l'utilizzatore.

La grafica è nella grande distribuzione dove il consumatore incontra la merce.

La grafica è anche nello sport, nell'immagine delle grandi manifestazioni come nella loro diffusione massmediata.

2

Noi affermiamo una nuova centralità del progetto grafico.

Nella cultura iperindustriale di massa, la quantità, la frammentazione, la disomogeneità, la dislocazione nell'offerta dei dati necessari all'uomo per vivere, producono una domanda di nuove sintesi e di orientamento. È inconfondibile, l'ente, l'istituzione, l'impresa che affronta il problema di comunicare fa già un primo passo nella direzione di una qualificazione dei beni e dei servizi che produce.

E ancora con la sua competenza nel pilotare l'attenzione, nell'operare destinzioni percettibili, con la sua capacità di attribuire una forma e un'identità alla comunicazione, la grafica contribuisce a conferire esistenza alle strutture della società.

3

Indichiamo la grafica come attività che si colloca dunque dentro al sistema generale della progettualità orientata alle necessità dell'uomo.

Accanto all'urbanistica, all'architettura, al design industriale, al design ambientale, cosa non solo li affianca ma interagisce con essi.

La grafica è urbanistica nelle tecniche di prefazione, nei sistemi di visualizzazione e nei metodi di rappresentazione.

La grafica è architettura non solo in quanto strumento della lettura del progetto ma anche direttamente nella presenza della scrittura nell'edificio costruito.

La grafica è design ambientale nella segnaletica cittadina, dei trasporti ecc.

La grafica è design industriale nella "grafica di prodotto", nei cruscotti, nelle interfacce, nel packaging ecc.

4

Come negli anni Trenta si avvertiva quello dell'architettura come ruolo guida delle discipline del progetto, e negli anni Sessanta, nella transizione dalla produzione al consumo, il design industriale assumeva un ruolo di coordinamento concettuale, negli anni Novanta è il progetto grafico a collocarsi in posizione strategica contro la cultura del progetto.

5

Per quanto articolata in numerosi settori, e pur mostrando facce anche molto diverse noi, che possiamo preferire o chiamare autori o planner, designer o creativi, fotografi o illustratori, riconosciamo la nostra professione come un'attività unitaria. Così come ribadiamo l'unità della disciplina cui fa riferimento la cultura del grafico. Sul versante della pratica mentre osserviamo la transizione dal mestiere alle specializzazioni, con-

stiamo anche che per poco ci si trovi ad affrontare un progetto complesso, il problema diventa quello del governo di processi e il ruolo assume i tratti di una regia.

D'altronde, cioè sul piano teorico, in tutte le diversissime procedure metodologiche dei singoli autori non si difficile ritrovare connotati comuni nella maniera di strutturare i problemi e di risolverli. A entrambi questi aspetti, alla prassi e alla teoria, legghiamo il problema della formazione che va ripensata e organizzata sulla base di questa identità rinnovata.

In Italia registriamo, da questo punto di vista, un grande vuoto istituzionale. Ad esempio non esiste una facoltà universitaria dedicata al progetto di comunicazione.

Ma, nelle indagini analitiche dei linguaggi, delle culture e delle società, in un programma di studi di storia e teoria della grafica, in una elaborazione sistematica e metodologica, e ancora nelle ricerche specificamente disciplinari del basic design, senza infirmità dimenticare l'esplorazione e lo sviluppo delle potenzialità informatiche, noi intendiamo identificare i principali filoni di lavoro e i possibili riferimenti per un nuovo iter formativo.

6

Nei confronti dell'inquinamento prodotto da una comunicatività pletrica e da una complementare indifferenza per la cultura dell'immagine, (risultato di una forma dell'industrializzazione dei processi comunicativi, dove l'industria mass mediale e informazionale, prigioniera della ideologia dell'orientamento al mercato, produce vulcanicamente informazioni), noi sottolineiamo le nuove responsabilità del progettista grafico. Difendiamo il progetto della qualità nel campo della comunicazione visiva. Rivendichiamo inoltre le responsabilità nei confronti dell'utente.

Competenza questo che è perentrio ciò che viene richiesto dalla committenza più avanzata. Noi dichiariamo pertanto il punto di vista dell'utente fondamento costante del nostro operare.

Possiamo, inoltre, il massimo dell'attenzione oltre che al risultato finale della comunicazione, anche a una presenza dei momenti strutturali e organizzativi della macchina della sua produzione.

Consideriamo tra i nostri compiti principali quello di agire dentro ai sistemi che producono standard (dal design di caratteri ai progetti di simologie segnaletiche, dai programmi di immagine coordinata alle strategie di comunicazione, dal software grafico a tutte quelle elaborazioni che servono in seconda istanza per produrre risultati finali).

7

Ci impegniamo a mettere in atto tutte le iniziative che promuovono il riconoscimento della nostra identità professionale sia sul versante della società in generale che presso la vasta gamma della nostra committenza.

Con questa "carta" ci impegniamo a lavorare in prospettiva, come sta avvenendo in altri paesi e in associazione con gli intenti delle organizzazioni internazionali e delle associazioni nazionali, ad una coesistente della progettualità. Ci impegniamo inoltre a costruire un calendario delle iniziative per la divulgazione dei vari aspetti della professione e della disciplina.

Giovanni Anonchi, Studio Azzurro, Franco Balan, Antonio Barrea, Giovanni Baule, Omar Calabrese, Enrico Carpi, Mimmo Castellano, Pierluigi Cerri, Aldo Colobetti, Mario Conventi, Mario Crespi, Geronimo D'Ambrasio, Massimo Dolci, Alfredo De Santis, Paolo De Robertis, Giorgio Fioravanti, A. G. Fronzoni, Franco Gennari, Pino Gennari, Ma Huber, Giancarlo Ignazzi, Catina Ienza, Enzo Lusi, Giovanni Luzzi, Pierangelo Mevini, Alberto Maranzoni, Daniele Marini, Bruno Mengozzi, Rob Norda, Franco Orgnoli, Vireno Pagliardini, Tullio Perotti, Gianluigi Pasquodewig, Roberto Perazzi, Valterio Pizzi, Alessandro Polina, Michele Provinciali, Andrea Rulli, Stefano Rossi, Roberto Sembrotti, Gianni Sisti, Lisa Steiner, Gianfranco Tort, Daniele Turchi, Alessandro Ubertazzi, Massimo Vignelli, Vitore Vitale, Heinz Walz.

Fig. 26. Mario Piazza, "Carta del Progetto Grafico", 1989. AIAP Documentation Center on Graphic Design.

Point 6 of the document states that, against the pollution produced by plethoric communication and a complementary indifference to visual culture, it is necessary to emphasise the new responsibilities of the graphic designer, defending quality in the field of visual communication, claiming responsibility for the user, advocating for quality as a key competence demanded by the most forward-looking clients. It also declares that user's point of view should be the constant basis of the designer's work and that the utmost attention should be paid not only to the final result of communication, but also to the structural and organisational moments of the process (1988). This is a fundamental point of the Charter, in which on the one hand the designer claims a new definition of quality, and on the other affirms that this objective can only be achieved through their involvement in the crucial steps of the strategic processes. It is a statement that anticipates more recent reflections, according to which the objective of design is not only the design of artefacts, but the facilitation of changes and transformations (Amatullo et al., 2022, p. 25).

In its Article 3, the Graphic Design Charter lays the foundations for subsequent reflections on the need for an interdisciplinary nature to design. The Carta proclaims the need to designate graphic design as an activity situated within the general system of human-oriented design. Alongside city planning, architecture, industrial design and environmental design, it not only complements them but interacts with them. Graphic design is urban planning in its forecasting techniques, visualisation systems and representational methodologies. Graphic design is architecture not only as a tool for project drafting but also directly in the presence of writing in the buildings. Graphic design is environmental design in city signage, transport, etc. Graphic design is industrial design when it is applied to products, in dashboards, in interfaces, in packaging designs etc (1989). What Baule describes in retrospect as a failure to perceive the disciplinary unity of graphic design (2015, p. 252) is in fact one of the qualities that underpin the possibility of graphic design to intertwine with other skills in projects such as exhibit design.

At the roots of the dialogue between graphic design and industrial design

The call in the Carta del Progetto Grafico for a new definition of quality and for the designer to have a greater presence in the structural and organizational phases of the production process foreshadowed an evolution of the design profession well beyond the mere execution of visual artifacts. This vision, which anticipa-

tes the concept of design as a process facilitator, is actually rooted in the historical work of pioneering post-war figures. Designers like Silvio Coppola already embodied what we might call a preliminary form of ecology of thought, operating across various fields of design, including graphics, architecture, and industrial design.

Coppola was able to operate transversally in different project fields between graphics, architecture and product design; active in Milan in the second half of the 20th century, he expressed himself with ease between various disciplines. He worked crosswise between graphics, architecture and industrial design, going so far as to found Gruppo ED Exhibition Design in 1968, a space for research, design and dissemination that, under his leadership, would work on experimentation and overcoming disciplinary boundaries. Over the years, the group would involve figures such as Giulio Confalonieri, Franco Grignani, Bruno Munari and Pino, redefining the exhibition space as a place for dialogue, exploring the versatility of materials, such as laminates, to carry out a sequence of pure, deliberately non-functional experiments aimed at showing the research, rather than the finished product (Galluzzo, 2019, p. 14). For the current discussion, it is especially interesting to note the effortless with which Coppola navigates across media, shifting mate-



Fig. 27. Silvio Coppola, BERNINI con *"AMBIENTI vi augurano una serie di giorni sereni per comporre un disegno di armonia"*, 1969. AIAP Documentation Center on Graphic Design.

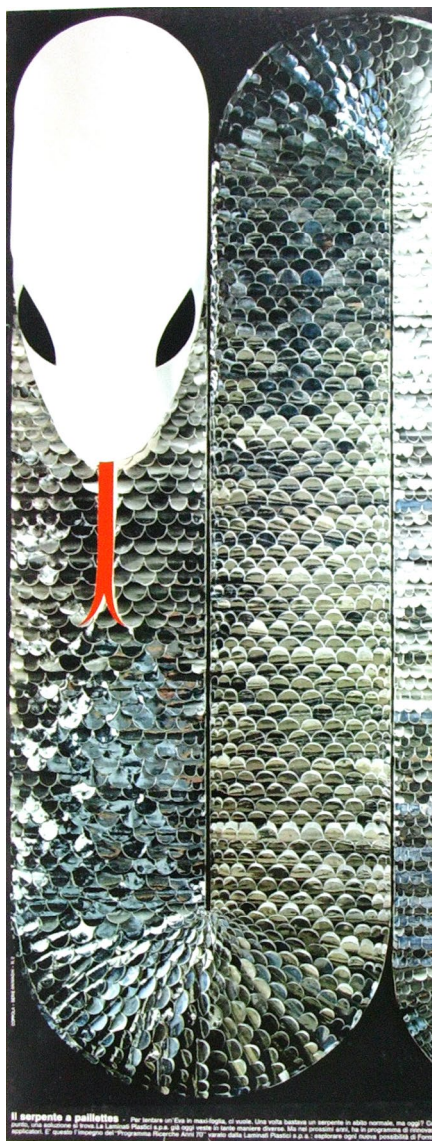


Fig. 28. Silvio Coppola, “*Il serpente a paillettes*”. Poster Laminati Plastici No. 2, serie animaghi, 1970/71. AIAP Documentation Center on Graphic Design.

rials from one area to another – a laminate can become paper for a poster, or it can bend to lightness, modular repetitions, tensions and unprecedented shapes to build. Evidence of this are both the pre designs, evidence of the research process produced by the Gruppo ED Exhibition Design, and the posters Coppola creates, often for the same laminate and semi-finished product companies. The Gruppo ED Exhibition Design’s pre designs escape from the classification of artefacts or prototypes, to restore centrality to experimentation and to the steps preceding the industrial product, in a sphere in which a rigid disciplinary classification is overcome in favour of the priority given to methodology. On the other hand, Coppola’s posters use semi-finished products that one would not normally encounter in graphic design.

Sustainability and graphic design

The complexity of the concept of sustainability challenges the communication designer in its applicability to different aspects of professional practice. Designing with a *forma mentis* aimed at sustainability certainly means promoting actions oriented towards environmental sustainability, towards the enhancement of a circular economy and the promotion of choices against

climate change. Designers can bring an ethical approach to their clients and a critical point of view towards the risk of communication-washings (green-washing, pink-washing, rainbow-washing, etc.). Designers can work to produce less, to choose sustainable media and materials, both physically when choosing like paper, supports, inks, personalisation techniques, and digital when choosing data storage suppliers. All kind of companies, from printing industries to data centres and providers are entering the world of sustainability-related accreditations, although it is an area that is not without ambiguity and the subject of frequent criticism regarding the criteria for offsetting and defining carbon neutrality. Not least, designers can work to counter an extractive approach not only towards raw materials, but also towards human resources.

As early as 2009, Belgian designer De Bondt had already drawn up her own manifesto on sustainable graphic design when called upon to design the communication and graphics for the Radical Nature exhibition at the Barbican Centre (Walker Art Center, 2014). She had analysed the most common practices and constructed a list of yes and no. The former included practices such as recycling and reuse, but also practical and operational advice such as the suggestion to use standard formats to limit waste, to favour simple easily dismantled binding or assembly systems, to opt for customisations such as blind embossing or laser engraving that avoid the need to add additional materials, to seek a reduction in the number of colours, to favour layouts with small images, and to choose local printing services and suppliers. In the nos: spot varnishes, laminating, vinyl films, mounting with glue, full colour backgrounds, heavy paper stock. De Bondt also recounted how, at that show, she questioned a high print run of flyers suggested by the client, in order to instead purchase a risograph printer and print on demand a smaller quantity of artefacts than initially planned.

More recently, Jennifer Armbrust drew up a list of 50 questions for every designer, intended as a vademecum and checklist for every designer to test their awareness of the working framework every time they go through a design process. Regarding the reflection on sustainability, questions 18 to 24 are striking. Armbrust invites us to first ask ourselves about respect, aimed both at the people we work with and the planet. This is followed by a reflection on the products one is designing for. The author invites one to think critically about their life cycle assessment, asking oneself what raw materials they are made of, how long they last, what their disposal or recycling process and waste management is, before deciding whether or not to accept a design assignment to promote that product (2023, pp. 39-40). More generally, Armbrust's fifty questions constitute a rig-

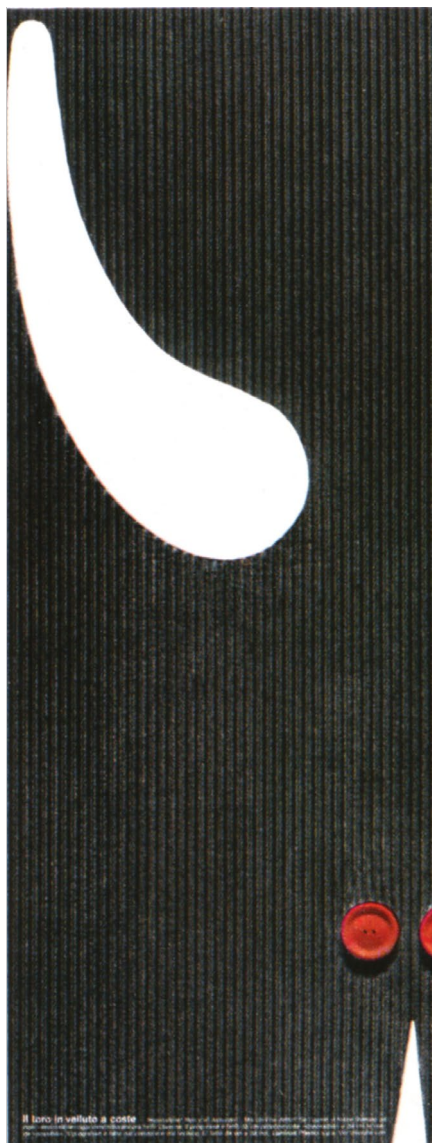


Fig. 29. Silvio Coppola, “Il toro in velluto a coste” Poster Laminati Plastici No. 1, serie animaghi, 1970/71. AIAP Documentation Center on Graphic Design.

rous test of the designer’s awareness of their position in the processes in which they participate and work.

Designing sustainable processes: Towards a set of guidelines

While the discussion of design manifestos and historical cases shows that the idea of ethical and responsible design isn’t new, today’s sustainability challenges demand a more profound, structural response. Designers can no longer simply choose eco-friendly materials or promote conscious consumption. Instead, their role must shift decisively towards a strategic dimension, where design focuses not just on the final artifact, but on the entire transformation process, acting as a bridge between data, people, and an organization’s sustainability goals.

In order to work towards sustainability, the ability to insert design into the processes of companies, organisations, and less formalised groups seems key, in order to look towards the redefinition of complex systems and new organisational cultures endowed with what Manzini has defined as sustainable qualities (2015, p. 23).

Design intended as a methodology and as a mindset, in which the designer plays in an increasingly strategic and advisory role, together with the client, in order to incorporate approaches and reflections aimed at sustainabili-

ty into the decision-making processes. The designer works first and foremost to make all those involved in the process aware of the changes underway and of the ongoing processes, and to give visibility to data and information, involving new and unexpected skills and players. For the visual communication designer this is matter of finally stepping out of the narrow role in which they have often been confined, and interpreting that redefinition of responsibility anticipated and hoped for by the aforementioned Carta del Progetto Grafico.

The designer can work to inform and involve stakeholders in a sustainability-oriented transformation process. An opportunity for this is provided by regulatory updates on sustainable corporate governance and the obligation to include ESG (environmental, social and governance) criteria in the business plans of public companies. These are criteria for assessing a company's commitment according to three dimensions – environmental, social and governance – which give a measure of how sustainable and responsible it is. Within this framework of redefining internal processes, designers can play a key role in making the various stakeholders aware.

Visual communication designers can give visibility, and thus understandability, to the data and information that processes towards sustainability develop, thanks to the potential and tools of information design and data visualisation. As a consequence, visual and verbal languages can change and evolve - consider how the spread of information design has altered the visual landscape of communication over the last two decades. They can involve new and unexpected competences and skills, activating principles of inclusion in design development.

In short, designers in the field of visual communication with a focus on sustainability can:

- make the players involved aware
- make data and information visible
- engage new skills and expertise
- activate principles of inclusion and accessibility
- make visual languages change and grow
- questioning outcomes and impact

Testing sustainable processes

The role of an association like AIAP, in this dynamic, is significant because it can propose practices and approaches with the aim of exploring dynamics that can become good practices and models.

In order to promote sustainability and enhance the importance of information visualisation, in 2021 AIAP explored the possibilities of data visualisation applied to open data, organising URBAN DATAVIZ CONTEST together with Urban Digital Center - InnovationLab Rovigo with and in collaboration with Università Iuav di Venezia. Through a series of initiatives aimed at involving visual designers, data journalists and creative coders, the association investigated the potential of dissemination of the open data. The themes chosen in that experience - the city and its citizens, the sustainable waste cycle, urban green - were expressions of the SDG Sustainable Development Goals. The actions implemented explored the ways in which information design, data visualisation and open data can become tools for accessing information related to the urban life and foster processes of participation and open innovation.

AIAP has also interpreted the theme of sustainability through the AWDA AIAP Women in Design Award, a design award created in 2012 with the aim of understanding and promoting the work of women related to visual communication design, to investigate their languages and approaches. In the latest edition of 2023, the award integrated a section called AWDA for RIGHTS!, dedicated to graphic projects that address social issues of rights, women's work and gender inequality. It is also significant to note the increasing number of events, festivals, and events dedicated to graphic design that are taking place annually in Italy, which AIAP sponsors or supports, testifying to an awareness on the part of students and young professionals of how the profession is changing.



Fig. 30. Mario Piazza, “Carta del Progetto Grafico”, 1989. AIAP Documentation Center on Graphic Design.

Bibliography and Online Sources

Anceschi A., Baule G., & Torri G. (1989). Carta del Progetto Grafico. <https://aiap.it/2000-2020/documenti/8046/193.html>

Amatullo, M., Boyer B., & May J. (Eds.). (2022). Design for social innovation: case studies from around the world. Routledge, Taylor & Francis Group.

Armbrust, J. (2023). 50 questions for every designer. In Place, A. (Ed.), *Feminist designer: on the personal and the political in design* (pp. 39-40). The MIT Press. <https://doi.org/10.7551/mitpress/14269.001.0001>

Baule G. (2015). La Carta del Progetto Grafico venticinque anni dopo. Una rilettura. *AIS/Design. Storia e ricerche*, 3 (6), pp. 243-259. <https://www.aisdesign.org/ser/index.php/SeR/article/view/142>

Galluzzo, M. (2019). PRE DESIGN 1969. Le ricerche sul laminato plastico del gruppo Exhibition Design. Corraini.

ICoD International Council of Design (2017). Montréal Design Declaration. <https://www.designdeclaration.org/>

Manzini, E. (2015). Design, when everybody designs: An introduction to design for social innovation (R. Coad, Trad.). The MIT Press.

Walker Art Center. (2014, 14 marzo). Insights 2014: Sara De Bondt, London [Video]. YouTube. https://www.youtube.com/watch?v=tUMh_UXc_dY

Reflections for drafting the CAM Allestimenti

*A legacy of the first conference on sustainable exhibit
promoted by the NSBVN Cluster*

B. Di Prete | Politecnico di Milano
Department of Design

R. Palomba | Università Iuav di Venezia
Department of Culture del Progetto



Fig. 31. Barbara Di Prete presents the guidelines of the NSBVN Editorial Series.
Photo: ClusterNSBVN_Iuav.

Reflections for drafting the CAM Allestimenti

A legacy of the first conference on sustainable exhibit promoted by the NSBVN Cluster

The exhibit sector—comprising fairs, exhibitions, and temporary events—has a significant environmental impact due to the short lifespan of installations, the use of materials that are often non-sustainable, and the high CO₂ emissions linked to lighting, air conditioning, and transportation. Added to these environmental concerns are the regulatory challenges posed by the Criteri Ambientali Minimi (CAM, Criteri Minimi Ambientali), which, although mandatory for public administrations, remain difficult to apply effectively. The criteria are not always clear, and when adapted to the specificities of temporary installations, they often result in forced interpretations and regulatory gaps.

To address this pressing issue, a number of academic initiatives—while rooted in research—are increasingly engaging a broader range of stakeholders, including industry professionals, exhibition contractors, and trade fair and museum operators. Among these, the NSBVN – Sustainable Exhibit Cluster¹, promoted by Università Iuav di Venezia, together with the projects funded under the TOCC² program and inter-university collaborations such as the Places+³ research group at the Politecnico di Milano, is developing innovative, circular-economy-based strategies for more sustainable exhibition design. These projects aim to devise methods and practices that mitigate the environmental impact of installations, raise awareness among both professionals and the public, and promote an update



Fig. 32. One of the working tables during the First NSBVN – Sustainable Exhibit Cluster Conference. Photo: ClusterNSBVN_Iuav.

to current regulations to make the entire temporary events supply chain more sustainable.

Within this research framework, the focus is on the work of the NSBVN – Sustainable Exhibit Cluster, particularly the national conference of the same name and the subsequent working groups⁴. Both have served as key opportunities to convene Italy's leading figures in the exhibition sector to discuss the gaps in existing regulations and, in the short term, draft supplementary guidelines to propose to the Ministry for Ecological Transition, aimed at better regulating installation processes and reducing their ecological footprint.

CAM Eventi: Towards a Cultural and Regulatory Shift

The need for a new legislative framework to regulate the exhibition sector was also addressed in the recent Regulation (EU) 2024/1781 of the European Parliament and of the Council (13 June 2024), which defines eco-design requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542, and repealing Directive 2009/125/EC.

This regulation forms part of the broader context of the European Green Deal

and the Circular Economy Action Plan, with the aim of ensuring that products placed on the EU market are increasingly sustainable, energy-efficient, and designed for a second life, thus reducing their environmental impact (European Parliament and Council of the European Union, 2024). Among the key criteria identified by the Commission are product durability, reparability, and recyclability.

However, these directives do not yet constitute a cohesive regulatory framework for the exhibition sector. When it comes to regulating production processes, material selection, logistics management, and the organization and execution of installations, the main regulatory reference remains the CAM Eventi (2022).

These *Criteri Minimi Ambientali* for Events represent an important set of guidelines for organizing events in a more sustainable and environmentally responsible way, aiming to minimize their impact and encourage the responsible use of resources. Yet, due to the sector's heterogeneity and the difficulty of addressing the specific decision-making and design processes within each supply chain, these objectives remain highly ambitious and, for now, largely unmet.

The philosophy underpinning the CAM is to limit waste and unnecessary consumption by adopting reversible and replicable solutions. Priority is generally given to recycled or reusable materials that can be employed across multiple contexts, entail low transportation costs, or utilize shared storage solutions. For catering, the guidelines encourage the use of organic, local, and seasonal foods; for waste management, organizers are prompted to promote recycling; for logistics, they are urged to favor sustainable mobility options—short-distance or low-emission transport systems. However, when it comes to the design and installation of exhibition spaces, specific prescriptions are still lacking.

It is particularly noteworthy that the CAM do not limit themselves to the “care” of the environment but also embrace a social and ethical vision of design, following the principles of Universal Design (Mace, 1997; Fortuna et al., 2023) to ensure accessibility and inclusivity for all. Another crucial point emerging from the analysis is the promotion of circular economy practices—not merely as a long-term aspiration but as a concrete operational anchor. Among the recommended strategies is Design for Disassembly (Rios et al., 2015; Toniolo et al., 2021), which facilitates the reuse and recycling of installations.

As mentioned, the CAM apply to a wide range of events—from cultural to sporting and entertainment ones—encompassing various types of exhibitions, fairs, and performances. Precisely because of this broad scope and the inherent complexity of each type of event, the CAM can only become truly operational tools

if they are further refined to address specific contexts, constraints, and challenges. While much remains to be done, the fact that compliance with these criteria is already mandatory for public administrations and integrated into public procurement procedures marks a significant step forward in terms of awareness, education, and the adoption of more virtuous practices.

At present, therefore, rather than serving primarily as a binding legal framework, the CAM represent a valuable cultural opportunity to foster a shift towards sustainability—one capable of leaving a lasting, positive legacy for communities and territories alike.

CAM Allestimenti: Challenges and Opportunities

At the conclusion of the First NSBVN – Sustainable Exhibit Conference, the namesake Cluster organized three focus groups specifically dedicated to the regulatory framework governing the sector. The first meeting, held in person immediately after the conference, provided an opportunity to establish a multi-stakeholder dialogue among representatives from the museum, trade fair, design, and exhibition industries, as well as the academic world. The session proved hi-



Fig. 33. First meeting of the NSBVN Focus Group – CAM Exhibition Design, 25 July 2024. Photo: ClusterNSBVN_Iuav.

ghly stimulating, and all participants emphasized both the need and willingness to further explore the subject through additional dedicated meetings. These subsequent discussions took place in July and October 2024 in a blended format (online and in-person).

Other professionals from the exhibition field later joined these follow-up sessions, as it was deemed essential to involve representatives from all stages of the exhibition process in order to enrich the dialogue and encourage as comprehensive and articulated an exchange of experiences as possible⁵.

A Critical Overview: Where to Start?

The analysis of current legislation on eco-design and CAM Eventi revealed numerous gaps and unresolved issues in a field facing significant challenges. The following summarizes the main critical aspects that emerged from the focus groups:

a. Limited relevance of exhibition-related issues: The first major concern, already identified in previous discussions, relates to the low relevance of exhibition and spatial themes within the CAM Eventi: out of the 23 stated criteria, only three directly concern exhibition design. This limited attention suggests that the field is considered marginally impactful. However, exhibition processes involve large quantities of material, significant logistical operations, and long-distance transport, resulting in considerable economic and environmental costs. Moreover, without proper planning, exhibitions can leave behind substantial waste. Giving the same regulatory weight to an entire exhibition process as to catering materials (e.g., tablecloths, cutlery, napkins) is, therefore, a naïve—if not risky—imbalance for a framework that aspires to be comprehensive.

b. A generalist approach: The CAM apply to multiple product categories, resulting in a generalist orientation that allows for wide interpretation—especially in exhibition design, which by nature involves extremely diverse production chains and differs significantly depending on site-specific contexts.

c. Poor alignment with real working conditions: The broad scope of the CAM comes at the cost of precision: the criteria are often perceived as overly theoretical and detached from professional practice. In the design phase, it becomes difficult to define commitments that reflect actual working conditions, making practical implementation inconsistent.

d. Lack of reference models: Due to the absence of prior experience, codified models, or dedicated literature, evaluation parameters for assessing the environmental impact of an exhibition remain unclear. This lack of benchmarks makes both interpretation and application challenging—unlike other fields (such as food and

beverage) that have developed long-standing, stratified regulations, which are easier to understand and apply.

e. Lack of private-sector responsibility: Currently, CAM compliance is mandatory only for public administrations, not for private entities. This creates market disparities and hinders the widespread adoption of a sustainability culture. Partial public–private entities, such as foundations or trade fair organizers, can often bypass compliance altogether. As a result, this tool has yet to achieve systematic implementation.

f. Absence of monitoring mechanisms: Implementing CAM requires not only careful planning but also rigorous verification to ensure that declared commitments are actually met. Such commitments should be articulated during the design phase through accessible and transparent tools, rather than via highly technical documentation that clients rarely understand. Likewise, on-site inspections and supervision are necessary to promote real accountability through collaborative oversight between public authorities, clients, and industry professionals.

g. Need for training and accountability: Closely linked to the previous point is a lack of dedicated training. In theory, responsibility for CAM compliance lies with the owner of the space (not the event organizer). When the owner is a public body, it is therefore the administration's duty to ensure compliance. However, there is often no adequately trained personnel to perform such checks. In most cases, compliance is verified only through self-certification by the contractor, a system that shifts responsibility and offers no real guarantee of results.

h. Building professional competence: A related and equally significant issue concerns internal expertise within companies. Certain CAM requirements—such as the calculation of carbon footprint—require costly software and specific technical knowledge that many firms lack. This additional demand for skills and resources further complicates implementation and highlights the need for training programs to support the sustainability transition.

i. Short-term planning: In addition to cultural and regulatory issues, economic and organizational constraints hinder the long-term sustainability of exhibition practices. Unlike in the past, when companies could rely on three-year budgets allowing for flexible and sustainable management, today most operate with annual budgets and plan short-term installations. This severely limits the possibility of reusing designs in different contexts, reducing opportunities to integrate sustainable practices.

l. Towards a deeper culture of sustainability: Finally—and perhaps most importantly—the main obstacle remains the lack of awareness among clients and the

broader industry. Despite some progress, a genuine culture of reuse is still largely absent. Often, at the client's own request, installations are used only once and then discarded. This attitude is rooted in an aesthetic culture that values novelty, perceiving reused materials as less appealing or even detrimental to brand image. Recycling is also resisted because many companies demand custom-built, brand-specific designs, rejecting the idea of sharing or reusing components provided by trade fair organizers.

A Design-Oriented Perspective: Where Do We Want to Go?

Over the course of the discussions on the CAM Eventi, the need emerged to draft a dedicated CAM Exhibition Design (CAM Allestimenti), expanding and deepening certain points already present in the current regulation while tailoring them more closely to exhibition-specific requirements. It was therefore proposed to prepare a supplementary framework that would address the sector's needs with a more vertical, targeted document.

In order to structure such a document comprehensively—taking into account all phases that characterize the design process, from the selection/availability of materials to the management of logistics, transport, and possible storage; from scheduling to the calculation of environmental impact and the structuring of the network of actors involved; from production through on-site installation, and from disassembly to end-of-life planning—the meetings were organized around a series of programming, design, and production parameters, grouped into operational macro-categories (see Table 6).

What follows are reflections shared in the working groups, intended to constitute an initial corpus of meta-design guidelines for a future CAM Exhibition Design.

a. The “right” timelines for sustainable installations: the first key aspect concerns the management of design and execution timelines, a crucial node for the sustainability of installations. Especially in the trade-fair context, there is often an imbalance between commercial activities—which begin well in advance—versus the design and production of the installation (compressed into a few months, if not a few weeks before the event) and the installation/disassembly phases, to which only a few days are allotted. Such compressed timelines create a precarious condition for the contractor, often leading to the use of pre-assembled materials that are less sustainable but more cost-effective. Many events impose rigid deadlines for dismantling, forcing operators to destroy artifacts that could otherwise be reused if properly taken down. Proper scheduling should therefore adopt a systemic view of the project, allocating adequate time to production and installation

Parameters for the Management and Coordination of an Exhibition Setup	Strategic Aspects (Phases of the Exhibition Cycle)	Impact Calculation (KPIs and Tools/Actions)	Actors Involved
Programming (Time): Advance space allocation Biennial/triennial trade fair installations Misalignment between commercial activity / design / production / installation timelines (<i>Short times prevent full optimization of logistics and design processes. e.g., 9 commercial months, 3 months for everything else, 5 days for installation</i>) Design (Production Phase): Everything that is done is paid for by the exhibitor. There is difficulty between trade fair districts and organizers in communicating additional costs in favor of sustainability. Every design choice affects the cost per square meter (+ cost = - area). There are general technical guidelines issued by fairs to leave exhibitors some freedom. <i>Fairs are now working on creating new guidelines (e.g., banning plasterboard unless recovery methods after use are clearly declared).</i> The need for beautiful, impactful installations often clashes with the timing and requirements of environmental criteria. A collective effort is required to align all stakeholders.	Choice of materials: CURRENT SITUATION: Consult existing academic research archives on eco-materials.	Characteristics? (<i>Mono-material / Multi-material</i>)	Organizer / Manager
	Logistics / Transport: CURRENT SITUATION: Who and what is transported is often uncontrollable, since routes are sub-contracted. NEED: Rationalization of movements. QUESTION: Would building loyalty with logistics companies help achieve greater control?	Ease of transport? (<i>Weight / Dimensions</i>) Emissions? (<i>Distances to cover</i>) →Carbon Calculator →Global Footprint Network	Client / Exhibitor
	Installation (Implementation Phase): CURRENT SITUATION: Modular systems differ from pre-fitted ones (the latter being contracts with the trade fair organizer). NEED: Provide designers with tools to foster a systemic vision. QUESTION: How can the scenic/visual impact of installations be reconciled with sustainability? CURRENT SITUATION: Advantages and disadvantages of parametric systems - a balance must be found between personalization and modularity. NEED: Personalization that reflects the exhibitor's and the fair's identity. QUESTION: How can customization be guaranteed?	Ease of Assembly / Disassembly? (<i>Number of components / Number of different materials / Disassembly possibility</i>) →Decentralized construction (on site). →Study of parametrically modeled components to provide to designers. →Research projects on parametric prototypes for trade fair installations. →Installations using aluminum and fabric systems with take-back schemes for storage by the manufacturer.	Designer
			Service Provider
Culture Horizontal, humanistic approach—not just technical. Technical limits often make professionals feel restricted in choices and possibilities. It's a matter of culture and awareness. Each actor should take responsibility, without limiting creativity and design freedom, as long as process criteria are respected. Can the Cluster promote this topic through cultural tools (e.g., competitions)? Goal: Develop process-oriented criteria.	End-of-Life Management: CURRENT SITUATION: Reuse practices are still perceived as fragile if not shared. NEED: Different logics between museums (custom, rarely reused) and fairs (reuse easier and frequent for economic reasons). Storage is a problem. QUESTION: Define standardized, modular but flexible construction systems?	Reuse? (<i>Number of possible reuses: how many cycles it can withstand</i>) Storage? (<i>Volume / Storage costs</i>)	Contractor
	Social Responsibility: CURRENT SITUATION: Focus is solely on economic sustainability. NEED: Training and skills-building for public employees. QUESTION: How can clients be made aware or "educated"?	Social Impact? →Present data clearly (raise awareness)	Reuse actors
			Visitor

Tab 6. Strategic themes emerged during the focus group, structured around the phases of programming, design, production, implementation, and management of an exhibition.

and thus avoiding improvised decisions that undermine sustainability.

b. Towards systemic design: equally crucial is the role of design—on the client-consultant side as well as the contractor’s technical side—called upon to collaborate synergistically rather than, as sometimes happens, conflictually. Design must concern not only the formal and communicative output of the installation, but also the selection of the most suitable materials, coordination of assembly, and—last but often overlooked—the supervision of proper disassembly. A programmed systemic approach—capable of accommodating in the project the materials’ life cycle, second life of components, or their proper disposal—is fundamental to reducing the economic–environmental impact of the installation.

c. Sustainability data as communicable and certifiable requirements: alongside the responsibilities of designers and contractors, it is essential to invest in client training and in better communicating the sustainability values embedded in projects. Over-optimizing an installation can appear disadvantageous to a client who, lacking adequate awareness, may choose the cheapest or most easily customized option rather than the most sustainable one. The transition towards more ecological choices should therefore be accompanied by an objectifiable communication and information framework based on reliable, comparable data: the aim is to build a shared set of parameters that industry professionals can convey as project data on par with cost, duration, finish characteristics, fire resistance, etc. This is not about “educating” the client so much as demonstrating the economic convenience of ecologically sound choices; to that end, the support of third parties such as universities—able to certify and guarantee the reliability of proposed solutions—appears essential.

d. The value of creativity and innovation: on the design front, beyond technical knowledge and scheduling capability, training can encourage designers to interpret production scraps as creative, sustainable opportunities rather than as mere (and useless) residues. It follows that investing in research and development—reimagining the aesthetic potential inherent in recycling and reuse—becomes important, with the involvement of start-ups and small firms already proposing innovative solutions. In this vein, consider the experiments by Social Factory which, for Gruppo CAP (the integrated water-service operator for the City of Milan) at the “Ecomondo” trade fair in Rimini (2021), outfitted the entire pavilion with production scraps, valorizing negatives from milled sheets to create furnishings and other spatial components.

Furthermore, the fair presented the first research conducted by the company with the Politecnico di Milano⁶ on new materials produced with experimental



Fig. 34. Furniture designed for the setup of the CAP Group stand at Eco-mondo 2021.

Photo: ClusterNSBVN_Iuav.

techniques by recycling waste with no source separation (plastics “contaminated” with aluminum, paper, and other residues typically found in food packaging). These panels—exhibited to date for demonstration in various shows—have strength suitable for use in furniture and cladding; they are of great interest because they signal the company’s sensitivity to ecological issues while also carrying strong narrative and aesthetic value, as their material “imperfections” simulate the veining of fine marbles. The intention is to propose them in future stands as research directly applied to exhibition artifacts.

e. Parametric exhibition solutions between standardization and customization: given the need to mediate between production requirements and brand-representation needs, there is an opportunity to valorize modular and modifiable construction systems that allow flexibility in the form, size, and repetition of installations while also ensuring a distinctive creative signature and recognizability of the exhibition artifact. In this perspective, parametric solutions are recommended, making individual project elements more easily manageable according to the client brief and enabling more effective responses to their needs.

A concrete example of this approach is the pavilion assembled by Mate-rieunite at “CPHI Barcelona 2023”

(Materieunite, 2023), designed using a parametric construction system in fire-retardant honeycomb cardboard. The client, operating in the pharmaceutical sector, had historically used “single-use” stands, without considering reuse as a worthwhile option. However, after being presented with a report including an economic and environmental analysis—highlighting the advantages of reusing the installation the following year—the client, faced with objective data, was convinced of the choice (underscoring the importance of “accompanying” clients towards a culture of sustainability). The following year the stand was expanded by 50% (from 108 m² to 153 m²): approximately 70% of the installation was reused, retaining the structure, furnishings, and walls. This substantial reuse yielded significant cost savings and a clear reduction in resource waste. Another noteworthy feature concerns the volume of stored material once the stand is disassembled: all panels can be folded onto themselves and compacted, occupying minimal space, with obvious benefits for both transport and storage. This (highly customizable) installation can therefore be considered a best practice within a systemic vision in which production, logistics, assembly, and warehousing are designed upstream, consciously.

f. Codifying suitable tools and methods for impact assessment: it would be de-



Fig. 35. MILANO CIRCOLARE – The City that Reduces, Recovers and Recycles, BASE Milano, 2023; Design Differente, Salone del Mobile. Photo: ClusterNSBVN_Iuav.

sirable—and necessary—to identify a shared tool to analyze an installation’s life cycle and calculate its CO₂ impact. Unfortunately, this goal remains elusive: assessing the environmental impact of an installation is still extremely complex, and the identification of a definitive, accessible, universal calculation model appears distant. While it is simpler to trace the chain for mono-materials, more complex installations require consideration of each material’s life cycle and integration with data relating to the entire installation process. Moreover, the international logistics of installations can make their environmental impact even more significant (and more complex to estimate).

A virtuous example of evaluation was proposed in the “Generative Circularity” installation at Fuori Salone 2022 (Materieunite, 2022), which used a model to calculate impact and represented it through a comparative infographic. While not a complete LCA, its simplicity and communicative accessibility make it a good starting point for future developments.

g. A multi-actor system: finally, to ensure coherent, attentive implementation of the points above—pursuing their concrete, applicable translation—it was deemed necessary to specify the individual actors involved in the installation process which, by breadth and complexity, sometimes presents areas of overlap that are



Fig. 36. ICE Pharma Pavilion at CPHI Barcelona 2023, designed and set up by Materieunite. Photo: Materieunite.

unclear in terms of roles and responsibilities. To assign duties and tasks to specific parties, seven main actors were identified (which may also coincide in practice): event promoter/organizer, event manager, exhibitor, contractor, designer, service providers, and “reuse actors”—a term increasingly used to designate all those commercial operators who foster sharing and recycling dynamics (consider, for example, the “NonSiButtaViaNiente.it” sharing platform, which makes exhibition materials from the national museum network available online). For an effective drafting of a CAM Exhibition Design, it is considered useful to structure the document so that prescriptions are divided not only by the macro-distinction between museum and trade-fair exhibits, but also according to this grid of responsibilities.

An appendix note (not a formal point within these suggestions for a future CAM Exhibition Design) underscores the leading role of the public sector. The choice to make CAM a mandatory requirement for public procurement—and a rewarding factor when requesting patronage—is considered appropriate; however, even if the transition towards sustainability can be led by the public sector, the goal is that the private sector will want to (more than merely have to) follow suit.

The Eco-exhibition designer and the Cultural Responsibility of Project.

The discussions undertaken make it clear that new skills and new design processes are needed to reverse the trend of “unsustainability” that permeates the exhibition sector.

This means, first and foremost, building new competences and new professional profiles, with the aim of developing the role of the Eco-exhibition designer (eco-allestitore) capable of steering the transition towards more sustainable exhibition practices. Designers’ responsibility is crucial to ensure that sustainable solutions are not merely seen as feasible options but become priority choices: their skills and sensitivity are essential to achieve a balance between aesthetics and environmental and economic sustainability in a field often marked by challenging timelines.

Fundamental differences must also be underscored between the museum and trade-fair spheres—two domains with distinct operating modes and differing issues and sensitivities regarding reuse and the spread of sustainable practices. In the museum context, reuse is often subject to prior agreements, given the specificity of installations and the presence of curators; conversely, in trade fairs, reuse is

more widespread, both for economic and fiscal reasons and due to the prevalence of turnkey contracts and rental structures. Nevertheless, museums are progressively adopting strategies similar to those of fairs—for example, promoting the circulation of exhibitions through other venues—thus fostering the design of easily demountable installations. The convergence between museum and trade-fair practices offers a valuable opportunity to develop innovative construction and design systems capable of extending the lifecycle of installations without compromising quality. Although significant operational differences remain between the two sectors, this scenario suggests the opportunity for parallel experiments, able to tailor proposed solutions to the specificities of each context.

Finally, it is evident that sustainability in the exhibition realm must be addressed not only from a technical-regulatory perspective but also—if not above all—from a cultural one: the goal of drafting CAM Exhibition Design (CAM Allestimenti) thus becomes a pretext for a broader reflection. On this basis, the Cluster has examined its own role as a tool/platform for promoting wider environmental (and social) awareness, going beyond purely technical criteria and shifting attention towards a broader culture of design as an act that is both responsible and visionary.

A change of perspective is therefore proposed: from *Criteri Minimi Ambientali* to “minimum design criteria”—a slogan that masks a crucial observation. Addressing sustainability as a cultural issue, rather than as a purely technical or engineering topic, represents a fundamental paradigm shift. It is not a linguistic flourish, but primarily an ethical, political, and, ultimately, regulatory matter.

In summary, the coordinated working groups—and this essay, which reports their outcomes—aim to trigger process innovations, codify replicable and measurable practices and methods, move beyond the limitations of current operating procedures, and lay the groundwork for future guidelines that more closely match working realities and can involve both public and private stakeholders in a challenge that must, by necessity, be collective: bringing about a significant system-level change capable of supporting a sustainable transition in which design plays a key role.

The success of this transition will depend on our ability to establish structured collaboration among key actors (fairs, museums, industrial clusters, and public bodies), underpinned by clear agreements, effective regulations, and innovative tools. Only through this integrated approach will it be possible to build a more sustainable and democratic future, in which the exhibition world is fully engaged.

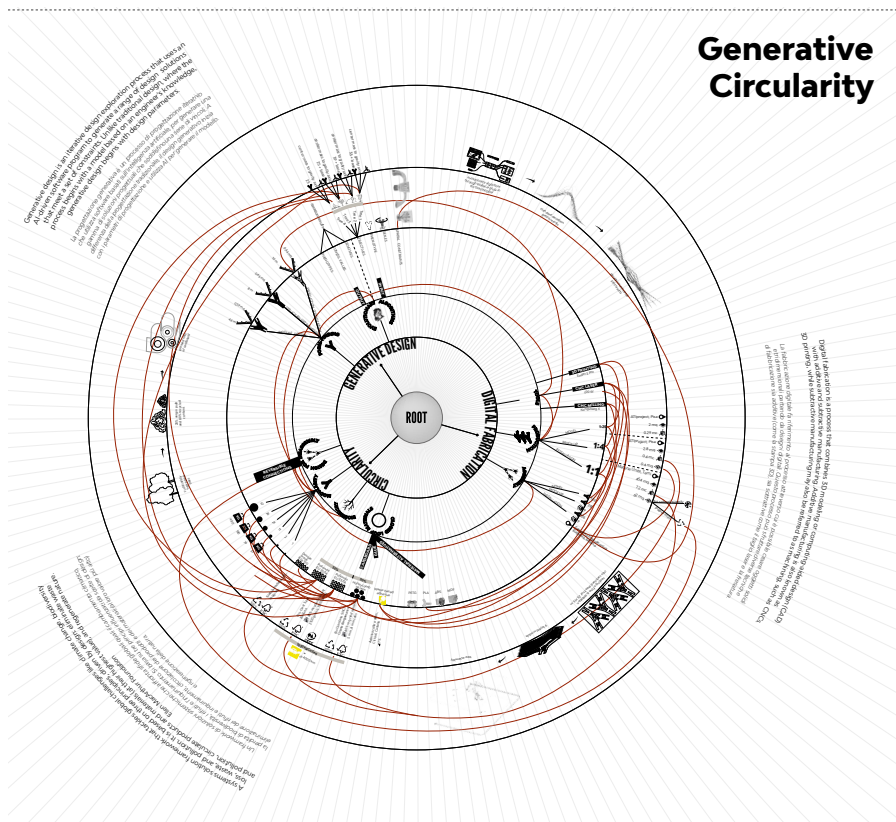


Fig. 37. Infographic of consumption data for the **Generative Circularity** project, conceived by ATI Project – Research and Development Department, and realized by Materieunite.

Notes

¹ Università Iuav di Venezia. (n.d.). NSBVN – Sustainable Exhibit: Promuovere l'economia circolare negli allestimenti espositivi. Inter-university cluster composed of three Italian and two foreign universities, with more than 25 stakeholders including institutions, museums, associations, and companies.

² Research funded through the public notice for the submission of capacity-building project proposals for cultural operators, under the NRRP, Mission 1 – Digitization, innovation, competitiveness, culture and tourism; COMPONENT 3 – Tourism and Culture 4.0; MEASURE 3 – Cultural and Creative Industries; INVESTMENT 3.3 – “Capacity building for cultural operators to manage the digital and green transition”; Sub-investment 3.3.3 “Promote the reduction of the ecological footprint of cultural events by fostering the inclusion of social and environmental criteria in public procurement policies, thereby steering the supply chain towards the eco-innovation of products and services” (Action B I); funded by the European Union – NextGenerationEU and managed by the Italian Ministry of Culture.

³ Politecnico di Milano, Department of Design. (n.d.). Places+: Design of places for sustainable transitions (B. Di Prete, A. Rebaglio, E. Lonardo, L. Ratti); research line “Places+ Sustainable Exhibit.”

⁴ First NSBVN – Sustainable Exhibit Cluster Conference, Università Iuav di Venezia, Ca' Tron, 17–18 June 2024.

⁵ The various focus groups included representatives of fairs and museums (including Fiera Milano, Triennale di Milano, Musei Civici Veneziani, Fondazione Prada); design firms and exhibition contractors (including beMatrix, Fogarolo Allestimenti, Foscari, Materieunite, Plotini Allestimenti, Saviola); trade associations (e.g., ADI, AEFI, AIAP, FederlegnoArredo – ASAL Assoallestimenti, ICOM); logistics firms (Fercam); universities and public bodies (Università Iuav di Venezia, Politecnico di Milano, Ca' Foscari University of Venice, University of Ferrara); and professional designers.

⁶ Research program “CAPitoli urbani,” carried out by the Politecnico di Milano – Department of Design (Places+ group) for CAP, 2021–2023.

Bibliography and Online Sources

Fortuna, J., Thomas, K., Asper, J., & Matney, L. (2023). A survey of universal design at museums: Current industry practice and perceptions. *The Open Journal of Occupational Therapy*, 11(1), 1-15. Disponibile su https://www.researchgate.net/publication/367172940_A_Survey_of_Universal_Design_at_Museums_Current_Industry_Practice_and_Perceptions [Consultato il 5 gennaio 2025].

Mace, R. (1997). What is universal design? The Center for Universal Design at North Carolina State University.

Materieunite. (2022). Generative Circularity. ATI Project. Milano Design Week 2022. Disponibile su <https://materieunite.it/allestimenti/generative-circularity/> [Consultato il 18 dicembre 2024].

Materieunite. (2023). ICE Pharma a CPHI Barcelona 2023. Disponibile su <https://materieunite.it/allestimenti/icepharma-cphi-barcelona/> [Consultato il 15 dicembre 2024].

Ministero della Transizione Ecologica. (2022). Criteri Ambientali Minimi per Eventi. *Gazzetta Ufficiale della Repubblica Italiana*, Serie Generale, n. 282, 22 dicembre 2022. Disponibile su <https://www.gazzettaufficiale.it/eli/id/2022/12/02/22A06879/sg> [Consultato il 9 gennaio 2025].

Parlamento Europeo & Consiglio dell'Unione Europea. (2024). Regolamento (UE) 2024/1781 del 13 giugno 2024 sulla progettazione ecocompatibile per prodotti sostenibili. *Gazzetta Ufficiale dell'Unione Europea*, L 1781/2024. Disponibile su <http://data.europa.eu/eli/reg/2024/1781/oj> [Consultato il 19 dicembre 2024].

Rios, F. C., Chong, W. K., & Grau, D. (2015). Design for disassembly and deconstruction: Challenges and opportunities. *Procedia Engineering*, 118, 1296-1304.

Social Factory & Gruppo CAP. (2021). Ricerchia CAP. Rimini. Ecomondo 2021.

Toniolo, S., Camana, D., Guidolin, A., Aguiari, F., & Scipioni, A. (2021). Are design for disassembly principles advantageous for the environment when applied to temporary exhibition installations? *Sustainable Production and Consumption*, 28, 1262-1274.

ABSTRACTS

AUTHORS'
BIOGRAPHIES

Mostrare

Exhibit at Università Iuav di Venezia, new paradigms of sustainability

The paper examines the evolution of exhibit design in Venice and the central role played by the Iuav University of Venice in education, research, and experimentation within this disciplinary field. Since the post-war period, the Venetian context has established itself as a privileged meeting ground between historical-critical inquiry and design practice, thanks to the contributions of architects, designers, and scholars of international standing. Several paradigmatic episodes — from the Murano Glass Exhibition (1953–59), a foundational example of a design system, to the recent establishment of specific academic programs in interior and exhibit design — bear witness to the continuity and innovation of Venetian research. The essay also highlights recent transformations, from the revival of exhibit design as a disciplinary field to the creation of the cluster NSBVN – Non Si Butta Via Niente, with particular attention to sustainability as a new design paradigm.

Alberto Bassi

bassi@iuav.it

Alberto Bassi is a historian and critic of design, and Full Professor at the Iuav University of Venice, where he also serves as Rector's Delegate for Communication. He coordinates the master's degree program in Product, Visual and Interior Design. He is a member of the Scientific Committee of the Iuav Archives of Projects, as well as of several editorial boards for design journals and book series. He has collaborated with design magazines such as *Casabella*, *Abitare*, and *Auto & Design*, as well as with major newspapers, and is the author of numerous books, including *La luce italiana* (Electa, 2004), *Design anonimo in Italia. Oggetti comuni e progetto incognito* (Electa, 2007), and *Food design in Italia. Il progetto del prodotto alimentare* (Electa, 2015), which received the ADI Compasso d'Oro Award in 2018. His most recent publication is *Design contemporaneo. Istruzioni per l'uso* (Il Mulino, 2017). He is President of the Scientific Committee of the national technological cluster MinIt – Made in Italy and founder of the Veneto Regional Innovative Network Face-Design, where he also serves as scientific coordinator. He has participated in several national and international research projects and currently oversees the integration of Iuav's design area within the innovation ecosystem INEST-PNRR.

The profession facing the challenge of change

The strategic role of the project

The essay analyzes the exhibition design sector in Italy, highlighting the gap between the legal definition of the allestitore (exhibition builder) and the actual complexity of this professional role, which encompasses technical design, logistics, safety management, and material handling. Drawing on the experience of the NSBVN – Sustainable Exhibit Cluster and the project Exhibit 2.0: The Ecological Turn, it underscores the limitations of a fragmented regulatory framework and the need to rethink operational practices in light of the ecological transition. The chapter emphasizes the strategic role of clients in promoting sustainability criteria — with particular attention to material reuse and end-of-life management — and reflects on the importance of dialogue between designers and builders to ensure coherence and reduce environmental impact. Within this framework, the essay introduces the figure of the eco-allestitore, a new hybrid professional profile trained through online courses, technical libraries, regulatory toolkits, and open-access resources — capable of combining creativity, efficiency, and ecological responsibility.

Davide Crippa

dcrippa@iuav.it

Davide Crippa, architect and PhD in Interior Architecture and Exhibition Design, studied under some of the masters of Italian design, completing his education with an interdisciplinary perspective. In 2004, he founded the Ghigos studio and has since carried out wide-ranging research through exhibitions, installations, and internationally relevant projects. From 2007 to 2021, he taught at the Politecnico di Milano and the Nuova Accademia di Belle Arti in Milan; he is currently Associate Professor at the Iuav University of Venice and, since 2022, Director of the Master's in Innovation Design and Management at the same university. He writes articles and books on design theory and criticism, consistently focusing on evolving scenarios. His current research explores the potential of interaction design and digital fabrication technologies within a circular economy framework, with a specific focus on the sustainability of exhibition design.

Designing for the future

Museography, sustainability, and the life cycle of exhibitions

The essay offers a critical reflection on the concept of the sustainable exhibit, analyzing its museological, museographic, and expographic implications in light of the cultural, environmental, and digital transformations shaping the contemporary museum. Following a semantic mapping of terminology and ICOM definitions, the author examines the organization's growing commitment to sustainability, with a particular focus on global guidelines and recent Italian initiatives. Central to the discussion are the challenges posed by material reuse and recycling, the protection of authorship in exhibition design, and the obsolescence of digital devices — issues that call for a critical reassessment of exhibition practices. The sustainable exhibit thus emerges as both a design and cultural paradigm that demands new skills, interdisciplinary approaches, and a rethinking of the exhibition lifecycle. Sustainability, once a limited best practice, becomes a structural principle of museum design, capable of guiding the future of cultural institutions towards responsible, inclusive, and enduring models.

Valeria Arrabito

segreteria@icom-italia.org

Valeria Arrabito is the Secretary-General of the Italian Committee of the International Council of Museums (ICOM), the global organization of museums and museum professionals dedicated to the research, preservation, and promotion of the world's natural and cultural heritage — present and future, tangible and intangible.

A cultural manager, consultant, and lecturer, Valeria Arrabito collaborates with some of the most prestigious international and national institutions in the cultural sector. She oversees all activities of the Italian National Committee of ICOM, supervising the design and organization of conferences, seminars, webinars, and publications, as well as the committee's ordinary and extraordinary administration — including legal, organizational, fiscal, and financial matters.

An expert in territorial marketing, she has worked on the analysis and promotion of tourism resources within the Bandiere Arancioni Territorial Program of the Touring Club Italiano, managing the certification system and planning strategies for the sustainable development of small inland towns of excellence.

She has organized and supervised more than 100 national and international conferences on key issues concerning the conservation, management, and enhancement of cultural heritage, working closely with public museums, foundations, companies, NGOs, intergovernmental organizations, and ministries.

Her expertise includes nonprofit management with a strong focus on public-private partnerships, fundraising, human resource management, patronage, and relations with investors and sponsors.

Towards sustainable exhibiting

A conversation with Marco Fogarolo

The exhibition design sector in Italy constitutes a complex and multidisciplinary field that brings together technical, logistical, design, and cultural dimensions. Despite its growing importance, the professional figure of the *allestitore* (exhibition builder) continues to be narrowly defined by current legislation — particularly by the *Decreto Palchi e Fiere* (Ministry of Labour and Social Policies, 2014) — which confines the role to that of a mere contractual executor.

This contribution is based on an interview with Marco Fogarolo, professional and representative of ASAL – Assoallestimenti. Structured around four guiding questions, the interview bridges the worlds of research and professional practice, highlighting the gap between regulatory definitions and daily work, the regulatory fragmentation that generates inefficiencies, the potential and limits of sustainability initiatives, and the complex relationship between design and construction.

Through this dialogue, the contours of a professional figure emerge who — beyond the label of executor — plays a strategic and cultural role, decisively influencing safety, efficiency, and sustainability within the sector.

Davide Crippa

dcrippa@iuav.it

Davide Crippa, architect and PhD in Interior Architecture and Exhibition Design, studied under some of the masters of Italian design, completing his education with an interdisciplinary perspective. In 2004, he founded the Ghigos studio and has since carried out wide-ranging research through exhibitions, installations, and internationally relevant projects. From 2007 to 2021, he taught at the Politecnico di Milano and the Nuova Accademia di Belle Arti in Milan; he is currently Associate Professor at the Iuav University of Venice and, since 2022, Director of the Master's in Innovation Design and Management at the same university. He writes articles and books on design theory and criticism, consistently focusing on evolving scenarios. His current research explores the potential of interaction design and digital fabrication technologies within a circular economy framework, with a specific focus on the sustainability of exhibition design.

Massimiliano Cason Villa

mcasonvilla@iuav.it

Massimiliano Cason Villa is a designer and PhD candidate at the Iuav University of Venice. His training follows an interdisciplinary approach, positioned between Interior and Communication Design, with additional experience in maker culture and digital fabrication. Since 2019, he has collaborated with the startup Design Differente, developing participatory educational projects on Circular Design in partnership with the Municipality of Milan, La Triennale di Milano, and SOUx School in Milan. Since 2022, he has been teaching at the Nuova Accademia di Belle Arti in Milan (NABA). He is currently pursuing a PhD in Design Sciences at the Iuav University of Venice, focusing on design and circularity through the use of Life Cycle Assessment tools.

Lara Migliori

lmigliori@iuav.it

Lara Migliori holds a degree in Interior Design from the Iuav University of Venice, where she completed her thesis on political exhibition design in the postwar period. Her academic background follows an interdisciplinary trajectory between historical research on exhibition practices and sustainable design, combining the study of curatorial history with innovative strategies for circularity and environmental impact reduction. She currently collaborates with the Sustainable Exhibit cluster and the platform Non Si Butta Via Niente, focusing on sustainability and circularity in temporary exhibitions.

Designing for change

The designer as a facilitator of sustainable processes

The discussion on the responsibility and role of the designer towards sustainability-oriented design is intense. This a theme already traceable in Carta del Progetto Grafico, which questioned the new responsibilities of the graphic designer (Anceschi, Baule & Torri, 1989), claiming an idea of quality intended as the designer's responsibility towards the user - a sort of ecology of thought, already present in the work of many post-war Italian designers, capable of moving transversally in different fields of design, between graphics, architecture and design. Designing with a *forma mentis* aimed at sustainability means not only dealing with the environment, choosing sustainable tools and materials, but also knowing how to dialogue with the client by incorporating into the work processes an approach oriented towards making all the players involved aware of the decisions, giving visibility to data and information, and involving new skills and figures.

Laura Bortoloni

laura.bortoloni@unife.it

Visiting communication designer, graphic facilitator, lecturer, artist and printmaker. Bortoloni trained as a visual communication designer at the ISIA in Urbino. In 2013, she founded Ida Studio, a visual communication design studio based in Rovigo, Italy. She has held lectures, seminars and taught graphic design in various public and private institutions in Italy and abroad, including University of Ferrara, University of Udine, Ecole nationale supérieure des arts visuel de La Cambre, Brussels (Belgium), Universidade Federal de Santa Maria (Brazil). Her prints have been exhibited in Bristol (UK), Canton (USA), Basel (Switzerland), Brussels (Belgium), Nara, Echizen (Japan), Taipei (Taiwan). She is currently a PhD student at the University of Ferrara.

Marco Tortoioli Ricci

marco.tortoioli@aiaip.it

Born in Perugia in 1964, 2nd level academic diploma at Isia in Urbino. He is the founder and owner of the Bcpt Associati studio, which has been working on communication design and branding on a national and international level since 1992. In 2003, he founded the Comodo collective, which focuses on content design and social innovation. His work spans strategic design and consultancy for corporate and institutional branding with applied to retail, environmental design and more recently product design. Over time, he has been involved in communication projects in the cultural field and the promotion of territories and communities. He is national president of AIAP (Italian Association for Visual Communication Designers). Since 2006 he has been Professor of Project Methodology at ISIA in Urbino. Since 2014, he has been Professor of Brand Design at the Academy of Fine Arts in Perugia and since 2018 he has held the Interior Design course at the Department of Design of the Faculty of Engineering of the University of Perugia.

Reflections for drafting the CAM Allestimenti

A legacy of the first conference on sustainable exhibit promoted by the NSBVN Cluster

The analysis of the Criteri Ambientali Minimi (CAM) for events highlights several critical issues regarding their applicability and the lack of specific parameters for the exhibition sector. By comparing existing regulations with current practices in the fair and museum contexts, the essay underscores the urgent need for regulatory updates that introduce more concrete strategies for the sustainability of exhibition setups. Among the proposed solutions are Design for Disassembly, the use of reusable materials, and the standardization of dismantling processes. The text also advocates for the creation of a dedicated CAM Allestimenti (currently absent), aimed at more effectively regulating material management and the life cycle of exhibition installations. The involvement of reuse platforms, collaboration among actors across the supply chain, and the promotion of new design practices are identified as key factors in facilitating a sustainable transition within the sector.

Barbara Di Prete

barbara.diprete@polimi.it

Barbara Di Prete is Associate Professor at the Department of Design of the Politecnico di Milano, where she conducts research at the intersection of urban, exhibit, and interior design. An architect and PhD in Interior Architecture and Exhibition Design, she co-founded the Ghigos studio in 2003, realizing projects for internationally renowned institutions such as MAXXI, Expo 2015, MoMA, and Triennale di Milano.

Currently, through the inter-university research groups Reside, Places+, and NSBVN, she investigates the role of design from a sustainability perspective—both energetic and social—and explores strategies for the adaptive reuse of abandoned buildings. Her recent research projects include De.Sign. The Role of Design in the Energy Transition Process (for ENEA); CAPitoli Urbani (for CAP); AMSHI – Advanced Solutions for Mitigating the Impact of Heat Islands on Urban Roads (for Alta Scuola Politecnica); and Greenway dei Due Parchi. Vivere il Territorio (for Regione Lombardia, ongoing).

Riccardo Palomba

rpalomba@iuav.it

Riccardo Palomba is a designer specializing in participatory design and digital product development, with experience in both academic and corporate contexts. He has collaborated with institutions such as the Politecnico di Milano and the Iuav University of Venice, working as a Junior Researcher and Research Fellow, as well as with companies like NonSiButtaViaNiente Sbarl and Save The Duck SpA, developing UX/UI design projects and communication strategies. He has gained experience in managing complex networks, including a national network of museums and fairs committed to sustainability in the exhibition sector.

Since his master's thesis, he has collaborated with associations and local organizations to co-create future scenarios and sustainable development strategies. His research focuses on methodologies for territorial regeneration, with a particular emphasis on interventions in abandoned rural contexts.

In 2023, he co-founded and currently serves as President of InTra Aps, a social promotion association that develops regenerative methodologies to engage people in designing the future of their territories.

In a world where sustainability is no longer an option but a necessity, exhibition design — a discipline inherently ephemeral and temporary — is also called to reinvent itself.

This volume tells the story of the emergence of a new professional figure: the “eco-Allestitore” (eco-exhibition designer), a mediator between creativity and responsibility, capable of integrating design, technology, and environmental care.

Born from the experience of the *NSBVN – Sustainable Exhibit Cluster* and the project *TOCC – Exhibit 2.0: The Ecological Turn*, the book brings together reflections, research, and practices shared by universities, cultural institutions, companies, and professionals.

It traces a path that unites theory and action, past and future, transforming the ephemeral from a synonym of waste into an opportunity for connection, innovation, and sustainable culture. *Towards the Figure of the Eco-Exhibition Designer* is not merely a collection of essays but an invitation to imagine new ways of designing and inhabiting temporary spaces — building a lasting legacy made of shared ideas and practices, not waste.

Davide Crippa, architect and PhD in Interior Architecture and Exhibition Design, studied under some of the masters of Italian design, completing his education with an interdisciplinary outlook. In 2003, he founded the Ghigos studio and has since carried out wide-ranging research spanning exhibitions, installations, and internationally significant projects. From 2007 to 2021, he taught at the Politecnico di Milano and the Nuova Accademia di Belle Arti in Milan; he is currently Associate Professor at the Iuav University of Venice, where he explores the potential of interaction design and new digital fabrication technologies within a circular economy framework, with a specific focus on sustainable exhibition design.

Barbara Di Prete, architect and PhD in Interior Architecture and Exhibition Design, is Associate Professor at the Department of Design of the Politecnico di Milano, where she conducts research between exhibit and interior design. In 2003, she co-founded the Ghigos studio, realizing projects for museums and institutions of international renown (MAXXI, Expo 2015, MoMA, Triennale di Milano). She currently works with the research groups Reside, Places+, and NSBVN, investigating the role of design from a sustainability perspective.