

MD Journal [Dossier]

Giuseppe Fallacara Dossier editor

ESSAYS

Ilaria Cavaliere, Dario Costantino, +202 salmabean Giuseppe Fallacara, Marco Ferrero, Katia Gasparini, Hugues Jacquet, Renzo Lecardane, Chiara Rizzi, Amin Taha, Adriana Valentini

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Scientific Direction

Alfonso Acocella, Veronica Dal Buono, Dario Scodeller

Editoral staff

Annalisa Di Roma, Graziana Florio, Eleonora Trivellin

Art direction

Giulia Pellegrini

Promoter

Research laboratory Material Design, Media MD Department of Architecture, University of Ferrara Via della Ghiara 36, 44121 Ferrara www.materialdesign.it

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UN'IMMERSIONE NELLA PIETRA STONE DESIGN – LA BOTTEGA DEL FUTURO

Catalogue of the exhibition Verona, September 24th-27th, 2024

Curator Giuseppe Fallacara

Assistant curators Ilaria Cavaliere, Katia Gasparini

Collaborators

PhD candidates: Alessandro Angione, Francesco Ciriello, Dario Costantino, Marco Massafra, Adriana Valentini Graduating students: Vincenzo Di Bari, Nicola Lacalamita, Stefania Laterza, Maria Giovanna Pansini, Luca Ranieri

Graphic design Giulia Pellegrini – Studio Variabile

MDJ Dossier editor in chief Alfonso Acocella

Designing is a joy, but also a commitment, a great responsibility.

To Cini Boeri, on the 100th anniversary of her birth.

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Table of contents

Presentation

6 Marmomac Meets Academies

Federico Bricolo

Introduction

8 Ceci n'est pas un fossile. An introduction to MMA 2024 Giuseppe Fallacara

Virtuous examples of knowledge transmission

16 The Académie des savoir-faire "La Pierre" by Fondation d'entreprise Hermès and the encyclopedic work "La Pierre", co-published with Fondation and Actes Sud Hugues Jacquet

Short essays

24 Is it possible to build in stone? Why not?
Amin Taha

26 Stone and Technology. The experience of Marmomac Meets Academies

Marco Ferrero

30 Stone and Biophilic Design: considerations Chiara Rizzi

36 The stone architecture of the Exhibition Pavilion. 20th-21th Century

Renzo Lecardane

40 The stone and its scraps. The future in the digital field Katia Gasparini

MMA 2024 work

- 46 StArch. Short Master and the Marmomac 2024 Exhibition Adriana Valentini
- 50 The central installation. Between tradition and innovation Dario Costantino

Prototypes

- 54 Practical research. The prototypes exposed at MMA 2024 llaria Cavaliere
- 58 Prototypes

STONE AND TECHNOLOGY

The experience of Marmomac Meets Academies

Marco Ferrero

(Sapienza University)

The development of stone architecture at the dawn of the third millennium shows significant discontinuities compared to a past where the main innovations were only in the evolution of machinery and tools. The driving force behind this innovation is the rapid digital evolution: in a relatively short period, even the digital tools available to designers have transformed multiple times, moving from digital graphic design to BIM modelling, that is not an analog geometric representation – even if executed with digital tools – but an actual construction process, carried out in a multidimensional virtual space.

In the production sector, evolution occurs in terms of CAM (Computer-Aided Manufacturing). Although the digital correspondence between design and production is not entirely automatic, the combination of the two has laid the groundwork for the already mentioned discontinuity. This is evident, for example, in the widespread transition from exclusively flat stone artefacts to those with complex shapes.

This scenario sets a mandatory reference framework for both producers and designers. However, production and design tend to remain on different levels, with a communication gap that hinders not only the possibility of further innovation but also the simple implementation of what has been acquired.

Trade fairs are primarily commercial events and, in most cases, do not include different initiatives unless for promotional purposes. From this perspective, Marmomac in Verona is a unique event. From the beginning, it was understood that expanding the dialogue was important, involving not only the protagonists of artistic production - from sculpture to design to architecture - but also education operators, academies and universities. The transition about the inclusion of academies was made from merely showcasing student works to a broader involvement, promoting material knowledge through support - sometimes, even financially - to the development of specific courses dedicated to the theme within degree programs. However, this effort had to face communication difficulties. and despite the quality of the initiatives and outputs the gap with the production sector remained deep.

Thus, the project "Marmomac Meets Academies" was conceived. Supported by agreements with universities and a select group of forward-thinking producers, the project reversed the previous approach, programmatically proposing to create tangible objects and prototypes constructed from stone – to be displayed at the fair as the result rather than the premise of collaborations between education and production. The project's success was evident; the quality of the outputs convinced the fair management to allocate part of the valuable commercial space for the Marmomac Meets Academies Exhibition.

From the universities' perspective, the partnership with the production sector provided a positive impulse for practical activities in the traditionally theoretical academic context. Additionally, it brought professors and researchers closer to the current realities of industrial production, deepening their understanding of the potential and limitations of technology in the sector.

Challenges and opportunities for improvement primarily concern the disparities between areas closely connected to production hubs and those further away. The former offer greater collaboration opportunities but are limited in number and so is their territorial distribution. The latter must contend with limited resources and low interest from small companies focused on local issues and markets. The mutual growth and learning that could come from resource sharing are currently hindered by a persistent tendency towards competition rather than collaboration, which is a par-



Marmomac Meets Academies, the 2022 edition, curated by G. Fallacara and D. Potenza. Photo by Marmomac

ticularly shortsighted stance in the globally significant Italian production system.

Another important area for potential development is scientific research. Study topics include production sustainability, the development of new products based on waste reduction or reuse, and the prevention of degradation; at the design level, there are also challenges posed by the development of ICT technologies and Artificial Intelligence.

Addressing these additional issues will not only provide further growth opportunities for the MMA initiative but also allow the enhancement of the most advanced offerings from today's universities. This will help move beyond traditional exhibition approaches and open Marmomac to the changes that are forcefully impacting the context in which producers and designers will operate in the immediate and near future.

