Preface

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We have reached the second volume of Representation Challenges, a collection of essays developed following the presentation, discussion and peer-review of the proposals exhibited in the REAACH-ID 2021 Symposium, an event organized online by Roberta Spallone, Andrea Giordano and Michele Russo, and already we can make fair juxtapositions with the previous edition.

Both symposia were organized remotely, and this may signify a signal that goes beyond the limitations and obligations dictated by the still festering pandemic; therefore, I would like to mention two international innovations that on the topic of new technologies applied to art and cultural heritage, a few months before REAACH-ID 2021.

On 19 and 20 of June 2021, the first augmented reality art festival conceived by the RMN Grand Palais and Fisheye was held in Paris; this event featured augmented reality artworks in collaboration with Tik Tok, and with a relatively small audience in attendance due to contingency reasons, the number of online views far exceeded one million likes, effectively marking a huge success.

Other news, published by ANSA on 21 of June 2021, concerns China, which has been greatly affected by the isolation given by the Coronavirus. It is expected that between now and 2025 there will be a 77 percent growth in Virtual and Augmented Reality products in this country.

Let's not even mention the great museums and exhibitions advertised all over the world that in recent years have changed the system of use of works of art, such as the Los An-

geles County Museum of Art, better known as LACMA, which thanks to the collaboration with Snapchat launched an augmented reality campaign for the city of Los Angeles

In the complex field of images, visual communication, and representation, graphic languages have expanded, and augmented reality has become an access tool for a deeper understanding of the existing space and the artifacts contained therein, an additional communication system for the enjoyment of scientific and educational products.

In the last decade, drawing has been able to intercept the stimuli coming from information technology for a synergy between theoretical studies and application systems related to the fields of architecture, the city, and art, today increasingly involved by virtual and augmented realities in all their forms, from monitoring to serious games. Today, horizons are further broadening on the plane of inclusion thanks to the entry of AR and VR for overcoming physical barriers and expanding sensory ones in favor of integration among people, to enhance the diversity of everyone.

In fact, the book shows how much the principle of inclusion is being declined, not only for the world of cultural heritage, always however protagonists in this context, but also in situations increasingly open to the world of psychology and medicine, to alleviate psychic suffering, an area that a few years ago might have seemed distant due to an involvement of representation and technologies for virtual fruition in the relationship between patient and places of care.

This feature is highlighted in this volume with the opening contribution of Pilar Chias, Tomás Abad, and Lucas Fernández-Trapa who, by introducing the term wayfinding in the context of the discussion, relate perceptual factors and orientation systems in hospitals and health centers that can be improved by GPS technology, 3D modeling, and augmented reality.

It does not elude, but establishes an inescapable polarity between natural and artificial intelligence in the fruition of tangible and intangible heritage, where cultural aspects must be considered at the basis of the development of augmented reality projects to transform the fruition of cultural heritage into a more complete experience in view of the ability of researchers to generate 3D scenes, to support the activities of restoration, conservation, maintenance, and preservation of built heritage. The most numerous papers belong precisely to experiences in the architectural, urban and museum fields, including many related to the BIM and H-BIM experience, as well as the increasingly emerging link between AR & AI heritage and archival sources, an area much debated in recent years by the members of the Unione Italiana Disegno.

We are confident that this volume can mark a step forward to further frontiers of graphic representation, open and challenging, capable of combining culture and technology, literature, art and science, in fluid and unconventional places and times. A symposium that demonstrates that technology in the service of representation can also be art, social involvement, as well as innovation.

Special thanks to the tireless organizers and curators, and to all the authors of this volume.

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