

Reviews

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(a cura di)

DAI - Disegno per l'Accessibilità e l'Inclusione

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The physical and virtual practicability of spaces, combined with the possibility of taking advantage of information technologies related to the communication of goods and services, allows people with disabilities to access Cultural Heritage on an equal basis with other members of the social context. The research carried out in this field by Drawing has made it possible to teach the relationships between the various subjects to have a broader and more coordinated design vision of the aspects studied.

These questions aimed the volume edited by Alberto Sdegno and Veronica Riavis, a collection of proceedings that includes two invited lectures and 46 papers selected from the second edition of the international conference *DAI - Drawing for Accessibility and Inclusion* held in Torre Santa Maria in Udine on December 1-2, 2008, thirty years after the *European Day of People with Disabilities* proclaimed by the European Commission, as the organizers of the event recall in the introductory essay to the volume *Esperienze in ambito museale e interdisciplinarietà: con il Disegno per l'Accessibilità e l'Inclusione* [pp.VI-XV].

The 106 authors are researchers, lecturers and PhD students from various universities and institutions, museum directors, professionals and scholars who have carried out analyses inherent to Drawing as a tool for improving spatial, socio-cultural, cognitive, psycho-sensory and museum accessibility and inclusion.

The volume opens with an introduction by the President of the UID - Unione Italiana per il Disegno Scientific Society, Francesca Fatta [pp. II-V], continues with contributions by the editors and invited essays by Aldo Grassini (President of the Museo Tattile Statale 'Omero' in Ancona), who in *I ciechi e la pittura* addresses the issue of the transferability of a painting to the blind and visually impaired [pp. XVI-XXIX], and by Paola Visentini (Director of the Friulian Natural History Museum and the Archaeological Museum of the Civic Museums of Udine) with *Progettare nuove realtà espositive o innovare realtà già esistenti: le soluzioni accessibili adottate dai Civici Musei di Udine* [pp. XXX-XXXVII]. After the introductory section, the various speeches are articulated into five focuses to address and formulate solutions to the problems that have emerged from the in-depth study of the conference themes.

The first focus, *Drawing for Accessibility and Spatial Inclusion*, includes a series of articles that, through the examination of a series of case studies, consider the representation as a tool aimed at the physical or virtual enjoyment of spaces that, for various reasons, are considered inaccessible. In fact, the arguments collected in this section propose overcoming architectural and mental barriers through co-design operations that involve the included and the excluded in a design activity whose results are tested in a virtual mode,

as in the contribution by Giuseppina Scavuzzo and Patrizia Cannas *Il progetto emancipante: il disegno come strumento di "self-empowerment"* [pp. 4-17], or they test prototypes of tactile abacuses designed to easily visit areas without light, as described by Francesco Stilo in *Per un itinerario tattile del sotterraneo come luogo di culto in Calabria* [pp. 80-93].

Other dissertations –including Claudia Pirina, Giovanni Comi, and Vincenzo D'Abramo's, *Ridisegnare l'archeologia. Il progetto dell'accessibilità in aree archeologiche* [pp. 110-125]– instead identify compositional principles capable of responding concretely to the need to make archaeological contexts accessible.

Two reflections conclude this part: the first, on innovative cases and related critical issues emerging in Heritage conservation –an issue addressed by Alessandra Biasi in *Notazioni sull'accessibilità per i beni culturali: l'intreccio tra progetto di restauro e nuove tecnologie digitali* [pp. 126-137]– and the second, to understand how, through visual perception and technical usability, architecture or the city can be involved in Design for All.

The second focus, dedicated to *Drawing for Accessibility and Socio-cultural Inclusion*, examines some proposals of a formative nature aimed at enhancing Cultural Heritage through thematic paths reproduced with tactile panels intended for different users, as in the essay *Valorizzare la città della memoria: il valore del Disegno per la comunicazione tattile* by Ivana Passamani, Cesira Sissi Roselli and Virginia Sgobba [pp. 152-171], or by physical copies of artifacts modeled to allow haptic exploration –a topic presented, for example, by Giuseppe Nicastro, Alessandro Luigini and Francesca Condorelli in *Stampa 3D e fruizione aptica per la valorizzazione del patrimonio culturale*

abruzzese: il caso studio dei tabernacoli lignei dei frati marangoni tra XVII e XVIII sec. [pp. 172-187] –, or by investigating issues related to the legibility of typographic characters.

Additionally, the authors Maurizio Marco Bocconcinco, Mariapaola Vozzola, and Martino Pavignano describe virtual reproductions of museums, which are designed to facilitate consultation of heterogeneous collections in the article *Il Disegno nelle strategie per la valorizzazione e l'accessibilità del patrimonio museale universitario: la collezione Curioni del Politecnico di Torino* [pp. 200-215]. There are also the virtual galleries, prepared through gigapixel photographs with the intention of increasing the dissemination of artworks, according to the research of Pedro Cabezos-Bernal, Pablo Rodríguez-Navarro, Teresa Gil-Piqueras, Daniel Martín-Fuentes and Adriana Rossi [*Creating Virtual Art Galleries to improve dissemination and accessibility*, pp. 228-243]. The contributions are further enhanced by a historical narrative of two monuments expressed effectively through hand drawings, and a reflection on the skills that the discipline of Drawing can offer in designing multimedia art therapy experiences.

The third section of the proceedings, which is devoted to accessibility and cognitive inclusion, opens with an analysis of the role of Drawing in offering new cultural, lexical, technological, and sensory tools that are useful in enhancing the performance of therapeutic devices in VR for different mental states. This research is presented by Piergiuseppe Rechichi, Valeria Croce, and Marco Giorgio Bevilacqua in their article, *La realtà virtuale nella diagnosi e terapia dei disturbi d'ansia: literature review per individuare contributi e potenzialità del Disegno* [pp. 326-343].

The focus then shifts to a system of guiding strategies and solutions based on a plurality of languages and the use of digital technologies, with the aim of enhancing the enjoyment of cultural heritage. This is expounded by Valeria Menchetelli and Elisabetta Melloni in their paper, *Dall'accessibilità alle accessibilità: il disegno per l'inclusione molteplice del patrimonio culturale* [pp. 344-365], and subsequently, with the programming of an inclusive robotic drawing system presented by Lorenzo Scalera, Stefano Seriani, Alessandro Gasparetto, and Paolo Gallina in the essay *An eye tracking approach for inclusive robotic drawing* [pp. 364-375]. We find, furthermore, Massimo Ciammaichella and Luciano Perondi's reflection on the current state of the art about *Editoria e didattica del disegno nelle scuole secondarie di secondo grado* [pp. 376-393]. In their contribution, special attention is paid to complementary graphic tools useful for the development of knowledge referring to the teaching of Drawing in secondary schools.

The section concludes with a teaching experience presented by Cristina Candito and Alessandro Meloni in *Un disegno prospettico accessibile. Aspetti percettivi e tecniche didattiche nell'ambito dei disturbi dello spettro autistico* [pp. 394-408]. The text was designed with the aim of conveying the basic rules for practicing perspective drawing to students with autism spectrum disorders. The *Drawing for Accessibility and Psycho-sensory Inclusion* is examined in the fourth focus and begins by documenting, through specially made images, the visual perception, and related limitations of people with dyschromatopsia with the aim of promoting an inclusive and empathetic visual culture, as expounded by Alice Palmieri in *Questioni di percezione. Racconti inclusivi e visioni*

insolite nel settore moda [pp. 412-425]. For the cognitive domain, we also find *The 3D virtual restoration as sensory inclusion: the Samnitic tombs of Santa Maria Capuavetere* [pp. 426-441], where Sara Gonizzi Barsanti presents possible immersive simulations of the frescoes of some ancient Campanian tombs. Other essays, on the other hand, highlight new accessible and inclusive communicative processes through innovative approaches to learning and multisensory engagement, as in the chapter *Flowing accessibility* by Giulio Giordano and Marzia Micelisopo [pp. 442-453], or have highlighted the role of artificial intelligence both in relation to perceptual-cultural accessibility and as a tool for enhancing visualization capabilities, as demonstrated by Enrico Cicalò, Michele Valentino and Simone Sanna in *Dalle parole alle immagini e dalle immagini alle parole. Traduzioni linguistiche per l'accessibilità visiva attraverso la visione artificiale* [pp. 454-473]. In *Segni e disegni per l'accessibilità ambientale*, Christina Conti and Ambra Pecile instead present a systems approach to accessible design that introduces the performance of the enabling and sensory components of an environment in a multidisciplinary and multiprofessional process that places people in individual variety at the center of the design [pp. 476-489]. Additionally, the volume includes reflections on the potential role of Drawing in the multidisciplinary and multisensory experiences offered by nature: in *FOREST THERAPY - RITORNO ALLA NATURA. Esperienze multisensoriali per il benessere psico-fisico*, by Ornella Zerlenga, Massimiliano Masullo, Margherita Cicala and Rosina Iaderosa, the outcomes regarding design and communication products accomplished in the field of representational techniques are indicated [pp. 490-505].

The topic on museum accessibility and inclusion, absent from the previous edition, is addressed in the fifth focus. Some solutions for sensory and cognitive disabilities are indicated, such as the visual-tactile information panels for villa D'Este presented by Director Andrea Bruciati with Lucilla D'Alessandro, Tommaso Emler, and Alexandra Fusinetti *VILLÆ (Tivoli, MiC). Percorsi di inclusione museale e accessibilità* [pp. 508-521]. The use of Braille texts, maps, and relief drawings transformed into multimedia, three-dimensional, and augmented reality content it's an approach exemplified by Federico Gabriele D'Intino in *Multi-sensory Guide: designing a new inclusive tool for Cultural Heritage* [pp. 522-537].

The methodology addressed to the tactile and cognitive fruition of paintings for blind and visually impaired recipients is also outlined –as Sonia Mollica describes in the essay *Dal modello digitale alla fruizione tattile. Creazione di un percorso museale interattivo e percettivo* [pp. 538-551]– and reflects on Drawing as a 'cultural mediator' capable of transforming the experience of an image into an aesthetic-perceptual exercise, as reported by Elena Ippoliti together with Flavia Camagni and Noemi Tomassella in *Modelli visuali cognitivi per l'esperienza museale. Il caso della Galleria Nazionale delle Marche* [pp. 552-561]. There are also the suggestions by Tommaso Emler, Adriana Caldarone and Alexandra Fusinetti regarding the most appropriate modes of communication to enable effective accessibility to cultural venues for those with hearing, visual or cognitive disabilities [*Procedure per l'accessibilità dei musei. Integrazioni ai PEBA per le disabilità sensoriali e cognitive*, pp. 568-581]. It also specifies the procedures useful for offering an expanded audience of content that emerged from

the study of an architecture painted on cardboard and the illustrated activities of a project aimed at eliminating physical and cognitive barriers in museums and public cultural places, as presented in *Digitisation, 3D modelling and digital fabrication: an accessibility project for MAO in Turin* by Roberta Spallone, Marco Vitali, Davide Quadrio, Laura Vigo, Mia Landi, Francesca Ronco, Giulia Bertola, Fabrizio Natta and Enrico Pupi [pp. 596-616].

Other experiences in the museum field are reported: the study proposed by Giuseppe Amoruso and Polina Mironenko on digital layouts developed for some Jordanian museums [*Digital Museology. Rappresentazione avanzata di spazi museali per l'accessibilità e l'esperienza interattiva*, pp. 634-647] and Luca Zecchin's project on Sardinian exhibition complexes [*Disegnare lo spazio e il movimento. Piccoli musei per tutti*, pp. 648-661].

In *Strumenti digitali per l'accessibilità spaziale di siti culturali complessi* [pp. 662-681], Mariangela Liuzzo, Dario Caraccio, Egidio Di Maggio, and Laura Floriano examine the potential of integrated three-dimensional surveying, digital modeling, and virtualization techniques for ensuring access to spatially complex or inaccessible cultural sites for all user categories.

Within this framework is also the temporary exhibition designed and presented by Manuela Incerti with Stefano Costantini considering the declinations of Drawing and its possible connections with the five senses [*Attraversa i tuoi sensi: accessibilità e inclusione nel Museo di Casa Romei a Ferrara*, pp. 682-697]. Concluding the last section is the essay *Modelli fisici per la percezione aptica di architetture dipinte: la Trinità di Masaccio* by Alberto Sdegno and Camilla Ceretelli, in which they present the study carried out to

increase the communicative potential of a painting in terms of spatial perception, through the elaboration of a three-dimensional digital maquette of the depicted environment and its reproduction in a physical model capable

of making the work usable even to a blind or visually impaired audience [pp. 710-723]. Overall, the volume, available in open access [1], provides an interesting overview of research conducted in

accessibility and inclusion by those working in the field of Drawing, while stimulating multidisciplinary reflections and new initiatives.

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Note

[1] The book is available at the site: <<https://www.publicapress.it/index.php/book/dai2023/>> (accessed on 15 May 2024).

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