

III CONVEGNO INTERNAZIONALE E INTERDISCIPLINARE  
SU IMMAGINI E IMMAGINAZIONE  
3rd INTERNATIONAL AND INTERDISCIPLINARY CONFERENCE  
ON IMAGES AND IMAGINATION

# IMG2021



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IMAGE LEARNING

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SHARING KNOWLEDGE

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book of abstracts

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## CALL FOR PAPERS

# IMAGE LEARNING

The link between imagination, forms, spaces, and anthropological, ideological, social, psychological, and formative contexts inevitably draws us to reflect on the importance of images in our cultural universe: the evident power of symbolic language in social life lends extreme importance and urgency to the development of diverse and multidisciplinary lines of inquiry into the role of the imaginal, especially in the processes underpinning the construction of subjects and their relationships with places.

Attending to images does not solely mean examining them within the vast and complex universe of reception processes that raise iconological, sociological, psychoanalytical, mass media, pedagogical, or anthropological questions: the imaginal is the area of the human experience where acts of reception converge with acts of generation.

Aesthetic and visual creativity underpins relational experience, facilitates the production of knowledge and interdisciplinary processes, and both organizes and orients methods of thinking about, designing, and enjoying the world.

The organizers of this conference – in keeping with their own dual scientific interests have issued a wide-ranging call for papers that is open to cross-contamination and interdisciplinarity, with a view to generating dialogue and exchange among disciplines that bring different approaches to bear upon the imaginal.



# IMAGE LEARNING

Il legame che esiste tra immaginazione, forme, spazi, contesti antropologici, ideologici, sociali, psicologici e formativi non può non provocare riflessioni sull'importanza delle immagini nel nostro universo culturale: l'evidente potere del linguaggio simbolico nella vita sociale conferisce estrema attualità e urgenza ad uno studio multiforme e multidisciplinare che metta a tema il ruolo dell'immagine all'interno dei processi di costruzione del soggetto e della sua relazione con i luoghi.

Rivolgere attenzione all'immagine non intende considerarla unicamente all'interno di quel vasto e complesso universo di processi di ricezione che pone il mondo imagetico all'interno di problematiche iconologiche, sociologiche, psicanalitiche, massmediatiche, pedagogiche, antropologiche: l'immagine è quel territorio dell'esperienza umana in cui confluiscono gesti di ricezione così come di generazione.

La creatività estetica e visuale permette il vissuto della relazione, apre il campo alla produzione della conoscenza, ai processi interdisciplinari, consente di strutturare ed orientare metodologie di pensiero, di progettazione, di fruizione del mondo.

Con l'intento di far dialogare discipline che a diverso titolo si confrontano con il mondo delle immagini, si propone una call estremamente ampia e aperta alla contaminazione ed all'interdisciplinarietà, a partire dalla doppia anima del gruppo promotore del convegno.



## TOPICS

The focus of the call for papers are illustrated below through some topics that can suggest the areas of interest of the conference, giving authors the opportunity to recombine freely the hashtags and leaving wide space for interpretation, so as to encourage the presentation of research topics uncommon or so far little investigated.

I focus della call for papers vengono illustrati di seguito attraverso alcuni macro-temi che hanno lo scopo di suggerire gli ambiti di interesse del convegno dando agli autori la possibilità di coniugare liberamente gli argomenti, lasciando ampio spazio di interpretazione, così da favorire la presentazione di temi di ricerca eventualmente poco investigati.

- Bioimages Learning
- Cultural Analytics Learning
- Graphic Images Learning
- Images Based Education
- Images and Crisis Learning
- Images and Society Learning
- Inclusive Images Learning
- Intercultural Images Learning
- Knowledge Images Learning
- Narrative and Storytelling learning
- Pictorial Images Learning
- Spatial Images Learning
- Visual Simulation & Modeling Learning
- Visual Based Research Methods
- Visual Studies



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**IMAGE  
LEARNING**







# The Imaginary and Imaginative in Children's Drawings. Interpretative Approaches with the Documentary Method

## **Abstract**

Children express their experiences and orientations, their relevance and perspectives not only in the medium of language, but also in the medium of the pictorial. In their drawings, children reconstruct the real and construct the fictional - in their drawings they process and create their experiences of the world and their social identity. The lecture will demonstrate the knowledge-generating potential of the qualitative analysis of children's drawings by means of the documentary interpretation of children's drawings of 4 to 6 year-olds, whose subject is their kindergarten and their 'dream kindergarten'. Connected with this is a plea for the stronger integration of image analysis in modern childhood research.

## **Keywords**

pictorial images learning, visual based research methods, documentary method, childhood research

# Images of Emancipation. Analysis of Photographs of Jewish Italians after the Liberation of the Roman ghetto in 1870

## Abstract

The end of nineteenth century brought the unification of Italy, known as the *Risorgimento*, in 1870, and the consolidation of the different Italian states into a single state, The Kingdom of Italy. For Roman Jews, the *Risorgimento* brought about liberation from a life of confinement and crushing poverty, disease and abuse under the hands of the Papal State, having being walled in the Roman ghetto for over three hundred years.

This study explores visions of Jewish liberation and forms of visual manifestation of life of freedom and equality in self-portraiture amongst the Roman Jews. It explores the ways in which the liberation influenced image constructions of this Jewish Community. What visual reality did the Roman Jews try to construct, upon having their portraits taken, after having been liberated from 300 years of captivity and confinement? What were the new visions of emancipation? Was it leisure? Wealth? Military attire? What was the role of photographs in the process of emancipation of the Roman Jews?

The study focuses on selected private family photographs, on which it builds a socio-semiotic analysis of the visual content. The found photographs lack a direct narrative, so that the historical and social context are constructed via interviews and contextual information. The study relates to the development of photography in Italy in the late nineteenth century as a period background.

The paper is based on the understanding that photographs are social constructions, they operate as objects in society. Annette

Kuhn (1991) writes "... A photograph can be material for interpretation-evidence, in that sense: to be solved, like a riddle; read and decoded, like clues left behind at the scene of a crime. Evidence of this sort, through can conceal, even as it purports to reveal, what it is evidence of".

## Keywords

photography, analysis, rome, jews, emancipation

# Image processing for knowledge and comparison of Piranesi's Carceri editions

## Abstract

Piranesi printed the 16 etchings of the *Carceri d'invenzione* in 1761. This version, which is more widespread and better known, derives from the reworking of matrices that the Venetian engraver produced in 1749-50. These are the 14 plates of the *Invenzioni capricciose di Carceri all'acquaforte*.

Many studies have focused on the semantic and formal comparison of the two main versions of the series. Up to now, comparisons have been conducted using juxtaposed pictures, whether original prints or digital reproductions. This procedure involves some limitations due to the effort of synthesis and mental superimposition of the two pictures of different editions to correctly identify the areas where changes occurred.

The contribution proposes a method of formal comparison between the two main editions of the series through the digital superimposition of two states of the same plate so that it is easier, more immediate, and more accurate to note the changes. This method is based on the application of image processing algorithms, which let to obtain a synthesis picture in false colours that clearly shows the modified parts of each plate.

Observation of the results has suggested the distinction of two main types of modifications carried out by Piranesi (additions/integrations and removal), clearly identifiable in the synthesis pictures.

In addition to its implications for Piranesi studies, this research shows how digital image processing can be an essential tool for knowledge in the field of art.

## Keywords

pictorial images learning, image processing, piranesi, carceri, etching

# Using Image-Based Research Methods in vulnerable populations as a culturally sensitive approach: ethical and methodological aspects

## Abstract

In psychology and social science, image-based methodologies (visual storytelling, photo-elicitation method, photo-walking, visual auto-ethnography) have been used as an innovative exploratory method for evaluating visual identities, life histories, and other collective features of local cultures. Visual and image-based methods offered great potential in developing bottom-up participatory research designs for inquiries, especially on vulnerable or disadvantaged subjects and communities. However, mainly for methodological concerns, image-based research remained with a limited status within the 'orthodox' word-based orientated landscape of qualitative paradigm. By using meta-synthesis of the recent literature, the territory covered by the present paper includes some applications of image-based methodologies as used in vulnerable populations. The main findings revealed an innovative galaxy of empirically-based methods that can be fruitfully used to integrate more "orthodox" quantitative, qualitative, and mixed-method designs. Implications from this methodological design's practical use were finally discussed, particularly in terms of decolonization of research practices and ethical aspects to guide practitioners' research in challenging contexts and vulnerable populations.

## Keywords

Image-based research, vulnerable population, mixed-methods, participatory research

# Video mapping for Cultural Heritage: state of the art and future developments

## Abstract

The fast development of digital technologies in the last two decades has led to the formation of new techniques and the renewal of existing ones for the specific purpose of dissemination of knowledge. Among these, a particular form of augmented reality, well known as video mapping, is considered of remarkable interest in the field of edutainment. Through the projection of graphic images on artifacts, it is possible to temporarily visualize them in a different configuration, in a completely reversible and non-invasive way. For example, this technique can be useful for the illustration of the original decorative apparatus of historical artifacts or for the representation of alternative or unfinished projects. In other words, it can be considered as a method for alternative fruition of Cultural Heritage. In addition, due to the strong spectacular component that characterizes it, an image projection performance is able to capture the attention and to involve a wider audience.

The aim of this paper is to highlight the potentialities of video mapping. By illustrating some significant experiences, conducted both in the national and international panorama, the purpose is to pay attention to how this technique, mainly used for purposes other than dissemination of Cultural Heritage, can really contribute to the valorization of historical artifacts. Some critical elements that characterize it and that still represent a limitation in its large-scale diffusion will also be discussed.

## Keywords

video mapping, augmented reality, cultural heritage, graphic images, edutainment

# Learning from the city: an emotional journey

## Abstract

Urban space is a real anthropological space, the result of the mixture of real sites and emotional references. In small urban realities, similar to the six villages of this research, the relationship between site and inhabitant is strong. The advent of new media and a different sociality has altered customs consolidated over time, unhinging the emotional link with real space. This research promotes the creation of an implementable platform that allows users to 'learn' from the city through an 'emotional journey'. The platform elaborates a strategy to strengthen the bond between the city and its inhabitants. The centres involved in the research are six small villages of the Sicilian Ionian coast: Forza d'Agrò, Casalvecchio, Mandanici, Fiumedinisi, Alì and Itala. The research work flow includes: building a database of emotions and memories; choice of a communication strategy; elaboration of emotional maps and integrated multimedia contents.

## Keywords

cultural heritage, augmented reality, little cities

# Narrative space in videogames

## Abstract

The space in videogames is not a visual extension of conventional narrative structures, as in traditional media, but it becomes a tool to organize the tale. The possibility of exploring space and acting on it makes the videogame the closest medium to the embodied experience of a story. This feature attributes a central role to the spatial representation that help the player in the construction of meanings which are necessary to understand the narration. The spatial suggestions become a formal and structural code of visual signs, able to emphasize tones and atmospheres and/or to express emotional valances. Starting from these considerations, the research aims to analyze the relationships between visual representation and narrative language in videogames. The survey methodology includes a comparative analysis of videogame spaces, starting from the main types of stories: realistic, verisimilar and unrealistic. This distinction allows to identify three macro-groups of spatial representations. The empathetic/anempathetic spaces reproduce perceptions similar to those existing in a physical space. The utopian/dystopian spaces propose perceptions that do not coincide with existing reality but that are potentially realizable in certain space-time conditions. The impossible/elsewhere spaces, finally, offer perceptions that not only do not coincide with reality, but that are also impractical in the physical world. This research underlines how the scientific area of representation can contribute significantly to the study of videogame, understood as a narrative form in which the drawing of the space is applied as an irreplaceable modality for the construction of a visual code of thought.

## Keywords

videogames, gamespace, narrative space, visual culture

# IS THE FUTURE OF EXHIBITIONS IN DIGITAL STORYTELLING? Curatorship in the age of internet and the rise of the amateur curator

## Abstract

Since the last two decades more and more museums and other cultural institutions are exploring the possibility of deploying their curatorial expertise through new virtual assemblages that can be experienced everywhere and by anyone. The simplest interface consists in downloadable applications or portions of websites, where high-resolution images of works from the collection are accessible, accompanied by information and metadata, quite often an audio piece that describes the image. But several experiences indicate instead novel and more advanced approaches to involve the audience. Recently leading museums moved clearly towards becoming a platform where ideas and audience engage in multiple ways: physical and digital, before during and after visiting, one way or together. With this paper I intend to look at how the practice of museum experience is changing, increasingly conveyed by images, comparing different experiences that through images open their archives to visitors.

## Keywords

museology, prosumer, digital curating, new media

# The Restoration Drawing by Images: The Dominican Monastery of the Holy Cross in Croatia

## Abstract

The article is part of a wider work in progress focused on the analysis of Balkan places of worship, with particular attention to the issues of conservation and representation. In the field of knowledge of an artifact, as it is known, the simultaneous assumption of information through visualization is more efficient than verbal transmission because, through images, it is possible to direct attention to a specific theme. The proposed study wants to verify the efficiency of the interpretative image introduced by some American researchers, which was created to highlight the functioning of a system by highlighting the individual elements and transformations undergone over time. The study, through the aid of photogrammetric survey, has as its objective to represent reality through a model of knowledge obtained by processing images taken through digital cameras. Case study of the investigation is the Dominican Monastery of the Holy Cross, in Croatia, a Christian-Orthodox religious complex built in 1432 on the northern coast of the island of Ciovo. The contribution presents the results of the phases of the knowledge process used: a philological analysis of the construction phases through the preliminary study of the archival documents found; a survey for the identification of the current configuration, materials and construction techniques used; the analysis and digitization of degradation using the forms and graphic conventions of the Normal 1/88 lexicon and the UNI 11182/2006 standard. The results obtained are to be considered as digital products constituting a data bank on a cognitive basis aimed at the future conservation of the important religious heritage analysed, often forgotten and not valued in its real potential.

## Keywords

images, knowledge, conservation, monasteries, croatia

# IT IS YOUR TOWN: KNOW HOW TO PROTECT IT

## The comic writing of Yona Friedman

### Abstract

In 1975, the Council of Europe published a small textbook titled *It is Your Town: Know How to Protect it*, conceived by Yona Friedman with a precise educational purpose as it was aimed at raising the general public's awareness about the problems (environmental, economic, social) suffered by Whiteborough. It is an imaginary city (as the name implies), but also a plausible one, both because it had a logo featuring all the figurative components of any historic European city (from roofs to domes, from towers to bell towers) and because it was presented as having grown over the centuries, stratifying itself around a primitive central Roman nucleus. Although marked by highly visionary proposals, in which the idea is to sink roads underground and lift pedestrian routes to higher ground, the main quality of Friedman's textbook lies in the singularity of the communicative tool used. A highly personal comic strip script that, over the years, has risen to the rank of style and preempted both Stanley Tigerman's *Architoons* and Bjarke Ingels' *Archicomics*. Nonetheless, while Tigerman's and Ingels' comics, insofar as they tend to be autobiographical, are part of a recurring trend in the history of architectural drawing, Friedman's comic writing is a case in point, because it is constitutively allographic.

### Keywords

Yona Friedman, historical centers, textbook, visual communication, comic writing.

# Settled / Nomadic: The Disappearance of the Project and the Invention of the Image. Two Projects by amid.cero9

## Abstract

The summary of amid.cero9's research presented in 2014 at the A.A. School of Architecture in London (2014/01/18 – 2014/02/15), "Third Nature. A micropedia", which gave its name to the homonymous and extremely rare catalogue, attempted to represent some of the research projects carried out by the studio, accompanying the written text by a corpus of images (both archival and authorial). The outcome is not the project in itself, understood as the perceptible result of assessed premises, as much the narrative image that was used or produced in order to transmit it. No longer the canonical design drawings, but rather satellite apparatuses, models and drawings directly exported (apparently) by the design software, axonometries with layers of complexity, collages, [historical] images useful for legitimising certain rifts. The image is the final aim of the research: suggestive and creative rather than plausible. Through two projects (Le Jardins de Prodiges Portables, 2013; The Aegean Paradise, 2014), this essay proposes to inquire into the role of the image, not only regarding the communication of the project, but also as an autonomous fact, whose "context" and "coordinates" become the image's support, in a non-conformist dictionary that proceeds by photograms: in these scenes, chance opens the doors to fields of knowledge, thought, reflection.

## Keywords

amid.cero9, architectural design, image, invention, garden

# The use of photographs in the teaching of the Shoah. A critical guide

## Abstract

The iconographic source of images is an element of great importance in the learning and construction of the history curriculum on World War II and specifically in the teaching of the history of the Holocaust.

The learning of history, in fact, cannot ignore the knowledge of the illustrative document and the value of the images.

The photo provides the student, in the process of elaboration and reflection of the acquired notions, how much regimes in Europe have invested and built their power even around the image.

The Images Based Education intends to present a guide to the didactic use of images aimed at integrating the learning of the historical event. The guide intends to expose the photographs and images critically including the choices that led to their creation and realization, its assumptions and the author's purposes.

The dissemination of propaganda pointed greatly to the value and role of the image so much that it was a tool to manipulate the thought of the mass. Both photographic and depicted images were used as a vehicle to enforce internal policies and, specifically, in the construction of the enemy in historical contextualization. In presentation, it will be the importance of placing the image in the time line of history also understood as a resource in the multi-disciplinary approach of historical knowledge. The photo and image are particularly useful for understanding the complexity and purpose of the historical event as auxiliary materials in its didactic use.

## Keywords

history of Holocaust, education, educational tools, iconographic sources, teaching history of Holocaust

# The “First Step” of Images The Tangible Illusion of Stop-Motion Animation

## Abstract

Over time, stop-motion animation has proven to be a setting for experimentation with idioms and modes of expression, involving, at present, not only the cinema and the visual arts, but modes of communication pertaining to everything from children's products to advertising, as well as audio-visual messaging and information, digital communication and social media. Such works, by their very nature, share features of the “cool” media, meaning media, such as cartoons, that engender high levels of participation by providing limited visual information which the public must then complete on its own (McLuhan, 1967). They also draw on the factors of attraction typical of the “System of Demonstrative Attractions” of the primordial cinema (Gunning, 2004), and without hiding their artificial essence, “clearly revealing themselves to be an expression of their creator's subjective «realism»” (Ajanović, 2004). To a certain extent, stop motion stands as an archetype, a primitive form of animation which highlights the contradiction “between the irrefutable objectivity of the photographic image and the incredible nature of the event” (Bazin 2008). This explains how the stop-motion technique has survived the change in paradigm brought about in animation by the new digital technologies, which have subverted, supplemented and, above all else, masked the perception of what is real and unreal. Indeed, the coexistence of fiction and reality found in frame-by-frame animation would appear to generate unique dimensions of perception which bring into play not only sight, but other components of the viewer's sensorial appa-

ratus as well (Guerra & Gallese, 2015).

In exploring this array of factors, the paper examines the visual statute of stop-motion animation by analysing and comparing various artefacts, from the first experimental works of the late 1800's to the latest projects combining stop-motion and new digital technologies. The fundamental objective of the study is to identify the constants and variables of this type of animation, throwing light on the role it has come to play in the panorama of visual communications.

## Keywords

stop-motion, animation, statute of animated images, real and unreal images, static and dynamic imag

# Drone survey of the Monastery of Panagia Kosmosoteira

## Abstract

The research presents the results of the survey of the Byzantine Church of Panagia Kosmosoteira, a religious architecture located in the town of Feres in northern Greece near the Turkish border. Using various survey methods, both direct and indirect and instrumental, the collection of images capable of representing the structures was carried out. The use of innovative techniques, such as the SAPR (Remotely Piloted Aerial System), using a drone and an overhead photogrammetric system, allowed the creation of images complete with spatial coordinates capable of providing metric and geometric information. Using innovative software, it was possible to process the images taken by the drone, in order to obtain high-resolution zenith views and shooting points that would otherwise be unreachable, to generate point clouds and subsequent three-dimensional models. This graphic activity, carried out with the aid of images, allowed the geometric and figurative conformation of the architectural artefact to be understood. The survey activities focused on the Katholikon, the main church of the Monastery of Panagia Kosmosoteira, founded in 1152. Between 1371 and 1373, this structure was occupied by the Turks and converted into the Suleyman Mosque. It took five and a half centuries to convert it into a Christian Orthodox church. The final objective of the research is to increase the scarce graphic and iconographic documentation of the Site, capturing its architectural peculiarities and the relationship between the artefact and the culture of the time, with the help of the information obtained through the images.

## Keywords

survey, technology, drone, monastery, greece

# Imitate, Cite, Contextualise. Approaches and the use of history in the teaching of graphic design

## Abstract

There are no such things as originality and authorship when it comes to the production of images, and what appears as an original artwork is always, explicitly or implicitly, a product of borrowings.

The work of great masters of design plays a crucial role in the academic training of visual communication designers. Design masters themselves quoted each other, for instance, Jan Tschichold referenced what he regarded as respectable colleagues to exemplify a certain design task, supplementing his discussion with examples.

The practice of imitation embedded in visual designers' education – which in itself resonates with artists' and craftsman's training in the traditional workshop of the past – contributes to the integration of models from the history of design within their coursework and beyond. Yet how does this corpus of references inform the practice of visual designer? How does history affect the projects and ideas of graphic design students?

Starting from my own experiences as lecturer teaching to design students (from 2013–), and taking in particular consideration the visual communication courses held in the academic years 2018–2019 and 2019–2020, this paper examines different approaches to history from the perspective of graphic design education and how these feed future image-makers in developing their own visual language.

## Keywords

design history, images based education, knowledge images learning, learning by imitation, design education, design methodology

# BACK TO THE PAST. Narrative and storytelling learning in a digital modeling reconstruction process

## Abstract

This essay describes the most recent and novel results of the fruitful collaboration between Politecnico di Torino and Fondazione Museo delle Antichità Egizie, in Turin. The reconstructive digital modelling of some of the Museum's halls constitutes a virtual environment that is useful in remotely and interactively showing some previous exhibitions of the collection named 'Travel models of Egyptian architectures' by Jean Jacques Rifaud. The collection was recorded from the time of its arrival in Italy until 1967, at the event of the Pirelli Exhibition in Milan. The maquettes are preserved at the Egyptian Museum but to date, only a small portion is exhibited, and most wooden models are kept in the deposits of the museum. Historical research has allowed us to collect the blueprints containing the layout of the artefacts displayed in the exhibits of the past. This has resulted in immersive navigation of the topologically reconstructed space that provides an active interaction with the digitized models.

## Keywords

narrative and storytelling learning, reconstructive digital modelling, virtual reality, museums

# Images Save Life. The Role of Graphic Communication in Social Health Education

## Abstract

This article, starting from some considerations on learning processes based on visual communication and from an investigation on how communication health-related has historically made use of tools of the graphic sciences through specific languages, each time declined according to the historical context and the cultural level of the users, presents an excursus on the use and current role of graphics in the medical-health field. The critical position proposed aims to emphasise how, in this context, images fulfil their primary task of social education to form individuals capable of learning and critically interpreting the reality that surrounds them, not only protecting their own health but also implicitly assuming responsibility for protecting the safety of an entire social group.

## Keywords

graphic design, health, education, visual communication, emergency

# Pictorial & Spatial Image Learning – Using diamond ranking to understand students' perception of learning environment

## Abstract

The academic world of research, in particular, can be seen as "a sea of words and more words, in which visually based communication [is] not taken as serious intellectual products" (Collier 2001, p. 59). Furthermore, scientific texts are often written in an elaborate language which is particularly difficult to understand for students and novices in research. A visual method seems to facilitate access to research, especially for students who first need to develop a scientific research habit.

Therefore, the present study uses the participatory, image-based method of diamond ranking, to facilitate a more accessible approach to research in educational science. Diamond ranking is a recognised thinking skills tool which is designed to facilitate talk and encourage people to consider their own value positions on a given topic (Clark, 2012). With respect to research into learning environments, the use of photographs in a diamond ranking activity resonates extraordinary well with people as it explicitly encourages them to consider their relationship to the physical space and how it influences their beliefs about learning and teaching (e.g. Woolner et al. 2010). This study therefore has two objectives: to show how students can learn to assess learning environments, before moving to analyse students' preferences for certain learning environments based on the resulting products.

## Keywords

pictorial image learning, spatial image learning, learning environment, participatory research method

# Image: necessity and truth. The narrative medium in Valerio Olgiati

## Abstract

The architectural reality that defines our contemporary is often in the position of having to deal with an inexhaustible need to consume images. The imaginative arrogance of the so-called consumption society does not exempt the architectural field from becoming a mere commercial tool, at the service of global production systems. In this context, the need for reflection spontaneously arises, supported by a constant and growing desire for change, relating to the identification of a renewed and sober methodology for approaching the constitutional and communicative process in the architectural project, aware both of the challenges and limits, with respect to what Vittorio Gregotti defines as creative modification. As the Milanese architect states "[...] creative modification is the way of being of creativity in the best tradition of the condition of modernity, that is, as the capacity of critical reason to propose measuring itself as the basis of its own intentionality, by means of the form of that is work of the possible necessary, with the contradictions of the present. [...] As a project, it is a lasting narrative process that replaces the idea of incessant novelty with that of the constitution of a fragment of truth of the present". In this sense, it is interesting to analyze the work of an architect who has made his design process the means by which to approach what he calls "as true as possible": Valerio Olgiati. The narrative and communicative construction of the Swiss architect lends itself to becoming a plausible tool, through which to deepen a methodological approach to the contemporary architectural project. The project for the Pearling Path in Muharraq will be considered with the aim of identifying the development process towards the establishment of a more than necessary revision of the production mechanisms in architecture: from the design image to the architectural image.

## Keywords

first keyword, second keyword, third keyword, fourth keyword, sixth keyword

# Emotional and Cognitive Maps for Urban Design Education: a human-centered design learning approach

## Abstract

The paper presents the exp-EIA© method applied into a Master of Science university architectural course at Politecnico di Milano for fostering a human-centred and evidence-based urban design approach. The method, coupling architectural and psychological perspectives, enables to investigate the people/environment relationship using Virtual/Augmented Reality and psychological questionnaires. The method adopts a tool able to collect data on the perception of the urban space, and to represent the outcomes in various forms, including the cartographic one. This paper presents a teaching experience applying such approach in a one-day workshop on the Città Studi neighborhood in Milan (Italy). The procedure includes a virtual exploration of the area, a survey investigating the emotional and cognitive effect of specific points of view in the urban environment, and a debate on the results. In the case study, 38 international students participated in a survey related to the observation and navigation of spherical panoramas. Individual reactions to the views were clustered and for each cluster the emotional and cognitive reactions associated with the specific points of view were analyzed and discussed with students.

The results of the analysis show that certain places are robust social attractors with intense emotional and cognitive reactions, whereas other places in the surroundings are socially negligible and emotionally neutral. Students were thus able to compare their own direct experiences with the results of a psychological assessment tool, including the experiences of a community of students. This experiential approach favors practical considerations to inform subsequent project phases in a human-centred perspective.

## Keywords

virtual reality, emotional appraisal, urban design

# The effectiveness of digital visualization tools to enhance co-design activities in urban planning

## Abstract

The paper investigates the use of digital visualization tools to strengthen students' skills in understanding and leading urban co-design processes. To avoid the risk of being tokenistic, these participatory paths should rely on new methods able to implement the citizens' interpretative capacities and involving them as early as possible in the planning stages. A pilot case study application has been planned to let the students test an original co-design strategy, consisting in a combined use of the exp-EIA© method, coupling architecture and psychology, and a web-based platform for team collaboration. The main hypothesis was that this approach can contribute to implement their competencies about the emotional, cognitive and community components of urban experience. The sample consisted of 38 Master of Science international students of the Politecnico di Milano (School of Architecture), and the study focused on the university area, the Città Studi district. The results shows that a new awareness about the importance of psycho-social dimensions as crucial factors for urban planning processes has been promoted in the participants. Their consideration of planning as a systemic synthesis of various subjective and social instances was also strengthened. Our pilot study stressed the critical role of visualizations in implementing an efficient online learning experience, impacting how students perceived information, valued the process, and would positively manage future co-design activities into their professional practice.

## Keywords

architect education, co-designing, environmental psychology, virtual reality, web-platform

# Narrating the museum: developing Critical Thinking skills through a collaborative Storytelling experience

## Abstract

Using storytelling as a teaching methodology in heritage education context is an established practice, especially in relation to the promotion of transverse competences. However, completely online storytelling activities in museum education context (e.g. with the support of Virtual Reality) are not frequently used and few results are available to researchers in terms of stimulating analysis, reflection, communication, critical evaluation and divergent thinking. Based on these assumptions, the research team designed, implemented and evaluated a learning experience for university students of the Master's degree course in "Primary School Education" in order to stimulate their critical thinking skills through collaborative storytelling activities. Initially, the students participated in a virtual reality experience of an Etruscan Museum collection through the so called E-trouria app. Afterwards, the students were divided into groups of 10-7 members and wrote a collaborative creative story using the Wiki tool available in the online Moodle platform of their university course. The collaborative stories had to be written according to certain criteria, such as target audience, and were inspired by one of the museum objects explored through the E-trouria app. The storytelling products developed by the groups of students were assessed, using a critical thinking evaluation grid, by three independent evaluators according to 6 indicators: use of the language, argumentation, relevance, importance, critical evaluation and novelty. Basic statistical analyses were carried out on the assessment data in order to verify the level of stimulation of critical thinking skills in the students participating in the activity.

## Keywords

museum, storytelling, critical thinking, HEI education, collaboration

# Unveiling Beauty through Maps

## Affective image determination for spatial learning through Metropolitan Cartography Maps

### Abstract

The genesis of a territory is deeply tied to the hidden signs that connect its geography to its history. As with language, maps are still conceived as machines, deterministically structured according to rules that do not admit exceptions. Metropolitan Cartography attempts to break down the mechanical act. Maps grew out of the inescapable need for architects and urban designers to construct a tool to help interpret the spatial complexity of the metropolis, the rules by which its components are related to each other, which often seem mysterious. Through the maps of Metropolitan Cartography, the user and cartographer are part of the data, giving meaning to the signs on a map because they are willing to listen to them and interpret their animated, memorable, and sensory images.

The specialization of information about metropolitan territories in transition provides a synthesis of vivid, multidisciplinary knowledge about physical space. The research question that arises is: How does the interpretation of reality change with new technologies? A qualitative mapping project for metropolises is proposed through the powerful, evocative image in the maps of Metropolitan Cartography. These serve as a spatial tool that can critically analyze the physical and temporal complexity of the territory, representing it in a new, dynamic way through the knowledge and translation of stratified information ecology, producing "sensitive" images that activate the understanding of their value in the intertwining of different scales.

### Keywords

narrative learning, affective image, knowledge image learning, image-based education, metropolitan cartography, graphic semiology

# Interventions for Dissonant Heritage in Bolzano

## Abstract

This contribution looks at the Piazza della Vittoria in Bolzano (Italy) and how it represents a site of various narrative conflicts over dissonant heritage. While lesser known than the African territories colonized by Italy, Bolzano itself is considered a “post-colonial” city whose urban make-over following the region’s take-over by Italy after World War I was implemented by the fascists with ideological principles in mind. For example, the Piazza was created during the fascist period with various monuments, buildings, and reliefs to glorify the Roman Empire, imperialism, and colonialism. At the center of the Piazza is the Victory Monument, which recently underwent an artistic intervention to “disempower” certain unsettling aspects. Other interventions have used natural elements to spread messages of peace and share stories from the local inhabitants. More recently, in June 2020, Black Lives Matter protesters threw red paint on the column, leading Casa Pound, a neo-fascist movement, to make its own demonstration of cleaning the statue, a literal act of white-washing. Looking at the piazza and its interventions, this paper explores how this site performs both materially and symbolically as a locus of conflicting narratives. I argue that the range of interventions embody the concept of dissonant heritage (Yaron and Amit-Cohen 2019), by revealing the ways in which different political and social actors engage with collective memory. Blending approaches from visual politics (Bleiker 2018) and narrative analysis of visuals (Budabin 2017), I investigate spatial dimensions, visual artifacts and interventions that unpack layers of meaning in the Piazza della Vittoria. In doing so, I demonstrate new modes of unraveling threads of narrative contestation at local, regional, national, and transnational levels. I maintain that greater appreciation for the range of artistic interventions shows

incomplete processes of inclusion—a major quandary for addressing dissonant heritage—as well as avenues to challenge traditional configurations of power. At stake is the ability for images and performances that contest cultural heritage to open and foster dialogue about inclusion and justice.

## Keywords

narratives, resistance, protest, symbolic politics, and monuments

# L'immagine fotografica nel lavoro di Josef Albers.

## La fotografia come strumento didattico e interpretativo

### Abstract

Josef Albers è tra i principali pionieri del modernismo del XX secolo, è stato studente prima e dopo un influente insegnante del Bauhaus prima di trasferirsi in America al Black Mountain College, scrittore, pittore e teorico del colore – noto per *Homages to the Square*, dipinto tra il 1950 e il 1976. Albers è stato anche un fotografo tra i primi a sperimentare la fotografia come strumento didattico. Il saggio vuole esplorare l'importanza della fotografia nel lavoro dell'artista e analizzare il valore di questo strumento nel suo metodo di insegnamento. Joseph Albers comincia a fotografare nel periodo del Bauhaus, e nel corso degli anni usa la fotografia sia come strumento didattico sia per documentare viaggi.

Per Albers la fotografia non è un modo per fare arte, ma un metodo per raccogliere idee, prendere appunti, uno strumento per interpretare il reale. Nel corso degli anni realizza diversi tipi di lavori fotografici. I foto collage del periodo del Bauhaus creano sequenze che producono una visione cinematografica del soggetto: le foto sono montate su cartoncini sempre dello stesso formato, gli scatti sono organizzati per produrre significato attraverso l'accostamento di punti di vista diversi. Nessun taglio dell'immagine: le foto sono utilizzate nella loro interezza, mai frammentate né manipolate (un modo forse per differenziarsi da László Moholy-Nagy, che al Bauhaus teorizzava un uso artistico della nuova arte).

Viene spontaneo chiedersi quale tempo cerchiamo quando siamo di fronte all'immagine? Un tempo plurale, un montaggio di temporalità sfasate come sostiene Didi Huberman quando dice che l'immagine ha spesso più memoria e avvenire di colui che guarda. Per Albers infatti le fotografie cercano l'arte astratta dentro la cultura messicana

i cui siti archeologici Albers visita nel corso degli anni.

Albers nell'osservare il tempo "è in grado di trasformarlo e di metterlo in relazione con gli altri tempi, di leggerne in modo inedito la storia, di 'citarla' secondo una necessità che non proviene in alcun modo dal suo arbitrio, ma da un'esigenza a cui egli non può non rispondere". L'essere contemporanei è dato dalla capacità di ascolto del nostro tempo e del tempo passato, è quello che aveva in mente Walter Benjamin, quando scriveva che l'indice storico contenuto nelle immagini del passato mostra che esse giungeranno alla leggibilità solo in un determinato momento della loro storia.

### Keywords

educazione, insegnamento, fotografia, foto collage

# The woman in the propaganda posters. Categories and graphic structures

## Abstract

In the century in which, from 1914, war was already looming over Europe and states would begin a process of militarization that would employ different social strata, the propaganda poster proved to be an effective means of persuasion and, increasingly, of recruitment. «In its schematization, the art of the poster [...] is simplified even more: it no longer speaks, it makes one see, it makes one feel» [Gallo 1976, p. 131]. The passerby is somehow trained by the image to action, there is no more space for reflection. The coercive attitude that urges enlistment, the pointing finger and the patriotic extremism will counterbalance the definition of a woman whose identity oscillates between the conquered political equality in the countries of the Soviet Union and the return to a traditional figure afraid and worried as she watches the soldiers go off to war, as will happen in England, Australia and Ireland. The article poses some reflections on the representation of women in Soviet propaganda posters in a period that can be placed in the first half of the twentieth century. A selection of emblematic posters makes it possible to identify the graphic and metaphorical elements that, organized in categories and structures of signs, induced large masses of the population to strongly conditioned visions of the female figure and her role within society. Women entered the production cycle, they demonstrated in national strikes, they became factory workers conquering their freedom in the productive life declaring an emancipation now de facto and not only proclaimed as a right.

## Keywords

graphic analysis, poster, propaganda, woman, soviet society

# Vulva Moulding. Contact Image as a Feminist Practice Producing Knowledge

## Abstract

Vulva moulding is a militant and ordinary practice representative of the genital turn of feminism. It lies at the crossroads between genitals invisibilisation in patriarchy and moulding marginalisation in art history. The article shows that vulva moulding, as a contact image, produces knowledge. Its process goes beyond inherited binaries such as inside/outside and passive/active that were misogynistically associated to feminine/masculine. After describing the anti-patriarchal purposes of militant, artistic and ordinary practices of vulva moulding, the article links them to Irigaray's and Laqueur's accounts on gender constructed binaries, and to the etymology of vulva and vagina. In a last part, Didi-Huberman's analysis of Duchamp's *Feuille de vigne femelle* is stripped of its misogynist tendency. Vulva moulding goes beyond the mere reversibility of the convex and the concave. It relies rather on the advent of difference through contact. By adhering in order to produce the same, vulva moulding shows the infinite diversity of genitals shapes. By taking into account militant and ordinary practices, whether public and private, the article adds vulva moulding to the agenda of visual studies and to the comprehension of contact images as producing knowledge.

## Keywords

visual studies, gender studies, genital turn, thinking images, empreinte

# Representation and environmental damage

## The case of Edward Burtynsky

### Abstract

A recent debate in visual studies has focused on the ways in which many authors, artists and scholars structure the narration and representation of environmental damage. The critical literature has focused some of the key question around Edward Burtynsky's visual production. In order to "explore the collective impact that humanity has, as a species, on the surface of the planet; and to "investigate the human systems imposed on natural landscapes", the photographer focuses his attention on two privileged subjects: humanity - or at least its indelible traces - and nature. The binomial man/nature is precisely what posthuman philosophical currents are examining, questioning not only the foundations of modern Western thought but also the representation associated with it, as conceived within the Cartesian model. Specifically, the process of sensitizing the viewer is challenged when entrusted to the exclusivity of the visual sphere with the consequence of not conveying adequate information about the global politics involved. In fact, since visual sphere holds an uncontested primacy - even within the mediatic and ecological discourse - it is necessary to question which tools are the most appropriate for the creation and transmission of a conscious imaginary, detached from the contemporary exasperated anthropocentrism. The intervention aims to investigate the ways in which contemporary visual culture is responding not only to the demands of new phenomenological and anti-human horizons, but also to the concrete need to shape an imagery useful for the maturation of adequate ecological awareness.

### Keywords

visual studies, images and crisis learning, visual based research methods, knowledge images learning, images, society learning

# On the habitus of students Reconstruction of explicit self-concept and incorporated norms in mental images of the future profession

## Abstract

Looking at specific characteristics of a photographic image, different aspects are noticeable, such as the constructed reality captured by the camera's one-eyed viewfinder respectively the designed cut-outs of world. These viewing regimes conserve patterns, which in turn can be reconstructed with methods of empirical social research. In detail, cultural values can be exposed, as well as subjective and social reality, but also hidden rules and stocks of knowledge. Since the photo fixes perceptual customs of the photographer, it therefore serves on one hand as a source of qualitative social research (cf. Burkhart, 2013); on the other hand, it is a didactic method within co-constructive situations in class (see also Moser & Rummler, 2017). To uncover both the viewing regimes and the related structures concerning career choice, adolescents at the age of 14 to 16 are asked to photograph as many professions as possible for three days. The subsequent moderated discussion is about choosing professions they can imagine practicing and those that are beyond imagination. Within the narratives of the self, incorporated norms or institutionalised behavioural expectations, theories of the self, and constructions of social identity are elaborated on the basis of the documentary method according to Bohnsack (2014). The results mirror facts that can be collated with the experience-based concept of habitus according to Bourdieu (1997). For instance, a child's habitus acquired in the core family is always carried into school and appears in that different social space as a representative of his or her origin (Helsper et al., 2014).

## Keywords

habitus, visual regimes, incorporated norms, notions of self, photo elicitation

# Hackcity - Hackbodies

## Images and narratives of cyborg architectures in Japanese anime and urban utopias

### Abstract

The images of the hyper-technological cities in Japanese anime are examples of premediation of the relationship between humanity, media-city, and environmental degradation. Especially the post-apocalyptic landscapes of the cyberpunk genre remediate the post-war Japanese architecture and reconfigure the relationship between subject and space. These scenarios become prosthetic extensions of the human being hybridized with the machine. The paper consists of two parts. The first frames theoretical coordinates, combining the concept of premediation with animated cinema; in particular for those aspects concerning the architectural and hyper-technological structure imagined by cyberpunk anime. The second part explores and deconstructs animated cyborg-architectures, interpreting them as hipotesis of scenarios in which human beings and designed space hybridize in a single organic device. By describing a few case studies selected on the basis of diegetic coordinates, we suggest relating them to the images of the cyborg urbanism of the Japanese Metabolists of the 1960s. The ultimate goal is to highlight how anime and, in general, images of hyper-technological cities and cyborg architectures anticipate – in their respective areas of expertise – the questions of environmentalization and premediation of the media, orienting design methods and visions of the world in a posthuman key.

### Keywords

visual narratives, radical mediation, pre-mediation, cyberpunk, anime, metabolist architecture

# From the verbal to the visual. An example of intersemiotic translation of Calvino's Invisible Cities

## Abstract

The editorial field is one of the spheres in which the translation paradigm for communication artefacts would seem to find a natural home (Baule 2017, 41). What are its characteristics of an editorial artefact? How can we interpret it? Why is translation central in editorial design? What are its declinations beyond the ordinary meaning of interlinguistic translation? How can we define intersemiotic translation and how is it implemented? These are just some of the many questions that allow us to reflect theoretically and pragmatically on the importance and the characteristics of translation paradigm in editorial design. An application example of intersemiotic translation, taken from a final master's thesis in Communication design, brings us closer to Italo Calvino's novel 'The invisible cities', a literary work connoted by a style of visual writing which is mainly descriptive and full of suggestions.

Following this research path, "(in)visible city" project consists into ten editorial artefacts for guys between 11 and 14 years old: by combining in different ways formats, images and texts, the editorial project aims to demonstrate the potential of the relationship between the verbal and the visual language, in close dialogue with different book formats. The project can be a useful playful tool for educators who aim to develop reading activities and creative experimentations. The translation of this specific text is a system applicable to different literary texts based on similar peculiarities. In the subtle thickness of a page there is infinite potential.

## Keywords

text, image, translation design, visual culture, print culture

# Digital Spaces and Digital Places: Recovering Ancient Traditions with Contemporary Forms in Rome

## Abstract

Works of art with a strong technological element often act as catalysts for subjects/recipients to recover old collective experiences. By fostering the discovery of a long-lost awareness, a reconciliation occurs between acts of reception and acts of generation. This article offers a very specific insight into the works of artists who endeavored to reconcile the need for technological avantgarde with sound craftsmanship in the Roman context. As the cradle of Classical civilization, Rome has always been the recipient of artistic practices which attempted to rediscover and offer new meanings to ancient traditions. We shall conduct case studies on works conceived in Rome by contemporary artists originating from different backgrounds, contexts, and artistic practices, which push for an active role in learning and making use of audio/visual information. In particular, we shall focus on the Rome based installation works in the exhibitions: *Memory Game, Villa Lontana*, 2020, by Edoardo Servadio; *Mi Manchi Come il WiFi*, 2019, by Ignasi Monreal; and *Sant'Andrea de Scaphis, Gavin Brown's Enterprise*, 2019, by Laura Owens. By combining various approaches in the visual arts, these works give rise to a memory theater which underpins the construction of subjects and their relationships with different places and universes on national and international scale.

## Keywords

digital humanities, craftsmanship, visual arts, memory theater, contemporary Rome

# Displaying displays. Contemporary architecture exhibitions and their production of images

## Abstract

Due to the impossibility of showing architecture in presentia, showing architecture has meant for decades reproducing it. Since their emergence in the 18th century, architecture exhibitions have, for a long time, produced surrogates to buildings as pale copies or representations of something that stands outside of the gallery and cannot literally enter its space. Through technical drawings, models, photographs, and other artefacts, the architecture exhibition provided images facilitating acts of mental reconstruction of a presumed original. Those very images, in turn, once exposed and circulating among the media, often assume the status of works in themselves, and create new narratives, alongside their original referents.

## Keywords

spatial images learning, images based education, architecture exhibitions, display, experience

# Re-Imagining Spaces and Places. Spatial imaginary methods: the creative process and iconographic circulation

## Abstract

In the field of architecture training, studies on the perception of shape and spatial conception play a key role, especially for the education aspects focused on acquiring awareness of the qualitative and quantitative dimensions of spaces, as well as on their transformation governed by design creativity. This educational process is extensively based on the use of images, following a dual path of figural elaboration and reception; at the same time, the intensive use of icons acts as an interface in the creation of a spatial imaginary that goes beyond technical-specialist training and reaches the cultural and creative sphere, specific to an era. Therefore, spatial imaginary is rooted in a solid instrumental and geometric-configurational foundation, which shapes buildings and spaces, also resorting to the figurative world and to the creative and cultural sensitivity that the subject draws from society. However, the spatial imaginary of an architecture does not concern solely the construction of the work, since in turn it generates new images and feeds different and transdisciplinary imaginaries. Cultural and physical contexts, such as cities, places or buildings, can be evoked, interpreted or represented in artistic or literary works, thus triggering the possibility of re-imagining space. The article attempts to explore the different levels of spatial imaginary, referencing a case study, and to identify the innovative elements introduced into the iconic-spatial process by recent digital technologies for processing images and their circulation on the web.

## Keywords

architectural education, perception/form, image, communication, circulation studies

# Virtual representation to narration Roman Turin. Interactive didactic paths from the city to the museum

## Abstract

This paper illustrates a research experience carried out on possible projects to enhance the archaeological vestiges of the city of Turin. The absence of precise links between Roman Turin and its remains makes it difficult to understand the rich archaeological heritage, which is often no longer visible. Among the possible project scenarios, the use of images appears to be the most effective tool for the reading, interpretation and transmission of the heritage in all its complexity. Moreover, considering that the privileged users are the students who are approaching the study of Roman history, the new forms of representation are an effective way to transmit and learn cultural contents. The case study, well known to insiders and scholars, is hardly intelligible to a more heterogeneous audience. An urban structure strongly influenced by the still comprehensible Roman layout is counterbalanced by the fragmentation of the archaeological artefacts visible today and the loss of significant ancient urban elements. The interdisciplinary nature of archaeology, restoration and representation makes it possible, through interactive digital environments, to interpret the contents correctly, to narrate the heritage by restoring its physical consistency and to transmit the values that the testimonies carry. The creation of cognitive and emotional relationships between the visitors and the tangible and intangible heritage makes it possible to reconnect the archaeological evidence present or lost in the city with the findings in the museum. The educational intentionality attributed to the image favours an inclusive process for users with specific needs, not only exclusively linked to disability conditions. The image assumes a privileged pedagogical role that

allows a greater involvement of people with specific needs as well as "alienated" audiences.

## Keywords

images based education, inclusive images learning, knowledge images learning, archaeological cultural heritage, heritage interpretation

# Visualizing the Italian way of life: Italian design products through the pages of *Domus*, 1955-1975

## Abstract

After the period of interruption caused by the war, the editorial *Domus* restarts in January 1946 with the number 205; Ernesto Nathan Rogers clarifies the intent of the magazine, announcing at the forefront the desire to "form a taste, a technique and a morality" to rebuild a society [205, 1946, 3]. From that moment *Domus* will become the mirror of the new Italian housing condition, nourished and enriched by new styles, new needs and new possibilities. Between the 1950s and the 1970s, *Domus* tells a story in which images play a fundamental role. In fact, the visual enrichment testifies to a chronological evolution not only of taste, but also of the *modus operandi* of visual communication.

The images tell the story of the new objects and new spaces that have reformulated the new paradigm of the home. An ascending climax of visual content, and more generally of graphics, which over the years has confessed a strong communicative and evocative power; as Mario Piazza wrote, "It is the graphics that modeled and made visible a symbolic universe through which consumers encountered the product." [2013]

The covers of the individual issues and the images used in the magazine were the dissemination tool of a new taste, received by a changing and well-oriented society. The contribution aims to analyze and reflect on the role of images within the *Domus* magazine during the period from 1955 to 1975, arguing on the visual display of visual content from a critical perspective, analyzing the stylistic choices and the masterful orchestration of advertising inserts, and how, thanks to their

certification, they have made *Domus* a container for theorizing and promoting the new Italian house.

## Keywords

*Domus*, visual, advertising, product design, Italian design, housing culture

# Stick Images. Learning by drawing lines with objects

## Abstract

The possibilities of graphic intelligence and graphic devices for learning are usually investigated in the field of traditional methods and tools of representation. The research can be extended to different investigation areas in which unconventional techniques and strategies of representation and image production enable the transmission of knowledge, notions and information.

The article aims to present and discuss some learning strategies that, through elementary objects that are also easily found in nature. These can foster cognitive development, sometimes achieving greater effectiveness than the more consolidated communication systems based on linguistic and logical-mathematical intelligence.

One example of this is the images made from simple sticks, such as Match-stick Puzzles, which use diagrams drawn based on pre-established rules to support mathematical skills development. Another significant application of this graphic strategy is the Marshallese Stick Charts. The Rebbelib and Meddo constitute real maps that allow the location of the islands of the archipelagos and the navigation routes. But far more interesting are the Mattangs. The latter, while using the same essential elements are abstract maps designed as learning devices for young navigators. In this case, the aim is not to show routes but to teach the principles of reading complex navigation systems.

These devices demonstrate the capacity of graphic learning artefacts to enable the development of skills useful for the indispensable transition from the abstract to the real and viceversa. These questions open to a perspective that suggests new approaches

to developing skills related to graphic intelligence through unusual learning devices.

## Keywords

graphic images learning, knowledge images learning, cognitive processes, learning processes

# Sound beyond the hedge. Towards an acoustic construction of images

## Abstract

The use of images for representing the world should be considered as the product of a generative act of the subject more than the result of an objective process. It could be said that the construction of images is produced by a consonance, or even a resonance – a common vibration between the real and the subject, amplified in his mental processing: a physical as well as emotional, symbolic, cultural connection.

Replacing the metaphorical sense of “resonance” with its proper meaning, there are many artistic, architectural, literary experiences that have attempted a translation of sound into visual images and vice versa – sometimes aiming at a synesthetic stimulation of our perception, other times configuring “silent media” able to inspire our imagination.

More peculiarly, the role of sound in the process of unveiling and building images assumes a great importance in the experience of blind people. Sound strongly contributes to develop a “gaze” capable of perceiving and judging the outer world. This extends the scope of the image beyond the mere visual, placing it in a multisensory dimension.

Through the method of interviewing and analysis, the paper focuses on the acoustic dynamics that affect the symbolic horizon at the basis of the construction of the image, favoring an inclusive perspective, with possible repercussions in the field of communication, art, society and environment.

## Keywords

imagination, sound, soundscape, deep narration, multisensory, blindness

# Infodemic, Visual Disinformation and Data Literacy. How to Foster Critical Thinking Through the Emerging Dataficity Competence

## Abstract

In an infodemic the citizen must quickly process information, using parameters of thought automation, rather than analytical parameters, and therefore preferring interpretations that employ less cognitive effort and that mainly reflect previous knowledge. Decoding of any infographic appears unknowingly easy, due to the strong use of iconographic elements, whose intuitiveness makes it simple, effective and free from misleading interpretations, even though graphs can lie.

It is necessary to learn to read a graph, before understanding it, as the truthfulness of the information contained in a data visualization is never absolute, but rather must be critically contextualized based on the objectives of those who want to use the initial data. Correct reading presupposes the acquisition of a new holistic digital competence: the dataficity, that intends to be a natural evolution of the concept of graphicacy, which summarizes the skills necessary for a citizen in the correct production and consumption of infographics.

If on the one hand, developing the factual, conceptual, and procedural domain of the infographic project is a consolidated practice in design schools, on the other hand, a lack of support activities for metacognitive and critical development of infographics, as a key to breaking the disinformation wheel, is undeniable. To do this, it is necessary to implement strategies that focus attention on the logical-procedural structure with which an infographic is created, and activities are carried out starting from the analysis of the products themselves.

## Keywords

infodemic, digital education, data visualization, dataficity, dataful thinking

# Image variables of collectible design: Art, luxury, and country-of-origin effect

## Abstract

The segment of Collectible Design (CD) is increasingly present and gaining in popularity in the global marketplace. The growing number of CD's cultural and commercial circuits and platforms clearly shows an intensified interest on the part of individuals ranging from simple amateurs to collectors. Within the image variables' theoretical framework, this study explains the reasons of the current success of CD by identifying its three main image variables - art, luxury, and country of origin - that influence the perception of audiences and the market. These three image variables, with their symbolic and emotional significance, enable three specific image effects on CD's value perception. Image variables of art, luxury, and country of origin can therefore be viewed as fundamental in the construction of the value of CD. This research offers significant information that may help CD marketers to develop useful strategies based on CD's principal image variables while having a stronger impact on audiences and consumers/collectors' perception. This study's originality consists in providing a theoretical framework of CD's value perception in relation to image variables.

## Keywords

collectible design, image variables, art, luxury, country-of-origin

# The repression of techno-aesthetic creativity

## Abstract

In the field of technologies for human expression, the practice of digital writing today involves a consistent integrated use of images and words. What does it mean to process digital images such as those we receive from the media? What is the relationship between images and words?

To understand this, it is appropriate to ask what kind of creativity is at stake in the processes of elaboration, learning and internalisation of technical images. In the field of the aesthetics of reception (Jauss, 1972) and of the theory of reading (Iser, 1976) it has been shown that the experience of the user is essentially of a reflexive type, but with the advent of new technologies we enter a pragmatic and performative aesthetic paradigm that particularly enhances the productive action of the aisthesis. This document aims to answer the questions set out above, starting from a consideration on the existence of a set of practices of "creative writing" widespread in school and non-scholastic work-shops and of "extended writing" on the web, which imply the use of imagination and sensibility (intermediale imagery and technical creativity) according to the new modalities and characteristics that the digital revolution has afforded them.

## Keywords

imagination, creativity, technique, image, digital revolution, environment

# Black Space, White Space. Transdisciplinary Reflections for a Pedagogy of the Void

## Abstract

Human experience of reality is usually mediated by the perception of fullness. However, the void exists and, since it is overlooked, it leads to an incomplete education. Moving from this reflection, this study will discuss the void as a concrete creative space and its educative essence. Quoting some examples from the arts that have shown the void in its pluripotential, it will problematize the idea of a pedagogy of the void in relation to previous pedagogical studies of Riccardo Massa and Renato Mantegazza. Then, it will frame the pedagogy of the void in the broader theoretical field of aesthetic education, in light of Spivak's considerations on Aesthetic Education (2012) and recent studies on artification.

## Keywords

pedagogy, void, educating space, arts, aesthetic education

# Drawing as a reflective practice in life-long learning

## Abstract

Drawings are a powerful tool for knowledge building and for representing thoughts and emotions during the course of life. Often limited to the world of childhood, drawing is not usually practiced in adult and higher education. This contribution introduces, thematizes and problematizes the use of drawing as a key skill for life-long learning. Drawing activates neurocognitive activities and can be regarded as an educational resource, aimed at observing and understanding oneself, the world and the other. Thus, understood, the experience of drawing can be rediscovered as an arto-graphic memory of an educational world, a communication tool capable of exploring meaning-making processes, capturing flexible and complex dynamics of living systems, power relations, as well as emotional and latent aspects of life-deep learning. This article connects drawings as a research and pedagogical tool with the teacher experience in multi-country projects, showing their capacity to make reflective practice visible in a distance learning scenario. A case example on how to use drawings to reflect on teaching practice will be described. More than 300 participants from an online European course reflected and created a metaphor, drawing a picture about resilience with a brief written explanation. Resilience pictures generated during such as reflective practice made visible connectedness and cooperative teaching at an international level.

## Keywords

drawing, reflective practice, lifelong learning, connectedness, teachers

# Augmented reality as a Thirdspace: Simultaneous experience of the physical and virtual

## Abstract

With the proliferation of devices that display augmented reality (AR), now is the time for scholars and practitioners to evaluate and engage critically with emerging applications of medium. AR mediates the way users see their bodies, hear their environment and engage with places. Applied in various forms, including social media, e-commerce, gaming, enterprise and art, the medium facilitates a hybrid experience of physical and digital spaces. This article employs the tri-alectic model of space from geographer Edward Soja to examine how the user or player in an AR app navigates the two intertwined spaces of physical and digital, experiencing what Soja calls a 'Thirdspace'. The article illustrates the potential for headset-based AR to engender such a Thirdspace through the author's practice-led research project, the installation *Through the Wardrobe*. This installation demonstrates how AR has the potential to radically shift the way that users view and interact with their world with artistic applications providing an opportunity to question assumptions of social norms, identity and uses of physical space.

## Keywords

augmented reality, thirdspace, practice-based research, geography, media studies, human-computer interaction

# Animalizing: Immagination to enhance italian towns

## Abstract

The integration of the animal and human worlds can lead to various symbolic meanings and the present article uses interpretations by various authors to analyse the significance of this fusion. Over time, many artists with great creativity have produced representations of 'fanciful' animals which are still rooted in the collective imagination. In such works, one can identify both beings created by blending different species of animals, for example the hippogriff — half horse, half griffon — or animals and humans, for example, the sphinx — half lion, half woman. 'Spread throughout the ancient world, fanciful animals were also very popular in the Middle Ages, as evidenced in the success of texts in which their physical and symbolic characteristics were analysed, such as *Liber monstrum de diversis generibus*'. This research introduces a new element of innovation: graphical experimentation with this topic in a contemporary key.

## Keywords

immagination, creativity, drawing, murals, medioeval

# Architectural Imaging Design

## Abstract

Contemporary architecture, especially in the field of interior design, has been developing for some years a new way of designing spaces, which from "static" become dynamic, interactive.

The figure of the architect of the image that is being characterized is that of a professional capable of manipulating, in addition to the classic ingredients of the project, the perceptual-emotional elements, through technology, creativity and science.

The challenge is to be able to transform surfaces, from floors to ceilings, into real star-gates that lead users to unusual spaces.

The use of "advanced" materials (thanks to the development of nanotechnologies), will also allow to define fluid spaces physically modeled around man and his needs, without the need to wear visors or aids, with the freedom to move in a natural way.

However, there is little experience in the domestic environment, but given the future of "smart houses", interactive images will be part of the functions related to living, going beyond simple decoration to become a multisensory project capable of making the spaces of the homes of the future ever more virtual, interactive and customizable at 360.

## Keywords

interior media building, interaction design, multisensorial design, cognitive design, emotional design, user centered design, smart house, smart space, media design, interior design, interaction design

# Learning from Scientific Visualisations: Knowledge Exchanges between Science, Design and Art

## Abstract

The pragmatic turn in science clarified the constructive character of scientific exploration: Scientific knowledge is not inherent in reality, it is a social construction. This process is not only dependent on formula or discourse. It also implies pictures and (mental) images. The research project, of which this paper examines and comments first results, tried to document the possible educational influence of design and art on the construction of such images in scientific research. The paper will present selected visual and theoretical results of an interdisciplinary research project developed within an academic context. Contributing also to the emerging field of image studies at the intersection of art, design and sciences, this project involved a team of scientists, a designer, an artists and art and media theorists, and it aimed at assessing the diverse role that visual design and visual arts can play in changing scientists' relationship with their visual production. Knowledge-Image-Learning in our case denotes the process of learning between disciplines (design – art – science) and the role of images in their different practices. The paper will therefore discuss the lab's scientific visualizations co-designed with a designer and an art project developed with the same team of scientists by a visual artist. The data so-far collected, especially during the design part of the project, suggest that, not only the scientists collaboratively produced new, more effective images. During the collaborative process of making, they also acquired awareness of and aesthetic sensitivity towards the technical images they produce.

## Keywords

image-learning, visual arts, scientific visualisations, visual design, knowledge exchange

# Sylva as Anima Mundi

## Animals, maps and outposts as project-related tools in the work of Luis Buñuel

### Abstract

The appearance of a flock of sheep in front of a staircase of honour, in *El Ángel Exterminador* (1962), shows the scenographic parable of the Spanish filmmaker Luis Buñuel, through which to determine tools and methods for interpreting bourgeois domesticity. The auteur's filmography constructs through optical focus points the system of the fin de siècle house, going beyond the Age of Enlightenment and opening – paradoxically – the field of the project and of the representation of space to a superior degree of depth which updates the notion of place and of interior in relation to the wilderness. The space is pervaded by the relationship between men, animals and vegetation, combined with the components of the anima mundi in which the compositional sphere takes place through a-typological sequences within a "dark mass", such as an endlessly dense forest. These are maps for a mock domesticated geography that reveals to be actually wild and uncontrolled. The anisotropy of the interiors, in *Le fantôme de la liberté* (1974), translates the sense of the "formlessness" of spaces into a continuous flow of speaking images without any moral content which, however, can define a field of application of the representation of the uncontrolled in architecture. The article intends to inquire through the relationships between animals, plants, objects and spaces, into the spectrum of dwelling as interpreted by cinematographic tools, into the place in which it is possible to identify the alliance between the biological and the artefact in architecture. These elements allow us to update the various disciplinary positions regarding the space-house, examining methods for traversing it and exploring those systems in which the biological overlaps the architecture, and where the relationship between horizontal and vertical elements, as in

a forest, is continuously questioned.

### Keywords

Buñuel, cinematography, maps, outposts, Sylva

# INSIDE and OUTSIDE SCHEMES. STEREOTYPES and CREATIVITY IN CHILDRENS' IMAGES

## Abstract

This research is aimed at investigating the development of creativity and the divergent thought in the child's drawing, by studying unstructured stimuli contrasting with the mental frames and models of the representation of reality.

When a child begins to draw, he needs a baggage of mental images which enables him to symbolically represent reality on a blank sheet of paper.

These models seem to be necessary not only to learn and draw, but also because they work as instruments of social and cultural belonging to a specific context.

These models, when they become stereotypes, are ambivalent since they appear reassuring but also restrictive, because they limit the creative thought and the imagination.

The educational and school context show - through the adults - the same structured interpretative scheme.

This experimentation intends to create contexts of experience where children can creatively handle their own representations. The purpose of these educational and didactic methods is to make the adult's scaffolding function [Bruner, 1976] capable of promoting and welcoming a different, multiple vision of reality.

This research is based on the investigations that have involved photography, nature and its colours as free expressive tools. The aim is to reveal the state-of-the-art, the analysis and the dialogue with the literature of reference and the research operational proposal.

Experience will lead the vision towards welcoming wonders [Mancino, 2014], errors, contradictions and diversity.

## Keywords

mental representations, thought, symbolic/divergent, stereotypes, creativity, vision, languages

# Museum in Absentia The Staging of the Image

## Abstract

In our epoch, the advent of the digital, following the paradigm of technical reproducibility on which Walter Benjamin reflected, has become an integral part of both traditional and virtual exhibition spaces, significantly modifying the forms of representation, communication and fruition of cultural heritage. Thanks to user-centered strategies, institutions, companies and the many places of knowledge have conveyed through websites and social networks, to meet the renewed needs of consumers. Now more than ever, museums have invested in the transformation of their identity image and in the educational component, configuring themselves as cultural attractors and disseminators at different levels of education and, above all, at the service of a diffusion without geographical boundaries.

The use of ICTs has fostered the search for new forms of learning and a different way of interacting with the contents of knowledge. In particular, the virtual museum aims to transmit culture through the digital image that becomes the synthesis of a visual and textual language, easily accessible to everyone. Following the current pandemic, the present paper aims to reflect on the inevitable metamorphosis of the museum institution, in which the role of the digital image becomes fundamental for the scientific and educational scientific and educational dissemination of culture. The current strategies of edutainment are based on the fact that «the human predisposition to enjoy the very act of looking drives us to be moved» [17, p. 4].

## Keywords

virtual museum, digital image, fruition, dissemination, edutainment

# Ἑστία or Notes on Architectural Heritage Imaging

## Abstract

In last years, the scholars of heritage representation are focusing their studies on advanced digital modelling and visualization technologies, dealing with interdisciplinary lines of research related to history, archaeology, design, etc. In general, the domain of representation relates to the graphic-visual-multimedia expression of tangible reality and of the intangible dimension, from the scale of findings to the architecture, the city, the territory. The most recent lines of study in the field of architectural imaging suggest to combine the "Theory of Models" with the Theories of the "Visual". This correlation is evident in the case of digital models: they are intrinsically constituted by complex data systems, and they have their epiphany through multiple visualizations, and different modalities in the mixed reality continuum. More precisely, they are "meta-models" that really possess the character of "virtuality", not in the sense of de-realization, but as "questionable field" from which images derive according to their capacity to shift their own ontological center of gravity. Furthermore, digital modelling configures the overcoming of the two-dimensionality offering multiple visualizations, in a logic typical of meta-mediums. Aim of the paper is to offer a reflection on how the theory of models and the visual culture suggests useful point of views to study issues of architectural heritage representation in the digital sphere of imaging.

## Keywords

architectural imaging, model theory, graphic sciences, visual culture, computer-based visualization

# From visual studies to interactive design: What about digital aesthetics?

## Abstract

In this paper, we illustrate how digital aesthetics is based on symbolic layering and a system of images and imagery. At the same time, we introduce the fundamental susceptibility to the sensitive in the design environment and how this relates back to a culture of the sensitive visual. We will address more specifically the aesthetics of images and rêverie in Gaston Bachelard and the use of pathosformeln in Aby Warburg's philosophy and art theory. Next, we will attempt to create a relationship between the new interactive techniques of design and somaesthetics and how they represent to date the new worlds of a digital aesthetic. In conclusion, we will try to reiterate the fundamental concept of the sensitive in the digital world.

## Keywords

digital aesthetics, images culture, imaginary, phenomenology, somaesthetics, interaction

# Graphic journalism: Multi-perspective and intersubjective visions

## Seeing, thinking and recognising the other

### Abstract

Graphic journalism through its combination of image and text offers readers of all ages immediate and multi-perspective access and multimodal and transdisciplinary readings.

This contribution considers the use of texts belonging to the tradition of transcultural graphic journalism, which is located at the intersection of cultures and languages, and to authors whose work is driven by the urgency to communicate their own experiences and to foster encounters with the other, enabling the experience of otherness and multiple belonging.

The graphic journalism of the Italian transcultural author Takoua Ben Mohamed offers opportunities to imagine beyond one's own experience, to be involved in processes of expansion of meaning and also in experiences of global citizenship and responsibility in an intersubjective dimension. The word and the image contain a symbolic dimension and lead to a reflection that receives its eidetic form by allowing the collaboration of the language of images and that of words for a meeting of the invisible with the visible in a real laboratory of the senses.

### Keywords

graphic journalism, multiliteracies, global competence, transcultural experiences

# From Art image to video/comic-image learning. The video spot Stay at home

## Abstract

From the Covid-19 health emergency entered our lives, the web continues to alleviate moments of isolation with ironic memes, photos and videos that, despite having been considered an irreverence to the masterpieces of Art and/or one of the many uses of irony to exorcise fear, they have favored the staging of video-graphic products with a strong 'humor' component. Within these premises, in the context of graphic design, this paper will evaluate aspects as the analysis of fashion environment as expressive language of living indoor during Covid-19 pandemic; the audiovisual languages and compositional criteria for the creation and multimedia communication of a video-graphic spot on Stay at home communication campaign. The video-graphic products were analyzed on the basis of: relationship between 'humor' message and supporting artwork; integration between image and photo-cinematography; figurative languages generative of graphic signs; duration of audiovisual spot; sound component as key to emotional reading; communication strategies.

## Keywords

art image, comic image, video spot, multimedia communication, graphics and image processing

# What Images Say / What Users See. Exploring Mobile Augmented Reality for Visual History-Telling of Architectural Heritage

## Abstract

Aim of the paper is the study of the potentialities offered by augmented reality visualizations of 3D models to communicate the history of architectural heritage, also for its valorization. The case study is the Basilica of Collemaggio in L'Aquila (IT). The church was the subject of a stylistic restoration that returned the building to an ideal former medieval appearance. Based on the digital survey of the current church, a 3D model of the baroque structure of the main nave, which no longer exists, is created by studying the graphic and photographic documentation of the period. An augmented reality application is developed at the University of L'Aquila, and used with the aim of visualising the 3D model to tell the story of the Basilica, so that superimposed information can be displayed dynamically and in real time. Young people aged around 20 years were asked to navigate the visualisations and then to answer a form with questions in order to evaluate the effect of computer based visualisations. The answers are analysed, and in particular it can be seen that while there is not a high level of explicit awareness of digital tools and techniques, there is clearly a habit of frequenting digital environments. Visualizations in augmented reality arouse particular interest.

## Keywords

architectural heritage, computer based visualization, mixed reality, visual communication, public history

# Learning by drawing. Learning to drawing

## Abstract

In questo articolo si discuteranno i metodi di apprendimento basati sul disegno, in cui la rappresentazione grafica diventa un'azione capace di favorire il potenziamento dei processi cognitivi alla base della comprensione, della memorizzazione, dell'interpretazione dei contenuti delle differenti discipline di insegnamento nei diversi livelli di istruzione.

La semplice azione del disegnare un contenuto visto, letto o ascoltato consente di attivare una modalità di comunicazione multimodale in cui gli stimoli provenienti dall'occhio, dall'udito, dalla mano e dalla mente si integrano potenziando i processi di apprendimento. La rappresentazione grafica può essere considerata dunque una strategia di apprendimento che influenza il modo di elaborare le informazioni. Per mezzo del disegno lo studente non è più uno consumatore passivo di conoscenza ma viene attivamente coinvolto nel processo cognitivo di selezione, organizzazione delle informazioni da apprendere. Secondo questo modello di apprendimento multimediale, il disegno obbliga ad estrapolare le informazioni rilevanti, ad organizzarle in rappresentazioni mentali verbali e poi a costruire rappresentazioni non verbali integrate con le verbali che le hanno generate. In questo processo di apprendimento l'efficacia dell'uso del disegno sembra legato alle abilità grafiche, intese come le capacità di raggiungere un adeguato livello di precisione di coerenza figurativa con l'oggetto rappresentato.

Tuttavia, all'interno dei curricula formativi dei diversi ordini di istruzione, l'educazione grafica e l'apprendimento del disegno vengono generalmente relegate in spazi monodisciplinari, limitati in termini sia quantitativi che qualitativi. Se nei primi anni dell'istruzione i linguaggi grafici assumono ancora un ruolo centrale nella formazione pluridisci-

plinare e interdisciplinare, all'aumentare del grado di istruzione tale metodologia didattica perde nella scuola la sua centralità e finisce con il diventare una materia di insegnamento autonoma, marginale e autoreferenziale, che pur permettendo lo sviluppo di competenze specialistiche non sembra riuscire a contribuire ai più generali processi di apprendimento, come invece riescono a fare le strategie didattiche basate sul learning by drawing, che questo articolo metterà in luce.

## Keywords

images based learning, drawing, multimodal learning, interdisciplinary learning

# The breath of the Leonardo's Last Supper

## Abstract

The architectural organism has its own and characteristic cyclic behavior, related to its materials and construction characteristics, as well as the seasons and the environment: solar radiation effects and related warming up on architectural structures, is one of the main risk nowadays. The mutation of environmental conditions, which took place in the last Centuries, both in terms of temperatures and of the virulence of atmospheric phenomena, makes compulsive to understand the outcomes of these unprecedented conditions on Cultural Heritage, in terms of "fragility" of ancient structures. Monuments had lost their historical "confidence" with the cyclical nature of their bodies.

It is necessary to change the way to imagining the bodies and the materials of the artworks, and to adopt systems aimed at understanding their physical consistency on time.

Dynamic systems can help us, through the inestimable wealth of historical data series, 3D surveys, ortho-photos and elaborations on time, to understand their "breath" (the response that the monuments are giving to the changes).

The state of The Last Supper is strongly linked to the behavior of the wall that supports it.

In the Cenacolo, datas are processed with numerical simulators to evaluate the trend in the short, medium and long term. We use to correlating the values of forces, deformations, temperatures and also humidity variations. The effects of the various interventions implemented on the structures (such as modifications, insulation) are highlighted by the changes in the behavior of the structural organism. The numerical results are related with the point clouds and compared with simulations on solar radiation in the various periods of the year and times of the day. We are able to interpret the behavior of the structural skeleton and to identify the elements most responsible for the stress on

the wall of the painting itself.

The Last Supper's wall is moving. The data allows us to evaluate the tendencies respect to an equilibrium point or to the deviation from the daily and seasonal cyclic behavior of the structure: we can perceive the movements.

Tensions, efforts, displacements: the difficult "breathing" of the Last Supper is made now tangible. Seeing it (as in a dynamic diagnostic imaging adopted in medicine), helps us to understand the processes and their systemic complexity (and consequences).

It serves to make people aware of the outcomes of their individual and community environmental responsibilities.

## Keywords

visual simulation & modeling learning, cultural analytics learning, climate change hazards, cultural heritages

# All Things Sacred. An Experience in Diversity and Active Citizenship at a Contemporary Art Museum

## Abstract

In 2020-21, the Italian government introduced citizenship education in middle and high school curricula. One of the central subjects of this curriculum is the protection and enhancement of artistic heritage, in coherence with Art. 9 of the Italian Constitution.

The paper analyses a case study concerning the mediation of artistic heritage promoted by Gallery of Sacred Contemporary Art in Milan (GASC) and designed by ABCittà, a collective of social researchers. The project places visual media within the broader framework of cultural diversity education and aims to build up a dynamic, ongoing "library of interpretations" characterized by an interreligious and intercultural approach.

The paper argues that, through the interpretation of contemporary artworks, the museum setting can become one of the main actors in education to active citizenship for adolescents. This work also aims at disseminating a methodology which presupposes intercultural as a part and parcel to image learning in contrast to the more prevalent rhetoric revolving around "inclusiveness" at museums. This strategy is even more relevant when a museum of Catholic art is engaged in questioning stereotypes about the perception of religion, cultural belonging, race, etc.

## Keywords

contemporary art, interpretation, migrant audiences, religious heritage, education to citizenship, adolescents, cultural diversity

# A video-performance as a (professional) mirror. The use of composition in a performative research with Primary School teachers

## **Abstract**

This contribution focuses on the final part of a qualitative, participatory, performative inquiry with Primary School teachers, aimed at investigating the heuristic and transformative potential of the embodied dimension in teaching and learning processes. It will be presented and described the video-performance I've realized during the research process, which was based on data analysis of teacher's embodied, professional narratives. The performative methodology used in my research was connected to my professional background as qualitative researcher (I'm a contemporary dancer and performer) and represented a sensitive way to stay in touch with teacher's professional and personal engagement. The video-performance used an embodied language in order to create a resonant pattern able to deal with relational intensity in teachers' job.

## **Keywords**

performative research, video-performance, potential of aesthetic, primary school, teacher training

# Reimagining Cognitive Visualizations: Designers' Leading Edge & Innovative Power

## Abstract

This paper challenges the assumption that virtual environments must mimic the physical world when studying bias and phobias and presents evidence to support that designers must join psychologists and engineers in developing virtual environments for mental health and wellbeing.

Even when aware of their biases, humans rarely admit them because they can unveil upsetting truths. When investigating discrimination in lab experiments, study participants are aware of being directly observed, which causes them to act in ways contrary to their typical behavior. Cognitive studies have demonstrated that Virtual Reality (VR) can be an ideal tool to study human perceptions in controlled environments where it is challenging to enact that situation in real life.

The study of human behavior through VR simulations is not new to social psychologists. The lack of knowledge of the technological tools and reliance on external firms to create photo-realistic VR environments have delivered less than ideal results. Little attention has been given to VR worlds' design and artistic implications when exploring mental health and wellbeing.

In this paper, case studies on non-photo-realistic representation in VR demonstrate that designers' spatial and visual strategies can facilitate the achievement of the sense of presence and immersion inside immersive simulations for mental health and wellbeing.

## Keywords

design, virtual reality, mental health, perception

# Victimsville. Or how Hedjuk landed in Berlin 2030

## Abstract

In 1984, John Hedjuk presented an application for the Holocaust Memorial of Berlin competition with the name of Victims. A proposal that consisted in 67 structures, with 67 inhabitants in each one, that should be ubicated in the plot by the Berlin citizens.

In 2020, a group of architecture students performed the citizens/structures of Victims in an exercise of future imagination, where this Victim's inhabitants were living in Berlin 2031. This Victims plot performance, was based in the resources and technics used in Dogville film by Lars Von Trier. Welcome to VictimsVille.

This paper is going to explain the pedagogical experience of an architecture course, focusing on the construction of a near and technological future as a tool for thinking and developing architecture in practice. The physical construction of the inhabitants of Victimsville, their needs and the prosthesis necessary to coexist and inhabit the Berlin of 2031, we will review and expand concepts such as cyborg (by Donna Haraway), digitalization, virtual reality, politics of care or the political dimension of citizenship. These inhabitants are developed in the abstract representation of the Victims structures (these small, mobile and symbolic architectural elements that Hedjuk design in his work), with the aim of build the domestic and intimate space of VictimsVille with their body and their actions (or performances).

## Keywords

Hedjuk, VictimsVille, Dogville, architectural performance, future and fiction, critical pedagogy

# Knowledge and appreciation of manga comics in an Italian sample

## Abstract

Starting from the eighties, the market of the Manga comics has developed also in western countries. A number of subcategories of Manga comics exists and several characters, mainly derived from the Japanese culture, could be identified and remembered. Notwithstanding, the role of comics such Manga is scarcely documented in scientific literature, particularly when determining its relevance and diffusion among readers. The present work is aimed at estimating whether and how manga comics are perceived in Italy.

A total of 240 participants in the age range of 16-55 year-old answered to the survey, while 151 of them declared to read and appreciate manga. In the main task, they expressed their degrees of appreciation and identification with a set of manga types and characters, selected among the most representative. Shonen was the most known and appreciated manga type, while, among the characters, Bakedere and LoneWolf were the most known and appreciated, respectively.

The research has shown which manga are known and appreciated by the readership of Manga, crucial information for both cartoonists and the market.

## Keywords

comics, manga, characters, readers, cosplayers, Italy

# From mutilated to complete image. Lacunae in paintings through the eyes of restorers, art historians and ordinary viewers

## Abstract

Lacunae in paintings are disruptive elements that create an 'interference' with the aesthetic quality of the image. Traditionally restoration has tried to overcome this problem in many ways and only in the second half of the nineteenth century did the lacuna achieve the right to show itself as part of the work's historic value. In recent decades restoration, particularly of paintings, has exhibited a new trend, with interventions that erase the lacuna by completely reconstructing the image, often mimetically. The reflections that have arisen around the new trend demonstrate how the aesthetic choices of restoration are conditioned by the pervasiveness and multiplication of 'perfect' digital images, and their easy manipulation. Two experimental investigations focus on the question by testing the aesthetic appreciation and visual exploration of intact and damaged paintings (with lacunae) of three categories of subjects, differentiated in their professional relationship with the art world, but who in any case are involved in restoration choices: restorers, art historians and ordinary viewers. A varied picture emerges that leads to reflection on the current role of the proliferation of digital images for those with specialist knowledge and the enjoyment of the original, of their potential to distance from the physical reality of the artwork. Of the categories tested, the restorer is the one who best knows how to appreciate incomplete works, who is best able to grasp the lacunae as part of the work, of its existence in time and space, and not just the image it conveys.

## Keywords

art history, restoration, painting, images, lacuna, eye-movement

# Knowledge Atlases. Spatial visualisations as (inclusive) learning tools

## Abstract

The western educational systems are still mainly based on three capacity: literacy, numeracy and articulacy. Nevertheless, different studies have demonstrated how impactful is the use of a fourth ability – graphicacy – in helping students and grown up people in understanding, learning and memorising knowledge. The article proposes an interpretation of the concept of map – between graphic-visual language and psychological-cognitive dimension – as a learning tool in the field of education.

## Keywords

graphic literacy, drawing, graphicacy, visual design

# Grasping the Fragility Aspects through Spatial Inequalities mapping. The Case of the Alpine Areas in Lombardy, Italy

## Abstract

The paper will deepen the role of the map as a medium to visualize and recognize the fragility features of the marginal municipalities in Lombardy and included in the Alps Convention. Starting from the definition of marginality suggested by the Strategia Nazionale per le Aree Interne, which considers the access to essential public services as the main indicator, the study will map and analyze further data in order to understand the role tourism could play in the reactivation of inner areas. In particular, the paper will analyze and demographic (populations trends), economic (the average tax revenue and the entrepreneurship index), and tourism data (tourism and tourism-related business, beds capacity and concentration) and develop several cartographic representations (heat maps, bivariate choropleth maps and bubble maps). The graphical outputs should offer a different perspective over mountain lands with which identifying spatial inequalities, and recognizing fragility aspects. The identification of patterns and divergences among municipalities should help learning from data and finally recognizing which areas deserves more attention for the reactivation of the local social, cultural and economic capitals through tourism practices.

## Keywords

map learning, territorial fragilities, spatial inequalities, remote areas, cultural landscape

# Bauhaus-room: design at the service of new didactic applications

## Abstract

More than a hundred years after the birth of the Bauhaus, the design elements conceived by the masters of architecture continue to fascinate and make school through their geometries, their shapes and their colors. The School of Applied Arts, so called during the first years after its birth by an enterprising Walter Gropius, is still considered one of the most influential and significant expressions of the modern movement.

The Research, through the Bauhausian architectural expedient, aims to describe the activities of an educational laboratory set up as part of the Primary Education Science course and carried out at the 'Mediterranean' University of Reggio Calabria, entitled Bauhaus-room. The project aims to educate in spatial and visual perception not only children aged 3 to 10 but also a general public or with 'special needs', specifically the visually impaired and the visually impaired. Starting from preliminary studies on the Bauhausian theory, based on the simplification of shapes, on primitive geometries, on malleable materials and on primary colors, we proceed to shape the furnishing elements with poor and easily available materials such as iron wires, cardboard in different colors, aluminum etc. Bauhaus-style objects come to life in the space of micro-rooms, placed side by side, as if to create an architectural 'perceptive path' through which, in the first place, to seek the craftsmanship of the element, a peculiar characteristic of Bauhaus furnishings, and, secondly, to perceive the intrinsic spatial and compositional essence.

## Keywords

spatial learning, visual modeling learning, narrative learning, visual study

# Illustration and architecture

## Abstract

Illustration has enormous importance in the world of architecture: not only does it allow communication between the workers and the designer, between the architect and the client, but it is also the first real design act.

In these days traditional illustration and drawing undeniably cannot have that precision and punctuality that is required by the technical tables, nor the communicative immediacy of a render. However, it is also true that in the past some illustrations have had even more force and more echo than the projects carried out. Think of the drawings by Sant'Elia, the illustrations by Piranesi, the Brick House by Mies Van Der Rohe. At the same time there are architectures that have been graphically repropounded in thousands of variations, illustrations that not only amplified its fame, but also highlight its ever-changing characteristics. Here we propose, therefore, to analyze some examples that make clear the potential of this means of expression, with particular attention to the posthumous life of the image, to the echo of the architectural image that sometimes exceeds the fame of the building itself, bringing for example the work of some architects, but also of illustrators who with their creations have contributed to making an architecture immortal.

## Keywords

illustration, architecture, visual studies

# The design of product's packaging: different perception from different perspectives

## Abstract

In marketing, the need to make products' packages as much attractive as possible is generally acknowledged as one of the leading assets. However, art designers also aim to surprise people and often break previous assumptions. In 2020, Kunel Gaur has produced a series of "dystopian" images of globally famous brands, by following the principles of minimal design. Although the images clearly contrasted biological principles, they obtained positive to enthusiastic comments from other designers. The present work is aimed at evaluating whether designers' judgement is congruent to other people's perception. Participants were recruited among students in three university faculties to represent these perspectives: designers, marketers and common customers. They evaluated 50 images produced by the artist. The results showed that designers were more likely to prefer the innovative design, while the other two groups appreciated the traditional packaging. Education in a certain domain emerged as significant effect for design skills only, indicating that this skill depends on learning, while both people's preference and field of study may be influenced by common personal factors, not dependent on learning. Although these findings cannot be generalized, they show that the perception of innovative product packaging in designers is different from other perspectives.

## Keywords

graphic packaging, perception, design, marketing, customers

# This Person Does Not Exist. Representation Theories and Practices of a Desired Face

## Abstract

The human body digitization and reconfiguration processes, in recent years, have been conditioned by imaging tools assisted by advanced algorithms of formal manipulation of images, interesting different disciplinary areas in disseminating disembodied aesthetic canons that are confronted with the expectations of those who want to impersonate them.

If the posthuman now seems to have completed its progress, the transhuman is the promoter of a utopian policy of overcoming physical and cognitive wear, the metahuman instead is the protagonist an alter ego of the self, mediated by a seductive and perfectible virtual body with whom he communicates and relates with others.

The investigation objects are precisely today's design practices and construction of credible humanity models that focus on the representation of completely non-existent faces, created by sophisticated algorithms of images generative reproduction, or by the construction of hyper-realistic and animated 3D avatars and by the increasingly pervasive introduction of photographic manipulation filters designated to social networks.

All of this shows how the ease of use of the available tools allows users to experiment the essence of a desired face, or to record its aesthetics mirrored by the verisimilitude of a standard designed by most. In general, however, the photorealism of the results invites reflection on the power of the image and its ability to direct the proprioceptive remodulation of the self.

In the problematic definition of "being", the essay traces those digital forms of appearance that substantiate it, leading them back to the labile memory of a synthetic portrait.

## Keywords

metahuman, posthuman, transhuman, 3d avatar, GAN

# Using virtual reality as a tool to research, analyze and learn: the competition for Palazzo del Littorio in Rome

## Abstract

Due to the current global situation, the existing model of accessibility to cultural heritage is facing a crisis. Over the last year, security measures to restrain the pandemic led to travel restrictions that greatly decreased the influx to places dedicated to arts and knowledge. However, even though reality seems to slow down under the pressure of those constraints, the need of accessibility to culture and information keeps on encouraging the research for a new usability paradigm, accelerating its transformation through computerized communication. The use of virtual reality could be an alternative tool to learn and interact with historical and artistic heritage, much like the complete digital archives and virtual tours that an increasingly higher number of museums and places of interest are now providing. By developing a virtual reality model of Giuseppe Terragni's unbuilt project for Palazzo del Littorio (Rome, 1934), it is possible to have an inside perspective of what Via dei Fori Imperiali would have looked like had this architecture been built. This innovative and immersive initiative could make it possible for anyone to experience the spaces recreated by this virtual representation of Terragni's vision, an opportunity that would not be attainable otherwise.

## Keywords

virtual reality, cultural heritage, Terragni, Palazzo del Littorio, Rome, virtual tour

# The power of the image in the comics culture. Two examples applied to architectural themes

## Abstract

Three references for research: McCay (1905), the first draftsman to introduce real-world architecture into the "bande dessinée" McLuhan (1977), in "Understanding media" defines the centrality of art in the influence of contemporary aesthetics; McCloud (1993), in "Understanding comics" gives us the definition of what for him is the art of comics: "images and other figures juxtaposed in a deliberate sequence, with the aim of communicating information and / or producing an aesthetic reaction in the reader".

On comics, defined in 1964 by the critic Claude Beylie as the ninth form of art, interpretative scenarios and scientific investigation have opened up related to the fields of semiotics and philosophy of language, leading to a redefinition of the means of mass communication, according to an "intellectual" dimension of the medium. Umberto Eco himself introduced in the 60s the study of this new form of art within university contexts, testifying, if needed, its cultural importance.

The essay will therefore deal with two graphic and thematic experiments developed within the courses of Multimedia Representation of Architecture, demonstrating the adaptability of the ninth art to the different disciplinary areas proposed. On the one hand, the comic language is used to understand the constructive, technological and ergonomic aspects of the "tiny houses", small prefabricated houses on wheels (Agostino Urso). On the other hand, comics are used for a historiographical and stratigraphic reading of both the city and the architecture of Reggio Calabria at the turn of the 1908 earthquake (Francesco De Lorenzo).

## Keywords

graphic image learning, comic, architecture, tiny house, cultural heritage

# Images of property market analysis in a GIS environment. The exploration of a Unesco site

## Abstract

The pervasiveness of image-based communication has always characterised the type of language: effective, incisive and capable of conveying messages and information in a short time. Among the various forms of representation, maps are a tool that divulges innumerable data that can always be integrated and implemented. The development and intuitive operation of new computer systems allow for the visualisation, consultation and interaction with cartographic representation platforms, through a rapid increase in fields of application through cartography, i.e. towards new communication and explanatory potential.

The paper presents an analysis of the real estate market in the urbanised context of the Portuguese city of Sintra. Recognised in 1995 as a UNESCO World Heritage Site, Sintra is one of the most attractive tourist centres in the country due to its climatic conditions and the presence of fascinating historical buildings. The study was carried out with the aid of a GIS (Geo-graphic Information System) platform: a useful tool for visualising and analysing a considerable amount of geographical data. The maps, produced with such a technology, represent an accurate process of collection, analysis and knowledge of data that characterise the Site, influencing its real estate market. These documents can support any user or non-expert user of the local market in identifying, within the urban fabric of the city, information based on their own preferences.

A prolonged application of this survey method over time makes it possible to identify changes in the real estate market, with the possibility of correlating such data with any phenomenon or aspect of the territory through digital graphic images.

## Keywords

cultural heritage, maps, housing market, images, GIS

# Educating spaces and hybrid images. Learning strategies in school buildings on the Kenyan coast

## Abstract

On the Kenyan coast, many school buildings are characterized by the presence of murals, made with the aim of transmitting messages with strong educational value. These images have an energetic communicative power, inserted in the space intended as a third educator. In these paintings we are witnessing a curious use of elements of Euro-American culture, which are transformed, introjected or rejected according to specific needs.

In school spaces so densely populated by images that children can recognize, creative projects have been developed aimed at experimenting expressive and participatory dynamics through the use of colors. Through courses co-designed with the teachers, the laboratory logics have gradually generated a new interpretation of the existing visual heritage, giving voice to elements of originality and interaction.

The dual purpose of this paper is therefore: to understand how symbols and themes of Western culture are used in the images created to educate in Kenya in combination with local and traditional elements; to analyze how, in a context strongly solicited by images, the created workshop path has promoted shared logics according to the new primary school curriculum in Kenya (CBC - Competence Based Curriculum). Through the main axes of postcolonial studies and intercultural pedagogy, we intend to highlight perspectives of dialogue, resistance and concerns about the use of images in learning processes.

## Keywords

educating images, third educator, visual turn, postcolonial studies, intercultural education

# Thinking and Design Through Analogical Image Knowledge, Visual Simulation and Modeling Learning: the Uncanny Space of the Hall

## Abstract

The didactic and research activity carried out by the authors, within the Design Laboratories of Politecnico di Milano, allowed them to experiment methods of interdisciplinary collaboration - between architectural composition and digital modeling - oriented to an understanding of syntactic, spatial and constructive values of hall architectures, and aimed at the project as the outcome of the collective research work. Architectural images can be analyzed in an interdisciplinary way to understand their meanings, and conversely, the process of image construction can be another means of translating and representing the meaning of architecture. During the design process, the imagination uses analogical references that nourish the tension for the meaning of form. In this context, the latest-generation technologies and methods such as eXtended reality (XR) and digital modelling have allowed users to expand the level of interactivity and architectural-spatial awareness. The informative value has been expressed through the targeted use of images and virtual environments to increase interaction between user and space, leading to forming virtual-visual storytelling of the project. This paper explores the value of the results of a working method, the cognitive possibilities opened by the interdisciplinary project and its relationship with images, first as a source and then as an expression of knowledge, in order to understand the strengths and innovativeness of this approach.

## Keywords

architectural design and composition, typology, analogy and imagination, spatial images learning, visual simulation & modeling learning, building information modelling (BIM), extended reality (XR)

# La Casa de los Toros de Barcelona When architecture, photography and cultural life are synthesized in a work of art

## Abstract

The commitment of the architect Antoni de Moragas (1913-1985) to image and design in 20th century Barcelona is extensive: founder and president of the Asociación del Diseño Industrial, co-founder of Grupo R, dean of the College of Architects, member of the Board of Museums, president of the Fomento de las Artes Decorativas, FAD, from 1968 until his death, etc. His work contributed to the renovation of Catalan architecture by synthesizing the new forms of European modernity with the autochthonous building traditions through a singular, unique and expressive use of materials. For his part, Català-Roca [1922-1998] is the greatest reference of Spanish urban and documentary photography of the 20th century and the best known internationally. A great connoisseur of the Catalan avant-garde movements, he was an active part of the cultural life, contributing to fix in the memory of the Spaniards, the customs and characters of the society of his time. The visual and creative strength of both are intertwined, in an unusual way, in the building known as "La Casa de los Toros" in Barcelona [1960-1962], in which the proximity to the famous Plaza Monumental and the desire to singularize each house converge in a compositional and illustrative synthesis of the facade through the incorporation of extensive photographs with a sequence of bullfighting themes: living and moving images that transmit the cultural atmosphere of an era and are shown on an architecture that remains structured, rational and expressive.

## Keywords

Antoni de Moragas, Català-Roca, Casa de los Toros, photography & architecture, Barcelona

# Decay buildings and their impact on urban regeneration through art: a case study in Taiwan

## Abstract

The functional obsolescence of buildings as a result of the urban transformation processes leaves behind abandoned infrastructures that are rarely reuse but are more often demolished, eradicating all vestiges of their existence in the process. Thus, by the exploration of artistic proposals such as the one made in the Qiáoyú building in Taichung, Taiwan, the present research aims through the photographic experiment technique to understand the aesthetic and perceptual qualities that can give meaning to decay buildings showing its impact on urban regeneration once its space is interviewed through adaptive re-used. To this purpose, it will be explored more specifically in educational research based on photography and whose results will allow to identify those elements that have served as guiding axes for its proposal, reuse and at the same time, explore the way in which the inhabitants have been organized and have given meaning to their neighborhood, all this through the use of the photographic image as a research method.

## Keywords

arts-based educational research, educational photography, visual analysis, adaptive reuse, decay buildings

## Hervé Morvan, artist and poet of the “optique de la rue”

### Abstract

After the dark years of German occupation, a new generation of poster artists emerged in France. Although advertising was not yet a marketing tool, these authors proposed a new, original graphic language, with innovative principles of commercial communication: very colorful, lively posters, pervaded by a subtle humor, the “visual gags”. The streets are the galleries where to exhibit; the poster is the medium, the viewer the target to hit.

Among this new generation, the artists who emerge are definitely Bernard Villemot, Raymond Savignac and Hervé Morvan. Between 1947 and 1951, the first two occupied the same studio, although their graphic language differed considerably.

Morvan establishes himself after a long apprenticeship. Born in Brittany in 1917, Hervé moves with his family to Paris where he attends the “Ecole des Arts Appliqués”, graduating in 1934 as a decorator, painter of murals and stained glass. At first he worked in film advertising (the large billboards that advertised films) before producing, after 1942, his first posters. After the war he worked for important companies such as Perrier, Savora, Panzani; but the commercial poster that made him known to the general public was that of 1948 for the underwear “Scandale”, presented at the Exhibition of the Fair of Lyon. His amusing style in advertising products through a drawn gag, is quickly successful; from Gitanes tobacco to Grutli beer, from Primagaz to Geveor wine, from Bendix electrical appliances to Gévéor wine, and again Bally, Petit-Bateau, Mazda, up to Alsacienne and Banania cookies, Kwatta and Lanvin chocolate, etc. Morvan composes “street paintings”, with bright colors and simple, but extremely effective, drawings, which also represent an extraordinary repertoire of “visual gags”.

For his posters, Morvan is inspired by the light-hearted, playful, reassuring naivety of children; Morvan’s graphic repertoire is

populated by friendly characters and smiling animals, such as Lanvin’s wolf who, instead of biting Little Red Riding Hood, happily bites into a chocolate bar!

### Keywords

affiches, french graphics, poster design, advertising, Hervé Morvan

# Archaeological documentation from Drone. The theatre of Locri Epizefiri

## Abstract

The research investigates the possibility of applying aerial photographic acquisitions from UAS to the documentation of archaeological sites. Starting from the analysis of the state of art on aerial acquisition techniques, the study describes the operations of photographic acquisition from UAS, the management and data processing phase for the archaeological documentation. Case study is the archaeological area of Locri Epizefiri, an ancient city of Magna Graecia founded on the Ionian Sea in the 7th century BC by the Greeks from Locride. One of the most prestigious public buildings on site, and the subject of the analyzes described, is the Greek-Roman theatre. A fundamental step for the research was to define an accurate photographic project and flight path to allow the correct and complete representation of the archaeological site as well as the georeferencing by GPS. The operations for survey, in addition to producing drawings representing the archaeological site, offer a basis for the documentation and investigation of the archaeological area, such as geometric proportional, stylistic, and diachronic analysis on the main building phases. Historical research and image-based survey merge to broaden knowledge and promote the communication of little-known archaeological sites.

## Keywords

aerial photogrammetry, UAS, Locri Epizefiri, archaeological survey, image-based modeling

# Image and Choreography. Transmitting to replicate, transferring to create

## Abstract

Video is currently the most widespread form of transmission of body and dance practices among the general population, especially young people and adolescents. Social networks such as YouTube, Instagram, Dubsmash and TikTok have popularised the use of short choreography tutorials that reinforce a reproductive and repetitive model. Unlike the vision applied to the transmission of movement by the massive model of the networks, contemporary creation privileges the research of manifold ways of communicating gesture. It happens by multiplying the possibilities of image and choreographic language. Although the choreographic notation is traditionally associated with the transmission and preservation of artwork, both historical and current modalities cannot be limited to a single intention. Just as the complexity of the choreographic event cannot be captured in a single language, be it visual or textual. In this paper we will apply a comparative methodology, using images taken from productions of both styles: imitation-based and exploration-based performances. Finally, three choreographic-creation workshops based on image generation are analysed as practical proposals for educating the gesture and the gaze.

## Keywords

choreographic notation, visual based research methods, movement visualization, images based education, dance education

# The new frontier of images NFTs. The digitalization of the image in the art world

## Abstract

The article analyzes how the concept of visual representation is undergoing a sudden transformation towards 'digitalization', where virtual images understood as unique and non-replicable goods surpass the world of 'physical' works, through a complex rise of the virtualisation of the artistic world. The creation of static and dynamic 'digital' visual content begins to merge with the common physical art market, with the creation of non-fungible virtual content. The evolution of a phenomenon that in recent years is changing the market of art and the concept of visual communication, contents developed through purely digital tools become the added value that ensures their definition of 'work of art'. The use of graphic programs that from simple information switches become art tools: the keyboard and the mouse become elements capable of representing unique works able to transmit real information and emotions through a purely digital art. The real limit that presents itself is how to make a work truly beyond application in the digital world. A limit now exceeded through the modern technology of the 'blockchain', a new open digital network, able to trace in a unique and defined the identity of a content and its creator-gital. Like the signature of an artist that makes a canvas exclusive, digital identity allows you to generate unique images in any extension. The article also illustrates how the evolution of a new market is creating new ways of exposing and transferring digital works, virtual places capable of hosting works and collections visible in the ether.

## Keywords

graphic images, NFTs, digitization, blockchain

# Educational power of images. Visual narrativity and iconicity in scientific dissemination

## Abstract

Since the age of Enlightenment and its goal of making knowledge accessible to everyone, thanks to that paramount work of dissemination represented by the Encyclopédie, the use of images as a means of education and transmission of knowledge has been established which, over time, it has been extensively explored and improved. With Positivism and the affirmation of the taxonomic principle as an ordering element within the various branches of knowledge, the latter have progressively developed their own iconographic codes, which are still the ones characterizing the visual communication language in their respective knowledge spreading tools, from anatomy atlases and natural sciences treatises to architectural manuals and technical handbooks. In fact, the visual language, in its different scales of iconicity, is helpful and influential in conveying, explaining and make understandable complex concepts and processes, contextualise them culturally, historically and temporally and make relations and connections visible, both in quantitative and qualitative terms to wide audiences. Furthermore pictures – real, realistic as well as abstract or hypothetical – have been at the basis of many inventions and discoveries and play a fundamental role in conceiving, conceptualising and coding the scientific discourse. The paper proposes, discusses and illustrates the narrative power of images in knowledge dissemination in engaging the public at educational and lifelong learning level.

## Keywords

visual language, narrative images, images in education, scientific dissemination, infographic and data visualization

# Learning by representing Architectural drawing between visual simulations and graphic abstractions

## Abstract

The paper presents the results of an approach, between research and education, applied in the last two years within the framework of the course of Techniques of Representation, and explores specifically the implementation of graphic synthesis through visual creativity, ranging from the analysis of architecture to its representation and the definition of a "logo".

In addition to the more conventional steps related to representation, the process involved a further level of synthesis that required capturing and representing the essence of a series of renowned Modernist architectures in the United States. This synthesis, in addition to stimulating the crucial exercise of analyzing the images and drawings found through the research phase, required an in-depth study of the great masters of Modern architecture, the cultural context and the compositional principles that generated those architectures.

The contribution explores the diagrammatic dimension and the methods of graphitization, in the form of logos, of the conceptual features of each architecture analyzed, more than forty examples of graphic-conceptual representations that combine architectural analysis through images with graphic synthesis to which the "concepts" underlying Modernist architecture can be referred.

A real process of "learning through images", which become the basis for the achievement of knowledge and critical awareness in architectural representation.

## Keywords

graphic images learning, representation, diagrammatic drawing, visual simulation, modeling

# The image of sacred space in Desiderius Lenz's drawings

## The aesthetics of the rule

### Abstract

Desiderius Lenz (1832–1928), painter, architect and sculptor, was in 1868 the theoretical founder of the Beuron school of art. We study his thoughts thanks to some posthumous publications collected by his collaborators. Reading his texts, we immediately discover a continuous search for the archetype as a canon to refer to the realization of sacred and religious art. The image becomes a vehicle for researching the ideal of beauty, used by Desiderius to represent a sacred iconography and design geometrically and spatially perfect spaces. The study of his critics and the consultation of archival drawings kept at the Beuron abbey reveal the personality of a restless and curious monk, ready to challenge art according to the logic of proportion and aesthetics. The Beuron School of Art was hosted by the Viennese Secession and came to influence artists such as Picasso and Verkade. It has produced artistic works and design studies full of interesting reflections in the field of art and beauty, interpreted as transcendental.

### Keywords

Desiderius Lenz, Beuron School, image, aesthetics, geometry

# Lidar Sensor for the Enhancement of the Architectural Heritage

## Abstract

During the last decade, digital survey methodologies and techniques have reached a considerable level of precision, remaining restricted to a professional and not very economical context. At the same time, similar technologies characterized by high portability and much more accessible costs are emerging. Apple, in collaboration with Lumentum, has equipped its new devices (iPhone 12 Pro Max and iPad Pro) with a Lidar (Light Detection and Ranging) sensor capable of performing 3D scans of the surrounding space, similar to laser scans at time of flight, fast and progressive in real time, improving the RGB-D technology once developed for Kinect (which uses depth Maps) thanks to the new sensors provided. The aim of the research coincides with the experimentation of this kind of technology in the field of cultural Heritage valorization through such low cost expeditive procedures. The proposed case studies concern the survey of an aedicule to the left of the main altar of the church of Santa Maria ad Cryptas in Fossa (AQ) in Abruzzo, an artefact which has also been the subject of a recent laser scanning survey by means of BLK 360 by LEICA GEOSYSTEM, and the survey of the Alviani Tunnel, a permanent work of contemporary art housed in the EX-Aurum in Pescara. The integrated survey operations are linked to subsequent cognitive investigations on methods and precision of low-cost survey, by means of comparisons and methodological insights and then proceed to the export workflow of the point cloud and to the optimization of the mesh in function of a transfer on exploratory virtual platforms.

## Keywords

Lidar sensor, low-cost survey, laser scanner, retopology, real time rendering

# Survey and lighting retrofit as instrument of knowledge and valorisation: the Casa de Vacas

## Abstract

The discipline of survey and representation are research instrument which play a key role for architecture with significant historical value. This research presents the surveys performed between 2019 and 2020 at Retiro Park in Madrid (Spain). The surveys were focused on the Casa de Vacas, one of the architectures located in the Park. The Casa de Vacas is located to the north of the Park and was built in 1874. Its name comes from the original function of preserving fresh milk. Over the years, its function has changed and, nowadays, the Casa de Vacas is an exhibition hall for events. The different stages of the building history during the Spanish monarchy and its construction were investigated through detailed archival research. By means of direct and instrumental methods surveys, two-dimensional and three-dimensional images have been realized to emphasize the architecture morphological aspects, the decorative elements of the façades and the relationship with the surrounding landscape. These images allow to transmit the intrinsic values of the analysed artifact, becoming an important instrument to show its current state. In addition, the survey showed that the Casa Vacas is poorly valued in the evening hours. Therefore, this research proposes a lighting retrofit design to enhance the cultural heritage and improve its fruition. Different lighting design scenarios have been developed and rendered by using a lighting design software. The comparison among the scenarios has allowed to identify the best solution to meet the lighting needs and the integration with the surrounding context.

## Keywords

retiro park, photogrammetry, survey, lighting retrofit, DIALux

## A partire dalla O di Giotto

### Abstract

In many nursery schools, paying careful attention to the images observed and produced by children is an integral component of educational design. Images are used to foster a mindful, active gaze, as well as in laboratory work, experimentation, and personal and group production. In this paper, we investigate the selection of artists that educators conventionally present to children, based on the results of a survey conducted with student teachers in primary education. The research findings suggest the need to include lesser-known artists in this selection, especially contemporary ones, and to tailor choices to context-specific educational needs. By way of example, we describe a project implemented with a mixed-age nursery school class, showing that, even when images appear readily accessible to interpretation, competent guidance is required to exploit their potential as a stimulus and source of discovery. In the present case study, after the teachers and children had formulated an initial research question on the theme of Giotto's "O", they were provided with input on artists and techniques that matched specific learning objectives. During their exploratory action, the children interpreted and presented their main discoveries, both individually and collectively. The documentation produced by the teachers allows us to analyze both the educational action and the children's learning trajectories. The project also impacted on the children's everyday experience and stimulated the production of new artifacts.

### Keywords

gaze, artistic production, experimentation, education, children

# That (interrupted) refined ludus Imagination and architecture in the reality of fragments

## Abstract

The various fragments that Poliphilus encounters in his *Hypnerotomachia*, represented in one of the engravings of the initiatory journey that the lover undertakes in search of his beloved, are a strong allusion to the value of the image as a signifier and as a synthesis of a real experience capable of referring to other references. The "ruinous" environment, the headless bust, the entablatures, are all signs that clearly represent the value of the image as a medium capable of translating the fundamental sense of experience into "vision", in this case rewritten in a double dream itinerary. Therefore, as a medium, the image is also a *speculum*, a reflection and translation of individual phenomenological bases and unexplored possibilities. It is a physical and metaphysical threshold between reality and imagination, even between the new and the ancient in the case of Poliphilus. Considering, therefore, the anchoring of the representation of a certain reality to its interpretation, the theme that the text wants to investigate is precisely that contemporary value of the image as a constructive means that lies between experience and imagination. Within this reflection we also want to understand the possible drift of the "products" of the imagination, in which the homologation and flattening of signs is now a contemporary reality. In this sense, the contribution wants to interpret the specific role of the image of architecture that, as in the case of the Renaissance text mentioned above, is sometimes figured as a subtle and sought after *ludus* (the result of a continuous itinerarium in a space imagined on the foundations of experience), but at the same time "interrupted" by the weakening of the latter. The fragmentary nature of the episodes and images, therefore, should

seek new meanings through "an exercise on memory".

## Keywords

fragment, image, imagination, drawing, architecture, ludus

# Verbal Space and Visual Space between Reality and Imagination

## Abstract

The essay addresses the problem of the conditions and limits of translatability of verbal expression into graphics, through the use of literary passages by different authors concerning the imagined and/or physical space. The mimesis in representation and the semantic values of languages are the central topic and the attention is focused on the literary descriptions of architecture, the city and the landscape found in the novels and essays of our time: for example Jorge Luis Borges, Iosif Brodskij, Italo Calvino, John M. Hull, Franz Kafka, Marcel Proust, Massimo Scolari, Giuseppe Tomasi di Lampedusa. In fiction, the written 'illustrations' of houses or urban and territorial contexts are uncountable. Words have the power to evoke the real world, to establish associations between the complexity of forms and the ways of their representation, to anticipate and direct the use of both the expressive power of images and the codified tools of drawing: just think of the way in which Aldo Sestini links the cartographic drawing to the textual description. The research develops the production of graphic representations conducted with figurative and/or abstract codes starting from mental images evoked by written narratives: from illustrations by Édouard Riou for Jules Verne's novels to Karina Puente's works on Italo Calvino's *Invisible Cities*. The goal is to focus on the constraints and potential inherent in the work of translating texts into figures, also to verify the increase in the effectiveness of the message generated by the mutual influence between the word and the sign.

## Keywords

graphic techniques, literature, mimesis, representation, space

# Design for graphicacy: the case of Glocal Climate Change

## Abstract

On 26 May 2020, the European Union Council members agree on the central role that media literacy covers in the European population skillset. Among the various forms that make up media literacy, we also find graphicacy (Bhargava R. et al., 2015), defined as the ability to understand and present graphic-visual information such as sketches, photographs, diagrams, maps, plans, tables, graphs and other non-textual formats. A form of literacy necessary -if not fundamental - in the increasingly datafied western society (Van Es, & Schäfer, 2017), which increasingly relies on visual data mediated communication and information.

Indeed, new forms of information emerged, such as data and visual journalism, for instance (Bonegru, & Gray, 2021). These rely on analysing a vast amount of data and their visualisations to narrate today's complexity to a broader and more heterogeneous audience. Some of these projects also tend to enhance the graphicacy of readers, enabling them to understand better the charts that they feature, thus moving beyond their primary function of narrating the phenomenon dealt with.

In this context, the present paper presents and discusses a case of interest, designed by the author, which contribute to the ongoing research on data journalism from a design and visual storytelling perspective. It is a further and emerging form, hitherto little researched, and necessary, especially to tell and understand complex and global phenomena, such as climate change (Prasad, 2019).

## Keywords

data visualisation, data storytelling, data journalism, graphicacy, climate change

# The development of images in Mass Choreography. From manual notation to computerised notation

## Abstract

The aim of this paper is to produce a review of the change of the choreographic notation that has taken place over the Olympic Ceremonies.

From 1896 to 1992 the notation was done by hand, and it was only from Atlanta '96 that a design programme, Adobe Illustrator, began to be used to draw maps. This gave rise to the role of the chartist, which is closely linked to that of the choreographer, and is often fulfilled by the choreographer himself.

A choreographic organisation involving 200 to 500 people has behind it a preparation that goes beyond the creative project alone. The procedure is complex and it is necessary to use a notation system for choreographic design that not only allows the project to be transformed into movement, but also allows it to be taught to all performers and understood by all those who work to disseminate its images.

The quest for ever more spectacular images has always been supported by the new technologies available in each historical period.

## Keywords

spatial images learning, mass choreography, olympic ceremony, methods of notation, visual studies

# Image as a vehicle of cultural expression between education and society. Experiencing an artistic-visual workshop for young adults between upper secondary education and university of teacher education in teaching at primary level in Italian-speaking Switzerland

## Abstract

In February 2021, at the Department of Education and Learning of SUPSI (DFA), an intensive block week of graphic, pictorial and plastic artistic research involved 16 young adults aged 20 to 25; their acquisition of visual competence is a function of their access to Teacher training programme for generalist teachers (pre-primary and primary schools levels in the Canton of Ticino).

The iconographic contextualisation that introduced the work, dedicated to Picasso's *Guernica*, had the objective – in the wake of the theme “Art and War” – of grasping the potential of the work to arouse not only emotional reactions (to provoke feelings), but also generative on a cognitive level (to develop reflective and critical thinking, creative thinking) and representational (strategies of figurative-abstract expression on the two-dimensional surface or in three dimensions).

Framed within an annual training course, the project was developed by two lecturers of artistic subjects, who have been active for years in the initial and continuing education of adults for the school system of the Italian-speaking Canton of Switzerland. The opportunity was taken from the perspective of Research-Training, to verify the status of the image in the transition between upper secondary and university of teacher education. The research approach is based on the resources (knowledge, skills and attitudes) referred to in Key competence 8 for lifelong learning, Cultural awareness and expression competence (European Council Recommen-

ation of 22 May 2018 on key competences for lifelong learning).

## Keywords

visual expression in two- and three-dimensional forms, contemporary art, european cultural awareness and expression competence, research-training

# Drawing COVID-19

## The viral image

### Abstract

The Prime Ministerial Decree of 9 March 2020 has caused the spread of social campaigns (#corona-virus, #iorestoacasa), whose 'pandemic' effect has influenced the collective imagination more than the COVID-19 virus which, spread all over the world, has changed everyone's life globally. In a hyper-technological era, this microscopic virus has shown that even evolved communities are fragile, questioning many false certainties. The society of the global image has reacted and, as a symbolic language, has responded with countless forms of visual and multimedia communication (magazines covers, cartoons, comics, video clips) to spread new messages on social networks or television channels: to stay home, to renounce social life, to use quarantine to rediscover forgotten activities.

This contribution examines the topic from a social and graphic point of view, analyzing contexts and languages such as: the proliferation of photographic images of deserted cities, which have portrayed the same places with different eyes and effects; the manipulation of the iconic and/or rhetorical force of artistic masterpieces or cinematographic titles, reinterpreted according to inspirations due to Coronavirus psychosis, or of well-known advertising brands to obtain ironic puns with an equally 'viral' effect; the redesign of the logos of famous multinationals in the name of the rule of social distancing; the creation of video clips to analyze, through the now usual video call screen, problems and typical behavior of the quarantine. The goal is to confirm how quickly the communication of the visual image on social channels was a favorable condition for learning the rules and behaviors to observe during the pandemic.

### Keywords

graphic images learning, images and society learning, visual studies

# From head to toe: an “exquisite” hopscotch as learning and research through drawing

## Abstract

Hopscotch is a popular game found in quite a few countries around the world. It is sometimes called by another name, and there may be slight variations in design and rules. In general terms, it consists of drawing on the ground a grid of squares on which children hop by pushing a stone with the foot so that it changes squares.

In this paper, an artistic action is presented as an educational investigation through artistic practice, articulated through the experience of the game of hopscotch. The objective of the research is to design a game prototype applicable both to childhood learning and to socio-educational research and intervention through art.

Pilot experiences have been carried out in artistic actions of social action. These actions usually consist of a collective artistic intervention, in which the summoned public participates based on the proposal. Like an exquisite corpse, the result, at times, is an intercultural composition. We start from the results of these experiences as an empirical foundation, and also from the theoretical foundation that connects the aesthetic environment with the playful context. The activities that are being worked on are the design of the rules of the game and the graphic design of its composition. The three authors collaborate in all the activity, there is no division of tasks. The contents of the game include the learning of drawing plus a field of knowledge of another discipline.

In the full text we will present a development of the theoretical foundation on the anthro-

pological articulation of drawing and learning through a popular game. We will continue with the description of the research process for the design of a prototype or model, and we will end with the presentation of said model as a result, as well as some of the evidence of its application.

## Keywords

drawing learning, intercultural images, Hopscotch, Rayuela, playful learning, La Maga

# Interpretive Communities: When collaborative writing meets metaphor-based object design

## Abstract

Based on the concept of 'interpretive community', it is possible to trace how humans can become interpreters (or decoders) of their own reality through, say, written excerpts and architectural works. This paper is intended, therefore, to report on an interpretive-community workshop where students of three different disciplines (namely, Architecture, Sociology and English Studies) were assigned specific chapters of literary works with the goal of making a collective interpretation through a process of rewriting and restoring architecture. These projects allow students (or any participant, in fact) in their recognition of salient concepts that are not necessarily ascribed to a specific domain; for instance, the understanding of architecture not solely as a construction process, but as a mechanism intended to protect traces of life that are naturally perceived through narration and the use of metaphors.

## Keywords

metaphor-based objects, interpretive communities, collaborative rewriting

# Images in motion: perceptive codes for shared space

## Abstract

Space is a collection of image fragments that manifest themselves as an association of multiple images. The set of visible traces of living is a writing of the space that denotes its configuration.

When a foreigner takes over an already inhabited space, he modifies this writing forcing its reorganization. We are witnessing the modification of the ways of living that bring about a change in the configuration of the space.

This work deals with the theme of visual perception in forcibly shared spaces in order to analyze new forms of occupation of the living space. In particular, we want to investigate how the ways and elements of emergency living rewrite the living space and create ever-changing images. Representing space through images means interpreting and decoding complex forms of spatial configurations in a repertoire of possible changing events.

The images that express space, of inclusion or exclusion, become the main tool of knowledge and transmit a series of decoded information that allows a new writing for shared spaces.

## Keywords

visual communication, image of spaces, visual code, design for emergencies, landscape in emergency

# Students' eyes like reality-based sceneries in e-learning

## Abstract

E-Learning has shown to be an important resource, particularly in recent times due to the limitations in the Sars-CoV-2 pandemic. Several ways to deliver lessons through the Internet were used but both instructors and students complained about visual outputs. An evaluation of the most proficient techniques to create video-based lessons is highly relevant and critical.

Seventy-eight students participated to 30 hours of university online courses delivered through MS Teams, in which OBS (Open Broadcaster Software) Studio was used to create the lessons. The software allowed merging: a) MS Powerpoint slides, b) the instructor through a webcam, c) pictures of background sceneries. After the end of the courses, students filled in a questionnaire evaluating pictures taken from different e-learning sceneries. The OBS-based situation reported the best evaluation in all measures (fruition, attention keeping and promotion of learning) and the highest rank when participants were asked to compare all the sceneries.

These results confirm how students prefer reality-based sceneries, in which the most informative aspects (face, body and voice of the instructor, and the slides used for the lesson) are all present. Beside other obvious factors related to the quality of teaching, e-learning should also definitely consider visual features.

## Keywords

E-Learning, visual scenarios, immediateness, university lectures

# The image of touristic Italy in the magazines of the late 19th and early 20th century

## Abstract

This research analyses the periodical publications dedicated to travel in Italy between the end of the nineteenth century and the beginning of the twentieth century from a twofold point of view: the first linked to the contents proposed and the second to the way of presenting these contents. The contents selection orients the formation of an imaginary related to the places and beauties of Italy suggesting a hierarchy of attractions. The ways of presenting the contents (graphic composition of the pages, relationship between text and images, type of illustrations) shape the printed page as a narrative using visual elements. The aim of this analysis is to understand the methods of communication which, in a particularly delicate moment, at the dawn of modern tourism and before the advent of other powerful imaginary sources such as the cinema, contributed to the formation of the image of Italy as a tourist destination.

## Keywords

tourist imaginary, illustrated periodicals, visual communication, graphic narrative

# 3D GIS Information System for the inventory of the Mudejar heritage in Aragon. Architecture and territory

## Abstract

For decades, it has been possible to verify how the use of GIS is an adequate tool for storing information and its subsequent analysis, since it is capable of effectively relating graphic information with any other type of data. It allows the storage of large volumes of information and its subsequent management, analysis, representation and dissemination, as well as the ability to be exploited by different users and repositories, such as the web. To carry out the inventory focused on the performance of administrative and protection tasks, in addition to the documentation related to the geometric model of the building, geographic information systems provide the additional value of spatial information, which together with information related to planning urban planning, the territory and the landscape, provide a vision of the building on an urban and territorial scale, not only as an isolated entity. The objective of the research has been the development of an Integral Information System focused on the protection of the Mudejar architectural heritage in Aragon, which is made up of unique architectural elements that have been declared a World Heritage Site by UNESCO, with the purpose of generating graphic information that facilitates spatial analysis for its conservation and dissemination.

## Keywords

information systems, web-based visualization, 3d gis, cultural heritage, territory

# The image of the contemporary city, a critical reflection on the spaces we live in

## Abstract

The contribution focuses on a research that analyses the contemporary city in order to trace, understand and identify the transformations that have affected its image.

The image of the city has strongly changed in the last century, in close relation to the changes in the life of the community that have developed within it. Contemporary society is characterized by excess and consumerism: an unbridled consumption of land, goods, images and architecture. It is characterized on the one hand by quantitative growth, involving markets and people, and on the other by the disappearance of traditional reference categories of relational and material values, starting with the fundamental categories of space and time. Ecological, environmental and social issues are put to the test in this consumerist mechanism. In contrast to the senseless densification, aimed at occupying all the spaces in our territories and maximizing profits, the importance of associating a value to every new construction and to every single architectural and urban design episode emerges. Our territory is precious and its consumption must be considered with extreme care. The aim of this contribution is to analyze, research and highlight themes and problems related to the image of the contemporary city and the way it is inhabited, trying to trace the profile of how the territory and consequently contemporary society has changed. The research proposes a methodological approach, capable of holding together the physical and immaterial datum that constantly characterizes urban space and bringing it back to the founding values of architecture.

## Keywords

globalization, image of the city, ethical architecture, images and society learning, ethic and city

# Historical views: images for comprehension of the modern garden

## Abstract

This paper deals with the analysis of the historical view's contribution to the understanding of modern gardens, which have been realised in Europe since the end of the 18th century. The examination of iconographic sources represents the innovative character of the research, because the image becomes a knowledge tool for the analysis of places.

By drawing techniques, within this kind of image, it is possible to identify the complex system of shapes and geometric matrices that constitute the underlying structure on which the organisation of garden spaces is based. The view seems to be free from geometric rules, instead it includes a wide range of accessory information, that are useful to fully understand the image. In the garden system, summarised in the landscaper's work, it is possible to find vegetative components reproducing the spatial relationship between architecture and vegetation, and expressing the landscape architect's design will as well. Acceding to this kind of information allows us to compare the ideal image, as described in the historical source, with the current state analysed using drawing tools.

The study of the illustrative material attached to the research, through the analysis of its colours, enhances the perception of the original look that the landscape architect planned to give to the different areas of this peculiar layout type. The use of darker shades of green and grey suggests a desire to create a more austere or wild landscape in which nature appears in all its severity, in contrast to the use of light tones, which effectively propose the amenity and breadth of the places intended to delight the visitor.

## Keywords

spatial images learning, knowledge images learning, drawing, garden, landscape

# Holographic representation tools and technologies for new learning actions: DhoMus Project applied to Pitigliano and Vetulonia Museums, Tuscany

## Abstract

If on the one hand the museum reality, which has its origins in the history of collecting, turns its attention to the collection and custody of objects, on the other hand the exhibited objects necessarily need a way to be told. Museography is part of this dual relationship between the museum and the object. It's a discipline that researches the different technologies of representation, finding tools to tell both the history of objects and the history of what binds them to their context and to the museum in which they are kept. To realize this story, it's necessary a phase of study of the objects, carried out by the experts of the various disciplinary sectors, bringing to light all the information. To communicate these data, a specific narrative is designed to promote not only scientific dissemination, preserving the scientific nature of the content, but also cultural dissemination, through storytelling aimed at learning and understanding the object. The technologies currently present in the field of visual simulation provide visual and dynamic tools based on the concept of storytelling. In this paper, we propose the technology of the hologram: a representation that allows us to interface ourselves with the object by observing the history that the museum offers from the outside. Holography and the technologies that implement it today prove to be effective in creating the efficient narrative to which the museum itinerary tends. For this reason, the hologram appears to be a tool of great potential also in the field of teaching and the dissemination of knowledge. In the dialogue between museology and museography, through technological evolution, the museum must look at this type of applications and the case

study that we present within DhoMus Project proves to be an interesting real example of experimentation.

## Keywords

museography, new technologies, hologram, narrative and storytelling learning, visual simulation & modeling learning

# The Micromega's eye. Image analysis in our cultural heritage and the challenges of global change

## Abstract

Sometimes artworks cannot be fully appreciated by curators, conservators and the public due to their complex shapes and positions. High-resolution digital scanning makes it possible to overcome the limitation of direct vision of the artworks, creating virtual aliases faithful to the original artworks, without physically acting on them. 3D laser scanning and high-definition photogrammetry are an auxiliary tool not only for the fruition, enhancement and promotion of our cultural heritage, but also for knowledge, preservation, maintenance and conservation. In addition to previously consolidated fields, there is now a new approach to studying indoor museum environments and their dynamics.

Two examples of this approach are the case studies of the Borghese Gallery in Rome and the Museum of the Last Supper in Milan. They are two completely different realities from some points of view: their urban contexts, the buildings, historical and artistic events and their conservation processes. The leitmotif of the two case studies is the use of imaging systems for the analysis of atmospheric micropollutants, thermo-hygrometric conditions and the study of microbiological risks.

In particular, the Apollo and Daphne Room in the Borghese Gallery and the Refectory of Santa Maria delle Grazie with Leonardo's Last Supper were examined. The first conservation environment analyzed contains several artworks from different periods and heterogeneous materials. The other environment contains two artworks, one of which is the object of the study, the mural painting of Leonardo da Vinci's Last Supper.

## Keywords

cultural analytics learning, intercultural images learning, visual simulation & modeling learning, high resolution scanning, museum

# The graphic representation of data in architectural scientific research

## The definition of visual elements

### Abstract

The paper shows how the graphic visualizations can be applied to the architectural scientific research to illustrate its contents, promoting its study and dissemination. In this project, the Drawing through the tools of Information Design, achieves a central role within the architectural field.

In Architecture, we are used to communicate through a type of "traditional" illustration and the drawing represents the only tool to discuss, explain, and measure. However, inside the academic environment the communication of highly scientific and particularly specialized data risks to remain closed within the circle of experts. In this case, the drawing is hardly understandable outside the world in which it is born. Showing some examples of work, we want to illustrate the use and potentiality of visual elements realized as graphic representations of data, designed to communicate the information obtained from the results of architectural researches, amplifying their dissemination. This process allows both to create visual outputs that follow the steps of a study, demonstrating its results, and to highlight patterns between the results themselves, providing new data to advance the research. This shows all the information of a preliminary study that could also influence its development, crossing more disciplines through a single representation. This is useful if we consider that scientific researches in Academy often uses interdisciplinary collaborations. The sphere of content came up beside another question linked to the aesthetics of data. Indeed, images should also be visually pleasing, attractive and sometimes persuasive. All these aspects belonging to the world of graphic representation allow to

balance the content on the one hand and the pleasure of discovering it on the other.

### Keywords

data visualization, architecture, scientific research, graphic images learning, knowledge images learning

## @Re-Art Archive Experience Innovation and beauty

### Abstract

The forced closure of cultural realities, dictated by the Coronavirus emergency, generated new needs for urgent solutions. Italy has heavily suffered as everything has been interrupted: exhibitions, trade fairs and museums, between more or less hard lockdowns and #iorestoacasa. From the spread of the virus, that thanks to vaccines sooner or later will begin to wane, to the spread of beauty that will help us revive the world. This is the path to follow and Italy a generator of beauty since ancient times, will have to be at the forefront of this mission. The reason is soon to be said. The aesthetic emotion brings man closer: the first sensation we experience in front of something beautiful - whatever it is - is that of not being alone. To encourage the meeting of beauty and people, many have done their utmost, let's think for example of the campaigns #museichiusimuseiaperti, #lacultur-anonsiferma, #MuseumFromHome, so well organized as to successfully substitute real life visits to museums and galleries, at least for the moment. Thanks to digital technology that allows activities to be carried out in places of art and culture and the distribution of content by all the main cultural institutions through social media. For the first time, the doors of the Web open wide and present to the public, through viewing rooms and virtual exhibition spaces, shows of all kinds. Broadening the horizon, the same choice is made by art galleries around the globe. Changing only the exhibition spaces, no longer physical but digital. Thanks to immersive 3D technology, one can enjoy the sensations and atmospheres of traditional visits. Therefore, the cultural mission of museums is not interrupted, rather it is strengthened and new

projects are born exclusively for the Web that follow the themes of the moment. The @Re-Art project fits into this scenario which aims to combine the dynamism of multimedia and digital means of communication (webinar, podcast, social network, virtual tour, and exhibitions intended for the Web) with the uniqueness of the carefully archived heritage from Milan-ese exhibitions of the past two decades. A way to make them accessible, galvanize them and bring them into circulation, making them live again.

### Keywords

images, exhibition, web, social, Covid, digital archive

# Icono-Ethnography as Methodology. Connecting visual communication and ethnography in participatory urban planning processes

## Abstract

In this contribution, we intend to situate what we refer to as “icono-ethnography” historically and (inter/trans)disciplinary. It is a multimodal methodology that incorporates methods from cultural anthropology and visual communication for the study of participatory images in urban planning processes. We elaborate the framework at CIELab, a collaborative research and action lab that connects theories, methods, and practices from both disciplines.

From the perspective of visual communication, we explore the design of visual tools that enable the expression of different perspectives and thus stimulate the process of mutual learning in participatory settings. Through embodied and digital work with the collage, we revisit this genre as carrying multiple layers of information, and as a means of engendering multi-authorship. To study processes and visual tools, we carry out practice-led design and ethnographic research. We highlight the centrality of images as part of actor-networks, and focus on their agency in participatory urban planning processes toward envisioning urban futures. They can enable compromise, and, ideally, bring about alliances between opposing actors.

During the last forty years, since the emergence of participatory design, the employment of visually based methods has substantially supported the development of strategies of participation in various social and political contexts and declinations. Susan Leigh Star’s understanding of boundary objects (1987), Pelle Ehn’s language games (1993), Peter Galison’s trading zones (1997), Elisabeth B.N. Sanders’ and Jan Stapper’s Convivial Toolbox (2010), Tone Bratteteig’s prototyping techniques (2012, 2014) and Alexa Färber’s notion of Urban Imagineering (2008) among other key authors are brought as exemplary instances where visual means are critically discussed and reflected upon and enable us to conceptualize images and multimodal research thereof when it comes

to facilitating negotiation and communication between various actors, their diverse backgrounds and desires when it comes to creating and living the city.

## Keywords

knowledges images learning, visual based research methods, inclusive images learning, multimodal explorations, actor networks

## Housing narratives. Stories of distortion, promotion and originality linked to the marketing of heritage

### Abstract

The paper proposes to observe the inclusion of symbolic elements linked to notions of memory, history and tradition within the images used to promote domestic interiors in regeneration projects. This operation is carried out in two of the most prominent cities at the forefront of the housing crisis: London and Shanghai, and reveals remarkable parallels between Eastern and Western modes of communication and representation. The financialization of space that deeply transformed our way to value, perceive and desire domestic intimacy opens issues of space falsification, fabrication of style, and distortion of the social models of reference. What these projects present us with are fictional narratives that selects not only materials and lighting, but also inhabitants, ambitions and social projections. What is new is the aggressiveness of the process that links the building of spaces and the shaping of the subject, and the enhanced use of references to cultural elements able to secure financial returns. Their reassuring character stabilises the aesthetic of investment that proposes to regenerate both places and people, imposing to think again how we do shape a specific idea of the city through images, and for who.

### Keywords

city-marketing, neoliberalism, real estate, heritage, London, Shanghai

# The Observer's Distance

## Scopic regimes in the Age of Intelligent Machines

### Abstract

The paper aims at contributing to build a theoretical and critical toolkit to define and handle what could be considered contemporary homologous of Jay's "scopic regimes of Modernity". It starts from a possible classification of forms of representation which is valid from Modernity to today, based on their genealogies and technological development: perspectivism, centered on the human eye, on the one hand; maps, sorts of god eye's views, on the other. Two relevant concepts emerge, one linked to the first, the other to the second, both fundamental for today's science and design and for discussing their future at the light where they come from: [land]scape, and weather.

Some possible crossing points between these two paths are exposed, not only in the visual domain but also in the aural, to hint towards critical artifacts that could be able to keep together the human point of view, unavoidable for humans, and non-anthropocentric observations, which the spread of big data, of AIs and of big and fast changes in the Earth's atmosphere are urging to consider.

### Keywords

representation, perspective, cartography, panopticon, dataviz, interfaces

# A course of architectural documentation through the clouds. The challenge of teaching survey techniques during the pandemic emergency

## Abstract

Is it possible to teach architectural documentation techniques without being in contact with the artefact? This was the challenge when, in February 2020, at the beginning of an Architectural Survey and Representation Techniques course, the pandemic forced lecturers and students to work from their own homes.

The course was structured to provide the students with an effective methodology able to make the scholars aware of architectural documentation techniques through a learning by doing process using as subject of investigation their own houses and online materials.

After a first phase of identification of possible mitigation actions to fill the gap of on-line teaching in a discipline that needs a strong contact with the architectural space, the education staff conceived a teaching methodology based on a digital architectural space, a point cloud of Palazzo del Merenda, an historical building located in Forlì city center, in Italy.

In this way by the exploration of the point cloud the students became familiar with a more complex architecture, simulating a direct survey and then describing spaces, decoration features, and developing spatial analyses.

The analysis of the point cloud, using the open-source software CloudCompare, allowed the students to investigate and examine the Palazzo del Merenda's spatial and formal survey's complexity. The segmentation of the point cloud and the subsequent reconstitution in AutoCAD allowed the students to know, verify and control the logical

process from the acquisition to the elaboration of 3d data, understanding the spatial/architectural relationships and achieving the final documentation goal by technical drawings.

## Keywords

digital documentation, point clouds, 3D survey, on-line teaching

# Insights of images within the Chilean student architecture press, 1930-1990

## Abstract

This work is taken from ongoing research, focusing on analyzing the student magazines of Chilean architecture schools, whose issues, published between 1930 and 1990, fostered important changes in the area's teaching systems. From the thirteen titles detected up until now, one of the lines of work stopped to review the images used and that, alongside their homemade nature, shows authentic and avant-garde visual resources for their time and also unveils, the phases of Chilean and university youth imaginary. The analysis as a whole, considers the theoretical meeting proposed by Chartier [2005], inasmuch as the consolidation of cultural history, coincides with Mitchell [2009] in terms of visual studies, is confirmed alongside Burke [2005] in the use of the image as a historic document, and with Rojas Mix [2006], in semantic units that condense images and as a reflection of social realities. Thus, the purpose of this text was to analyze the graphical discourse represented in some of these publications, doing so as the meeting point of architectural modernity. To achieve this, methodologically speaking, it inverted the traditional editorial process, extracting graphical material (photos, typographs, drawings, and sketches), went further into their creation process and, finally, contrasted this with the accompanying text. As a conclusion, it can be ventured that each magazine, despite their different times, graphics or ideological language, offers a varied imaginary of the avant-garde university that, through editorial expressions like these, augured the changes that deeply influenced the fledgling Chilean architectural culture.

## Keywords

magazines, imaginary, students, graphics, Chile, architectural culture

# Participatory actions in virtual spaces. The role of images in the construction of shared spaces

## Abstract

Participatory actions in public spaces are practices of encounter with the potential to reinforce social ties and foster a renewed sense of belonging to places. They are well-established and widely practiced – both at the national level [1] and internationally [2] [3] – as modes of exploration [4] and participation that are located at the intersection between different disciplinary domains. The particular form of participatory action discussed here ideally takes place on the street, in squares, and on public ground, via interventions that are often temporary in nature and involve the transformation, but even more fundamentally the re-appropriation, of collective space. The advent of the COVID-19 pandemic, among its numerous repercussions, has also made it difficult if not impossible to carry out such forms of participation in person and on public ground. It has thus become necessary to modify and reformulate the ways in which participatory action is implemented, so as to continue harnessing its communicative power, and to identify new ways of fostering participation, at a time when it is needed more urgently than ever to counteract the risk of isolation. In this paper, we present and discuss forms of participatory action that have recently been transposed into virtual public space and are primarily based on the sharing of images. We investigate the possibilities and valences of such an approach, both in general and at this specific historical moment.

## Keywords

participatory actions, public space, virtual public space, images, participation

# When the Artifact Becomes Image: Representing Geometrical Query with Tangible Tools. Catalogues Physical Models at the Turn of 1900

## Abstract

Traditionally, communication in mathematics passes through symbolic representations and visual ones, whether they are images, models or other artifacts, both in the theoretical speculation phase and in the transmission of knowledge with educational and disseminative aims. This dichotomy of representations has its roots in the epistemology of the discipline. In the European context, during the second half of the 19th century, a set of Catalogues of models for the study of geometry born. The contribution analyses their structures based on visual operations of a mathematical nature, with an indisputable aesthetic content, realized following the developments of mathematics at that time and the foundational studies by Monge, which explicitly identified the educational use of models for the geometry of surfaces. Catalogues are therefore tools for the promotion of visual artifacts of great impact, designed for the materialization of complex mathematical queries. Therefore, we propose a critical analysis of the images used in such Catalogues, of the modalities of model interpretation and of the possible repercussions in the current context of interdisciplinary studies.

## Keywords

representation, geometry, algebraic surfaces, didactic, models

# New narrative and graphic tools in museums Experiments of motion graphic technique applied to Japanese illustrations of Museo d'Arte Orientale (MAO) of Turin

## Abstract

The work proposed here is part of a broader research project focused on differentiating and broadening the experience of visiting the Museum of Oriental Art in Turin (MAO), one of the most important organizations in the Italian panorama in the field of valorization and dissemination of Asian arts and cultures.

The goal of the proposed experimentation is to prepare ad hoc virtual systems/digital artifacts that allow for diversified ways of exploring museum content, visual and communication, and thus understanding the historical and cultural value of the artworks contained in the museum.

Specifically, the work focuses on an illustration of the Japanese collection, starting from the analysis of the geometric construction of space typical of Japanese culture (layered perspective) up to the reconstruction of spaces and scenes represented.

The result will be the production of a multimedia project, a video in Motion Graphics, to animate the contents of the images through the following steps: determination of the narrative structure to be imposed on the motion graphics; creation of a storyboard; decomposition of the elements of the images and subsequent recomposition through specific animation software with the creation of visual effects and film compositing.

This multimedia project could be subsequently be placed side by side with the static works on display thus obtaining a more pervasive and diversified perceptual experience than the current one giving rise to a reflection on how display technologies can be more

effective in the dissemination of information and make the viewer more active opening up to diversified scenarios such as augmented and virtual reality.

## Keywords

motion graphic, visual communication, digital museum, visual narrative grammar, layered perspective

# Street Art: from impertinent transgression to inclusive citizenship

## Abstract

The image, whether produced or enjoyed, is the first symbolic communicative act based on processes that manifest themselves outside one's bodily self. Starting with the very first drawings of small children, we can easily trace our need/desire to share messages, perceptions, doubts and ideas with other people. Street art, thanks to its technical characteristics, its particular expressive form, and the original canvas it uses, can be a very important stepping-stone for the development of creativity and divergence of thought, a creativity that must not be confused with the messy and chaotic defacing of public spaces. It must coincide with the ability to find alternatives to linear ways of learning, experimenting and finding original strategies that can provide more articulated answers -- thus more adapted to the complexity that characterizes one's awareness of being and feeling part of a community. Street art can be a methodological strategy for opening up education for citizenship, legality, and respect for the *res publica*. Young students of all types and school levels can appropriate the concept of collective heritage, the sense of belonging to the territory where they live, transforming an act that is in itself transgressive into a recognized and shared action, into a legitimate product that leaves a permanent trace of their passage in the schools they attend, in the public squares they cross, in the cities where they live.

## Keywords

street art, civic education, transgression, education

# Picture books as a source for mind mapping.

## An experience in secondary schools

### Abstract

Calare l'educazione al paesaggio nei contesti di vita quotidiana dei giovani, anche quando questi siano ordinari o degradati, è un passaggio fondamentale per sensibilizzare alle prassi di cittadinanza attiva, di partecipazione e di consapevolezza del comune diritto all'accesso e alla salvaguardia dei territori e dei patrimoni culturali di appartenenza. In tali percorsi costruire mappe mentali consente di attivare processi di lettura dei luoghi che valorizzino la dimensione qualitativa del paesaggio, favoriscano un approccio interpretativo e veicolino una condivisione delle esperienze.

I libri illustrati per ragazzi sono ricchi di mappe realizzate con libertà e inventiva, spesso strettamente connesse, nei contenuti come nelle soluzioni grafiche, alla storia della quale fanno parte. Queste illustrazioni eterogenee possono costituire una fonte significativa di esempi per stimolare, nei ragazzi, una riflessione sui differenti aspetti che può assumere una mappa e sui diversi contenuti dei quali può farsi portatrice, ponendo l'accento, in particolare, sulle relazioni tra disegno del territorio e percezione dei luoghi. In vista della costruzione di una mappa mentale di luoghi conosciuti, le rappresentazioni tratte dai libri risultano stimolanti per diversi fattori: si riferiscono a luoghi diversi e spesso di fantasia descritti attraverso la sensibilità dell'illustratore, con un approccio quindi palesemente soggettivo e interpretativo; presentano qualità grafica e capacità espressiva; testimoniano una grande varietà di soluzioni, rileggendo secondo chiavi diverse i codici topografici della cartografia normata; si distinguono in molti casi per libertà d'interpretazione dei codici geometrici e dei modi di rappresentazione degli oggetti nello spazio; si inseriscono in una narrazione e sono dunque spesso coinvolgenti.

Il saggio si propone di avviare una riflessione sul tema a partire da una selezione di esempi e da un'esperienza condotta nelle scuole secondarie delle aree periferiche di

una metropoli nel contesto di un progetto di ricerca condotto congiuntamente da esperti e insegnanti.

### Keywords

images based education, spatial images learning, visual studies, mind maps, illustrated books

# Style, taste, trend Perceptions, statements and misunderstandings in design theoretical discourse

## Abstract

The striking and contemporary conditions in the life of everyone, the needed massive replacement of in-person meetings and events have seen a super-exposure of private and nested contexts.

More than ever, the concepts' perception of style, taste and trend comes to be interwoven with the personal narrative and 'adjectivation' in the loss or oblivion of what these concepts scholarly bring alongside.

The theoretical discourse aims to nourish the understanding of the connection between design application and its society, through the observation of the role of trends' and taste's evolutions as the natural processes of time passing. Old and new behaviours and paradigms in oneself depiction, through design choices for the personal environment, help in grasping which direction society is going to and which might be the challenges in design theory for the next and the far future.

What seems to be only an academic debate about literal statements becomes pivotal when the original concepts go so far from the original definition till turn themselves into misunderstandings. The issue of orienting society's taste and angling self-representation cannot be unhinged from objects' choices and owns' story. The matter becomes nodal when the channel is under everyone's eyes, as it is with the most known social media, and rated as sacred according to the sharing platform or the contributor. If the historical exactness and literal statement give way to shared narratives and personal perception, how to handle in the 'right' manner the role of visualization within social media?

## Keywords

design history, style, perception, self-depiction, self-representation

# Photography and Representation of the Museum Visit Experience

## Getting to Know Museum Audiences through the Photographic Image

### Abstract

The experience of the visit to the museum accompanied by photos responds to different needs, ranging from a contemporary trend to capture in images every moment considered relevant, to aiding one's memory after being exposed to a multitude of images experienced in a limited time that are, otherwise, destined not to be retained. The photographic images in the museum are therefore a personal synthesis, a memorization exercise, a documentation that can refer to the works on display but also details of the exhibits, portraits and self-portraits and everything relating to the free and personal interpretation according to one's own style of visit.

Another aspect of photography that contributes to define a portrait of museum audiences is given by the photographer, who observes the relationship between publics and museums, and narrates it through his gaze. These photographic images highlight what the photographer's sensitivity considered interesting and relevant.

The whole of this varied and heterogeneous repertoire of images can constitute documentation that becomes an investigation tool to identify choices, styles, visual stories. From a museological point of view, it is also significant for recognizing the public, their relationship with the collections and spaces as well as helping to read the characteristics of the visiting experience. This study therefore aims to analyze, through the filter of photography of visitors, aspects of the experience of art museums, identifying some possible applications on museum audience studies.

### Keywords

photography, museums, visit styles, visiting experience, audience studies

# Drawing Modernity

## Abstract

Between the end of 2006 and January 2007, "Costruire le Modernità" was the name given to three major exhibitions dedicated to Franco Albini, Ignazio Gardella and Carlo Mollino, architects who have played a leading role in the Italian architectural debate interpreting the canons and demands of rationalism with great coherence and methodological rigour. Hosted almost simultaneously in Milan, Genoa and Turin, these exhibitions not only provided an opportunity to get to know the three protagonists of Italian architecture in depth, but also triggered critical processes and fascinating historiographical interpretations come together in the three volumes dedicated to the exhibitions held at the Triennale in Milan, the Palazzo Ducale in the Ligurian capital and the Archivio di Stato in Turin. The aim of the "Costruire le Modernità" project was to create a single event of international scope which, thanks also to a series of collateral activities, would be able to investigate more closely the contribution of the architectural poetics of the three masters of Italian architecture. This essay, paraphrasing the title of this extraordinary initiative, explores some of the three architects' projects through drawing in order to further increase knowledge of their work. The digital narration of their architecture through new images is intended to restore to historiography the contribution of the three Italian masters, highlighting the character of their *modus operandi* not only for the purposes of dissemination but also for educational purposes tending towards recognition of a 'workmanlike' work that links architecture and its construction within an autonomous theoretical/practical path.

## Keywords

history, model, project, dissemination

# Learning from patterns: information retrieval and visualisation issues between bioimage informatics and digital humanities

## Abstract

The large amount of data generated in different fields, among which bioimage informatics and digital humanities, is increasingly requiring appropriate automatic processing techniques, such as computer vision, data mining and particular visualisation tools, to extract information out of complexity and to clearly display it.

This has led, in digital humanities, to the use of pattern recognition techniques similar to those applied in biology, chemistry and medical studies, but where patterns to be analysed and segmented are extracted from texts, images, audio-visual and online media rather than from cells and tissues. Regularities can be recognised through machine learning, based on artificial neural networks that are modelled, to some extent, after the brain's structure, showing a variety of analogies between natural and artificial world.

These processes can also add information to 3D models for cultural heritage: data mining technologies allow information retrieval from archives and repositories, as well as the comparison of data in order to better understand the context of – and relationships between – works of art, thus producing knowledge enhancement.

Various tools to describe complexity are here analysed not only for their educational aim, but also for their heuristic value, allowing new discoveries and connections between different disciplines.

## Keywords

bioimages learning, image-based education, visual simulation and modelling learning, visual-based research methods, visual studies

# The Mathematical Table of the Palazzina Cinese in Palermo

## Animation and virtual reality techniques for an edutainment project

### Abstract

The Palazzina Cinese of Palermo was built on a project by Venanzio Marvuglia in 1799 on behalf of Ferdinand IV of Borbone, when the royal family, fleeing from Naples following the establishment of the Parthenopean Republic, moved to Sicily. The building, known as "Chinese" due to its style, is full of particular architectural and decorative solutions.

An element of particular interest is the Mathematical Table, designed to avoid any contact between the living room and the kitchen below, isolating it from smells and servants. Thanks to a complex system of winches and pulleys, in fact, the dishes could be served by letting the central portion of the table and small circular areas fall into the space below in correspondence with the seats of the diners. Today the table is in good conditions, but despite the restoration, the mechanisms are not working.

Therefore, it was decided to create visualization systems that allow to show their functioning, in order to develop an edutainment product, with various levels of interactivity, from digital animation to the development of a virtual experience in which the user decides the actions to be performed and observes their effects in real time.

The workflow developed in various phases: survey, modeling, model optimization, texturing, animation, and scripting for use in VR.

### Keywords

cultural heritage, digital animation, virtual reality, edutainment

# Unusual rainbow Images and projections between art and science

## Abstract

What do have in common a friar lived in the XVII century, a contemporary American artist belonging to the land art movement and an Italian structural engineer become famous between the two world wars? The answer can be certainly found in the common scientific approach of the three authors, but more precisely in their shared passion for the natural phenomenon of rainbow. The paper focus on the contextualization of studies relating to this atmospheric phenomenon - investigated since the classical period - considering its depictions in the history of science and art. Among the protagonists of this story, whose approaches are between aesthetic researches and natural philosophy, we find the friar Emmanuel Maignan (1601-1676), a scholar of optics and author of one of the most important gnomonic treatises of the Baroque period. From 1980 the artist Charles Ross had used big glass prisms, precisely oriented, to project the chromatic spectrum inside architectural scale installations. Finally the engineer Arturo Danusso (1880-1968) developed in the early decades of the 1900s a method for evaluating the tension stress of reinforced concrete structures based on photoelasticity. Beyond the examination of the heterogeneous uses of rainbow in art and science, the paper also intends to focus on the relation between light and optics assumed as an 'universal method' for investigating natural phenomena during the centuries.

## Keywords

optics, knowledge images learning, visual simulation & modeling learning, art and science

# Images as communication of a new normality. The representation of the new social habits introduced by the Covid19 emergency in public spaces

## Abstract

In a constantly evolving society where radical socio-cultural changes have been introduced in the last year, as a consequence of the world health emergency linked to the spread of the Covid 19 virus, the centrality of images in the daily life of individuals has been reconfirmed. In situations of risk for the community, such as in the case of a health emergency due to the spread of a highly contagious virus, the role of communication is particularly important for public institutions, to obtain the cooperation of the population in procedures aimed at preventing the spread or slowing down the contagion, using images that describe the recommendations to be followed. The image confirms its social role in contemporary culture, as a means of communication and a channel for the rapid and direct dissemination of information, regardless of cultural level, language, or age.

## Keywords

sign language, public space, social distancing, visual communications, design

# Drawing Labs – from the Copy of the Master to the Inquiry into the Design Process

## Abstract

This contribution starts out by briefly summarizing, in the first section, the historical development of the institutional and socio-cultural settings in which drawing classes were developed in Europe since the Renaissance. This introduction contextualizes the second section, in which the analytical drawing course, taught since the 1920s in the foundation year of the Basel Trade School, is presented and discussed. While the drawing of a cube in the context of analytical drawing teaches students to observe and represent angles and planes, the third section is proposing contemporary drawing experiments which focus on the observation of sensuous experiences in the very act of drawing. These experimental exercises aim to teach learning from the inside and develop an approach of inquiring into the design processes through an involvement in the very materiality and physicality of drawing.

## Keywords

drawing, design process, image research, materiality, visual communication, learning from the inside

# Processes and tools for understanding the survey image

## Abstract

This study deals with the theories and processes for the understanding and realisation of images related to digital surveys and models of architectural artefacts of great historical value. The use of technologies such as terrestrial and aerial photogrammetry support the realisation of surveys based on iconographies and views of places and architecture.

The instrument of the image, in addition to representing the mere function of documenting architecture, is conceived as a culture of language internalised by the user through thought, the cognitive process for determining the perceived space.

The present work, therefore, proposes to document and graphically reconstruct through images, the temporal evolution of the fortress of Christoupolis in the city of Kavala, in eastern Greece, with a series of digital drawings, but above all with 3D photogrammetric modelling systems of the external spaces. The few bibliographic and iconographic sources represented the cognitive support for the realisation, in the summer of 2020, of point clouds developed with the assistance of a quadrihelix drone. This survey was finalised for the survey and digital modelling of the walls, the tower and the minor buildings still preserved today.

The new technologies, applied to the knowledge of the basic geometry, become a tool for analysis, information and restitution through the images of the fortress of Christoupolis. In the illustrated graphic context, the drawing of architecture, that is the practice oriented to model the object as a form, covers the main critical and theoretical exercise of

method for digital technologies, defining the questions of geometric nature necessary for the creation of virtual images.

The outcomes of the research intends to demonstrate how the perception of images can influence surveying practices and how the contribution of technologies determines an aseptic vision of architecture and landscape.

## Keywords

images, survey, graphic, knowledge, modeling

# ABR Training for Educational Research: The Global Classroom project

## Abstract

Arts-based approaches and languages are valuable resources for the field of education, with the potential to enhance both educational work (Zuccoli, 2020) and educational research (Biffi, Zuccoli, 2019). In educational research specifically, Arts-Based Research Methods (ABR) (Baron, Eisner, 2012; Cole, Knowles, 2008) – understood here as a range of approaches that recognize the artistic process itself as a mode of inquiry – may usefully be adopted alongside or in combination with other research methodologies. However, implementing such approaches requires specific competence in both art-based languages and research methods. In this paper, we present a project entitled the Arts-based Research-Global Classroom, a training course designed to provide PhD students and early career researchers with the knowledge and skills they need to deploy ABR methods in educational settings. The course is jointly delivered by the University of Milan-Bicocca and Drexel University, Florida. The concept is that of a learning laboratory, where students are given the opportunity to critically and reflexively discuss and evaluate perspectives, philosophical positions, and research questions that can lead to the design of collaborative research projects using art-based research methods. The course takes place over eight monthly sessions, each lasting around three hours. Part of the sessions takes the form of workshops based on artistic practices such as collage, assemblage, dance, drawing, and small group work.

## Keywords

arts-based methods, arts-based research, university, global classroom

# ARCHITECTURE BEYOND IMAGES

## The storytelling in the collages of Fala Atelier

### Abstract

While in the past, education in architectural design took place through books and specialized magazines, current times show how communication is strongly related to new channels of digital dissemination, which, even in architecture, favor the use of visual storytelling tools. In fact, the strong evocative power of images, in fact, returns an insightful reading that stimulates the imagination and arouses instant emotional reactions. Currently, architecture is faced with representational techniques that present architectural design through an engaging and novel narrative.

Specifically, young architects choose the collage as a graphic solution able to lead the interlocutor to the understanding of the project through a schematic and intuitive representation. In fact, the visual artifact is filtered by a subjectivity declined in the graphic, stylistic and chromatic choices. The collage technique returns constantly evolving images, which change their meaning according to the observer's interpretation. Faced with the vastness of tools available in the digital age, the contribution aims to investigate the potential of collage as a visual storytelling tool through the analysis of the work of Fala Atelier and other contemporary firms in order to communicate design intent and educate the audience to the reading of the architectural artifact.

### Keywords

fala atelier, collage, storytelling learning, image-based education, visual communication

# Silent poetry

## The images of gesture among the arts

### Pretexts and reflections on a language with great educational potential

#### Abstract

The assertion “painting is a mute poem and poetry is a blind painting” attributed to Leonardo da Vinci, represents for the writer the most authoritative synthesis to introduce the topic of this contribution. Unlike literal languages, figurative visual arts make use of body language as a medium composed of expressions, postures, gestures and traces of these.

Starting from the conception of gesture as a universally intelligible form of communication, we will look at some dictionaries of gesture such as the one created by Bruno Munari or the choreographic projects created by Virgilio Sieni, whose common root is the transposition into images. In choreography, the transposition into images, most often signs or drawings, is called notation and is the instrument through which artistic projects are transmitted to dancers and posterity. This means leaving traces of an idea, knowledge or simply a state of mind that is fixed on the paper through a gesture. The nature of gesture as a medium and an instrument of immediate transposition will show its value in the field of education.

#### Keywords

graphic images learning, images based education, intercultural images learning, heritage education, didactic transposition

# Coloured patterns: designing urban spaces through chromatic abstractions

## Abstract

Contemporary urban policies increasingly experiment with a bottom-up approach that starts from the social base of the city, focusing on the interests and perceptions of the inhabitants and building on citizen participation, which becomes an important cognitive-operational tool [Acierno, 2019]. The involvement of the population can be useful in understanding the criticalities and conditions considered most pleasant in urban parks, areas where issues of enjoyment and the search for psychophysical well-being are concentrated. In these cases, the use of images proves to be a very useful investigative tool for understanding subjective reactions to certain visual stimuli, especially colour, in order to identify the elements that create the most significantly positive effects on the visual perception of public space. Learning from images, therefore, to define guidelines for future design.

An experimental test was used to assess subjects' perceptions of specific colour combinations from existing urban locations in order to identify the most pleasant and relaxing ones. Thus, the contemporary city offers the possibility of working from below: the community expresses itself through subjective reactions to abstract images that propose different colour palettes. Reflection on the perceptual aspects of the chromatic components of urban spaces falls within the research area of the "psychology of colour", which investigates how different colours stimulate the human mind, provoking particular emotions and specific states of mind, thus attempting to understand the effects on psychological functioning, which are a function of social behaviour [Elliot, Maier, 2014]

and psychophysical wellbeing. The image thus represents that synthesis of perceptive experience that can become generative of conscious strategies of design and use, in search of positive aesthetic and visual conditions.

## Keywords

visual perception, chromatic patterns, urban spaces, colour, patterns

# The role of images in the dematerialisation of design presentations during pandemics

## Abstract

The Spring 2020 lockdown has forced a dematerialisation of project outcomes in the design schools' university education processes. Final events, to which, in the past, the narrative function of the project was delegated, were redesigned. In this dematerialisation, the image role has changed: from the ancillary role accompanying the physical model to becoming the true and only protagonist of the project narrative.

The case study chosen is the 11th edition of the Master in Transportation & Automobile Design at the Politecnico di Milano, which ended in July 2020. The exhibition of the thesis projects was transformed into an international online event. The narration of the projects involved the construction of a presentation centred on videos and images.

The time available to the students to present their projects was shorter than usual due to the constraints of an online event, making it necessary to do much work to prepare the iconographic material and directorial. As the quality of the images and videos had to be high, training courses, not initially foreseen, were introduced to help students achieve the new objective. The material produced was also used to create a virtual exhibition on the master's website.

The experience gained in the emergency caused by the pandemic will be helpful in the future, especially at the end of the twelfth edition of the master's course (July 2021), given the continuing uncertainty of the scenarios in which we operate because making images the narrative focus will allow greater adaptability to rapidly changing situations.

## Keywords

narrative images, car design, scenario description, creative process

## Read or watch

### **Abstract**

Let's look around us, do we see any letters? I'm sure we do. Without looking at it again, what is the shape of that glyph? Was it thin? Maybe stylized? And most importantly, why does it have that shape? What does it want to convey beyond its textual meaning?

Learning to recognize our surroundings through typography is another way of looking, another way of educating and a good way of mapping our environment. I propose that we delve into a world of details that go unnoticed in our daily lives.

Our environment is changing and understanding the textual stimuli that coexist with us is necessary to be able to communicate effectively, with this we will have the ability to fix our eyes on the detail and learn from within the use of typography as a form in coexistence with the text.

That we are surrounded by letters is nothing new. It is a silent invasion that has been with us since the invention of the printing press. This work aims to raise awareness about it, more specifically about all the letters that carry information outside our private environment, using design as a weapon to attract our attention and persuade us.

The starting point for this work is a graphic piece in the form of a book, which has 88 geometric shapes, 108 typographic characters. Arranged on 88 pages including front and back cover. Printed in risograph and edited as a piece to read and look at calmly and slowly.

### **Keywords**

read, watch, design, image, communication, immediacy, glyph, typography, letters

# THE “ALLEGORICAL FACADE”

## Between temporary set-up and collective well-being during health emergency

### Abstract

Starting in early 2020, with the spread of the Covid 19 virus, the home environment has been designated an elective shelter, marking the boundary against potentially threatening outdoor space. Life inside the domestic enclosure, necessary to prevent the risk of contagion and to protect everyone's health, inevitably coincided with the exclusion from participation in a series of public meeting occasions, clearly affecting daily life and also urging the world of art, design and architecture to offer solutions aimed at encouraging adaptation to the emergency situation. Into this scenario comes the experience of The House Floats, in Louisiana. In February 2020, celebrations for Mardi Gras, the New Orleans carnival, contributed to the accelerated spread of coronavirus disease. Faced with the prescription to stop the 2021 carnival festivities, the answer comes in the initiative of a series of artists and designers: the facades of entire neighborhoods where the traditional parade takes place are temporarily transformed into staged masks inspired by floats. The occasion of interaction between the facade and the “mask” takes the form of the insertion of installations, with results that from time to time deny or amplify the compositional characteristics of the facade. In any case, the dynamic character of the parades of allegorical floats is replaced by the fixity of a prepared representation. Starting from the analysis of the above-mentioned case study, the paper proposes a new interpretation focused on the topic of the “allegorical facade”, interpreted as a design strategy capable of educating to social respect and to the community well-being. Through the methods of architectural survey and drawing, this paper

focuses on the analysis of the relationship between the refuge and the sign, attributing to the latter a clear value in the processes of reconstruction of the city, both from a physical and an identity point of view.

### Keywords

mask, exhibit design, ephemeral, health, emergency

# Future teachers' implicit ideas on creativity: visual stimuli for idea-generation activities

## Abstract

Despite the studies on creativity since the 1950s have widely suggested that creativity can be developed through training programs, it seems to remain the idea that creative performances are linked to endowments of the individual and that they cannot be subject to educational action [1; 2]. On the other hand, some research points out that the scarcity of activities that stimulate the generation of new ideas is at the basis of the lack of creativity in the classroom [3]. Teachers' implicit ideas of about creativity are therefore central for the promotion of idea-generation activities in the classroom. This contribution investigated the implicit ideas on creativity of 150 university students in training to become future teachers. Personal beliefs on what defines a product and a process as creative were investigated, together with ideas on the potential of a visual stimulus (a picture of unstructured material) as a generator of new ideas in school context. In our results, some of the stereotypes that characterize naive conceptions of creativity in literature emerged: terms linked to the semantic area of freedom, spontaneity, art, etc. In line with this view, students' interpretation of the visual stimulus focused on those characteristics that made the image similar to commonly used objects. Although many teachers recognize the importance of creativity as an educational goal, their implicit conceptions may interfere with their ability to grasp the potential of some stimuli in generating new and useful ideas [4; 5].

## Keywords

creativity, teachers, implicit theories, visual stimulus, idea-generation

# Image Education and Didactics of Cultural Heritage

## Graphic and creative workshops within the project “La scuola adotta la città”

### Abstract

Within the Laboratories of Drawing and Image Education activated by the Degree Courses in Educational Sciences of the Palermo University -and connected to the internships of future teachers-, various laboratory activities have been carried out over the years, with an integration between Museum Didactics, Didactics of the Cultural Heritage of the Territory and a creative approach to the artistic masterpiece. The students, under the supervision of the university tutors, were invited to propose, within the classes in which they were placed as trainee teachers, projects of workshop activities in which to experiment, in addition to the graphic learning of the work performed with creative re-appropriation techniques (redesign, artistic techniques related or similar to the executive techniques of the studied works), complete programs in which to insert interactions with other disciplines, guided visits to places, exhibitions and final happening activities; in particular, active participation in the events proposed periodically by the city institutions was planned. An interesting connection was made possible (before the restrictions due to the pandemic crisis) by linking the initiatives relating to the event “Palermo opens its doors / The school adopts the city” with the circuit of Norman monuments recently included in the UNESCO World Heritage List. The study of architectural artefacts and of the artworks kept in them, mainly Byzantine mosaics, has become an opportunity for both recreation and learning, with an approach that has favored the manual skill of the re-design and re-construction as a privileged way for the acquisition of knowledge.

### Keywords

image education, didactics of cultural heritage, school exhibits and workshops, norman monuments of palermo, artistic techniques: mosaics

# Emphatic Designs: Reclaiming Imagination in Architectural 'Thinking'

## Abstract

Building on the phenomenological distinction between conception, imagination and perception, this paper critically investigates the meaning of the term 'thinking' and its relationship to imagination in architectural design processes. Today, computational design methods privilege "creative thinking" above imagination. I begin by contextualizing historiographically architects' mistrust in "intuition" as an impetus for design within architectural computation and the 1960s Design Methods Movement. I then elaborate on the philosophical relationship between "creative thinking" as a design posture and 'thinking' as a template for "problem-solving." This latter sense of thinking was used to develop the first computers. An alternative framework emerges from this discussion, characterizing imagination as a phenomenological relationship to the world, as described by Jean-Paul Sartre. I conclude by discussing the current concept of "emphatic imagination" in architecture as an alternate approach to the contemporary reduction of 'thinking' to step-by-step processes or set of algorithms that do not encompass design thinking in its fullest sense.

## Keywords

design, computation, image consciousness, thinking machine, empathy

# Real digital world(s) Indizi di realtà nell'esplorazione virtuale di spazi reali

## Abstract

La recente pandemia ha limitato la nostra possibilità di movimento, impedendo o limitando gli spostamenti. Abbiamo imparato ad osservare il nostro quartiere dalla finestra e il mondo da quello che ci viene offerto dai nostri computer, smart phone o televisori. La vecchia metafora dello schermo come finestra sul mondo si è fatta prepotentemente attuale. Le stanze virtuali dalle quali si svolge l'attività didattica hanno preso il posto delle aule reali. Dopo un anno di lezioni, workshop e attività seminariali svolte in questa modalità è necessario riorganizzare le idee e rivedere i paradigmi di fruizione del mondo e della sua rappresentazione. Quanto possiamo ritenere valida l'esplorazione virtuale di uno spazio reale al fine di comprenderne la complessità?

Se con la fotografia era stata decretata la perdita dell'"aura", la postfotografia ci porta a rimettere in discussione l'idea che l'immagine fotografica sia una traccia diretta della realtà. La situazione attuale ci porta a riconsiderare queste categorie e prendere in considerazione la relazione tra la rappresentazione virtuale dello spazio e lo spazio reale ai fini di una comprensione di quest'ultimo. Quando, l'unico strumento disponibile per esplorare la realtà è la sua rappresentazione fotografica tramite strumenti digitali come street view, ad esempio, un nuovo paradigma per interpretare la realtà si impone.

Questo paper vuole esplorare la natura di queste immagini digitali come surrogato della realtà, offrendo un punto di vista teorico che ne permetta l'utilizzo progettuale.

## Keywords

impressione di realtà, postfotografia, rappresentazione

# 1964 - 2020, From Tokyo to Tokyo

## Heritage and actuality of pictographic communication

### **Abstract**

The approaching of the XXXII Olympics and the pictograms designed for strongly suggests some reflections on these graphic artefacts, on their purposes, and on how they have changed through the times.

Through an overview of particularly significant projects, this research aims to outline some considerations on the role taken by pictographic communication in the Olympic context, reflecting on the potential of this tool not only as an expression of a brand identity, but moreover to convey information and, above all, culture.

### **Keywords**

pictograms, olympics, visual culture, visual identity

# Image education and visual digital storytelling

## **Abstract**

The contribution presents the results of an experiment conducted in the context of the iconography and iconology workshops of the Single cycle degree programme (LMCU) in Primary Teacher Education, University of Bologna, with a dual objective: 1) to relate the different levels of image reading and the activation of specific cognitive dimensions in technological environments, with particular reference to the design and production of visual digital storytelling; 2) to collect the perceptions of future trainee teacher students.

## **Keywords**

images based education, digital storytelling, visual teaching and learning, kindergarten and primary school

# OPEN Communication of Science: the role of audiovisual language in the digital museums

## Abstract

The relationship between science and society needs to be dealt with today by the universities in terms of engagement, for a more egalitarian communicative action than the one that was inherent to the concept of scientific dissemination. Upstream there is the active involvement of scientists and citizens and the invitation to a stronger relationship of confidence between experts and public, for a democratic training of both. The environments and the languages to be used are the ones made available by the Web and by the digital world that is constitutionally graphic-visual; communication of scientific research can avail itself of the visual and the audio-visual language to foster a process of construction of shared and participated knowledge-building. Hence, it is necessary to support the users in training projects necessary for the dissemination of key competences in this field. The priority aim of the MOdE, Museo Officina dell'Educazione, is to involve the communities in pathways of participation in knowledge. In this digital environment the users/visitors can extract information independently following virtual tour paths; they can create rooms where they can revisit the contents accessed inside the museum by following a process of personal re-elaboration characterised by communication of a graphic-visual nature.

## Keywords

digital museums, audience engagement, graphic-visual communication, audiovisual communication, open access

# Animated representations

## Multimedia techniques for storytelling

### Abstract

The paper presents the results of two case studies that use multimedia language for the knowledge, appreciation and communication of works of art of different epochs, nature and location and that, through the tools of Representation, make use of digital methods of animation and visualisation.

The final results concern the creation of multimedia products designed to narrate a conceptual path, through a reasoned animation of raster and vectorial products.

Together with the necessary technical and IT skills, it is essential to reaffirm the role of representation, which is central to image processing, recognition of graphic analogies, study of proportions, knowledge of the laws of visual perception. It should be remembered that the act of seeing is a conscious creative process that involves an intentional selection of what one wants to express and therefore represent.

The two case studies presented here aim to construct a precise and intentional narrative and reading perspective that integrates the physical experience of the work.

### Keywords

digital storytelling, 2D/3D animation, multimedia representation

# Narratives of glitch: towards a new understanding of the imaginal

## Abstract

This investigation focuses on a phenomenon rarely examined in literary studies: the notion of "glitch," which generally designates a temporary error in an electrical circuit and, by extension, a "bug" in an electronic system. Human experience is characterized by our ability to think and communicate in the form of images. From Aristotle's Poetics to the latest virtual reality models, we tend to represent things to integrate them into a personal narrative. Building on literary case studies, this essay suggests ways in which we, as curators of personal content on streaming platforms, smartphones, and social networks, are democratic participants in what Dubois calls "an imaginary of the image" in the digital age. Based on a hermeneutics of error, current narratives of glitch question the visual codes of our time and allow us to claim our autonomy as users in the process.

## Keywords

narrative and storytelling, visual studies, images and crisis learning, glitch studies, hermeneutics

# Semantic Model Learning

## Cultural hybridizations and aesthetic recycling for architecture and design

### Abstract

The current "post-digital" techno-culture, in which the ambiguous and perhaps instrumental divide between "analogue and digital" (between "real and virtual", recalling a well-known title of '92 by Maldonado) seems to have been finally reduced, continuously feeds new space-time conformations (images, models, sensitive environments, interfaces, etc.), generated above all by cultural hybridizations and aesthetic recycling; designs that can be found in every disciplinary field. A total project in which architecture, design and art (but not only), expanding their disciplinary boundaries, exchange their genes in a continuous mutation; metaphors and chimeras, morphemes, mythological and fantastic figures that represent the face of a culture that, from Pop Art to Postmodernism up to today, has been elaborating metamorphic processes until configuring a new model of representation, which we have been experimenting with for a while now.

The research, presented here, is the last result of this long study, focused mainly on the analysis of the representative and conformative role of the semantic model in architecture and design, of which we outline the most recent evolutionary stage, also illustrating the methodology adopted. In this way an elaborative process is progressively defining itself, which concerns both research and didactics, named in its general aspects as "Semantic Model", in which the methods and techniques of representation converge and intersect in order to understand (transforming information into knowledge), create (in the awareness of conceptual and visual references) and transmit (documenting the history) cultural processes, ideas and images preparatory to the project of architecture and design.

### Keywords

semantic models, hybridization, aesthetic recycling, architectural drawing, history of representation

# The power of images to imagine and create worlds yet-to-come

## Abstract

We are living in an image world. During the day we consume more images than ever before. But do we really understand its influence and power they have? Although we cannot ignore the massive exposure to images we are, many times we do not know how to interpret them and, more concerning, how to use them.

This paper invites us to think of the importance of teaching in images and its potential to create realities and imaginaries. From poststructural theories and new materialisms, we will explore how to transit from the representational function of images in education to a performative function. Images as a corporeal (MacDougall, 2006) situated (Haraway, 1988) intensities (Deleuze & Guattari, 1987) that force us to think and to imagine which subjects we want to be, which (other) worlds we want to create. Images as a means through which we can get closer to the not-known (Atkinson, 2018) and to those worlds yet-to-come.

Understand the images as part of our vital phenomena we are involved in our daily lives. And how teachers and students, as full right citizens, can move forward a more critical gaze about images they consume, create and disseminate. Which discourses, realities and imaginaries they are feeding, blocking or leashing. How through images, they can get 'outside the box' and go to 'novel modes of subjective engagement that emphasise a subject-yet-to-come and where the notion of the not-known is immanent to such adventures' (Atkinson, 2015, p. 43).

## Keywords

corporeal images; situated knowledges; people yet-to-come; images in education

# Poliphony of Gazes in an Emergency. What Images relate and How The Tangible and Intangible Elements of Suspended Time

## Abstract

The emergency situation started a 'literacy' (learning) about the web-based pandemic. Communicating through images, produced through the most varied media, has become more important than ever. In the absence of interpretational models to refer to, the images presented daily by mass media have been our 'window on the world'. In the meantime, social media recorded avalanches of images of us closed in our homes and wanting to get out. Contemporary Italian photography (art) has also tried to provide answers by identifying different keys to interpretation. Designers, illustrators, cartoonists, street artists, media artists, varying their focus, sought to create a channel of communication between their inner perceptions and other people in the world. Graphics/signs printed on the floors/walls have helped us to create internalized views of the partitioning of public places.

With respect to this multiform world of images and starting from a selection/analysis of the types of visual medium, the article aims to investigate and express a set of reflections on functions and messages, contexts, focus, encodings, instructive-symbolic power of this immense amount of images in relation to events, places, and people in this crisis situation.

## Keywords

images and crisis learning, images and society learning, knowledge images learning and communication, photographic and graphic images learning, social network-media images sharing

# “Infuturarsi” Imagination and argumentative competence in digitally augmented learning contexts Notes and reflections on a didactic experience

## Abstract

The spread of digital technologies in schools, potentially, opens up an unprecedented cross-media horizon within which to develop multicode learning paths. In this direction, a rethinking of the didactic scene would allow – and at the same time impose – a remodeling of the spaces and times within which to give form and substance to relationships, interactions and functional contaminations to pursue the key competencies for lifelong learning. These competencies, already stated by the Council of the European Union in 2006 and updated in 2018 “Recommendation”, have been defined on the basis of the technological evolution of the society and of worrying data (INVALSI, 2019) about the insufficiency of basic skills in adolescents. In the face of this scenario, this contribution proposes notes and reflections on methodological strategies and qualitative outcomes of a didactic experimentation that involved a class (fifth year) of the Scuola Primaria of the IC Galilei of Reggio Emilia. In a digitally augmented classroom setting, such as to allow synchronous and asynchronous interaction, cooperation and sharing practices at different levels of proximity (between teachers and students), an attempt was made to develop learners’ argumentative competence by working on images and stimulating their predictive imagination. Taking into account the importance of predictive logics in learning economy (Frith, 2007; Hohwy, 2013; Rivoltella, 2014) and assuming technological evolution as cultural and aesthetic horizons

within which to imagine a possible future (Andersson, 2018), students were asked to “infuturarsi”. That is, to design the school to come, evaluating errors and intuitions with which artists of the late nineteenth century had imagined a future (the year 2000) that the children involved did not experience. Final objective: to develop an argumentative and linguistic structure capable of supporting a lecture aimed at citizenship in which to expose the “conceptual design” (Floridi, 2019) of a sustainable integration of digital technologies at school.

## Keywords

image, imagination, argumentative competence, future, digitally augmented learning

## From mental maps to art: a project on the University-Bicocca sense of place

### Abstract

Recently, the University of Milan-Bicocca, as regards to the so-called 'terza missione', has remarked its role as a key-pole for the surrounding area by proposing research, educational (and orientation) activities, as well as institutional initiatives based in the Bicocca District. In a trans-scalar perspective, this area extends from the Bicocca NIL (Nucleo di Identità Locale) to part of Municipality 9, Sesto San Giovanni and Cinisello Balsamo. Within this scenario, our group was in charge of designing a project leading to an artistic image representing the district users' sense of place. By combining geography of perception, urban sociology, participatory design and the flânerie approaches, we planned a working process starting from the 'subjective production of images' by the district's users and inhabitants. The project was structured in two phases: (1) December 2020 – January 2021: we organised two workshops by inviting groups of students, teachers and shop owners and working on their mental maps to construct a final image resulting from the two teams' negotiation processes. The reading of the maps was initially inspired by the categories identified by Kevin Lynch (1962) and then moved on to a process of co-construction of a collective image; (2) March 2021: we shared the visual body with a professional illustrator (Carlo Stanga) entrusted with the mandate to translate the images into an artistic product. The essay, which starts with a presentation of the methodology and the work phases, discusses the link between the sense of place and the construction of urban imaginaries, as well as the role that the subjective (and collective) production of images can play in such projects.

### Keywords

campus, mental maps, sense of place, bicocca district, urban imagination

# The Collages of Athens

## The Representation of the City in the 21st Century

### Abstract

Since 2000s, Athens has been changed due to imponent urban transformations mainly provoked by the implementation of large-scale works in occasion of the 28th Olympic Games in 2004, then by the dramatic effects caused by the impact of the 2008 economic crisis and the imposition of austerity policies and, finally, by the unbalanced growth of the subsequent economic recovery that abruptly halted with the impact of the Covid-19 pandemic. The city has rapidly changed not only its urban configuration, but also the way it has been perceived and represented.

During these years, it can be registered a diffuse interest among architects and artists for the use of collage to represent Athens. While during the previous century in Greece collage was mainly limited to the representation of rural and mythological landscape, since 2000s many collaged images embed for the first time many urban features of the contemporary metropolis.

This paper aims to present how collage art had been adopted by architects to describe, analyze, critic, and imagine the city as an attempt to find a proper tool to deal effectively with the emerging urban issues that had arose with the new status of Athens as a metropolitan city. In particular, the association between collage and the city will be investigated in relation with the periods of growth (2000-2008), decay (2008-2015) and economic recovery (2015-2020).

### Keywords

athens, collage, urbanism, metropolis, autonomy

# Pittronica

## Towards an Archaeology of the Electronic Image on Italian Television

### Abstract

In retrospect, the ways and times that have characterized the transition from analog to digital television should now be reviewed in the light of the fundamental steps that the progress of computer technology had during the '80s of the twentieth century. If it is clear that since the first television broadcasts, "traditional" visual arts have given a strong contribution to the aesthetics and contents of Italian television, there are not many studies that have investigated the function, operated by TV, of bringing out the role that information technologies have had in the construction of a new visual imaginary. Therefore, the article proposes first reflections about events, transmissions, personalities and technologies that are at the origin of the computer divulgation in Italy mediated by television. Among the proposed case studies, some significant incursions into television programming by personalities already known for having investigated experimental forms of hybridization between TV, art and computers will be analyzed, as well as programs, also on the radio, that have seen the electronic/digital language interact with the television one.

### Keywords

TV show, electronic image, digital archaeology, technological visuals, Italian television, paintbox







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