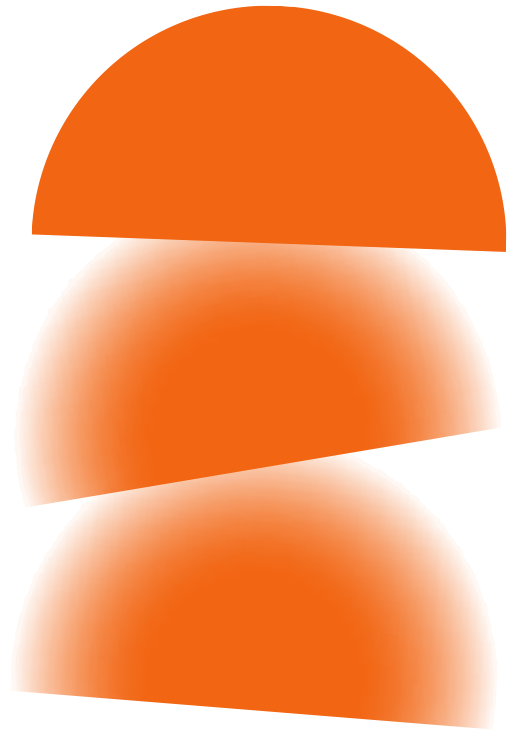Eighteenth International Conference on
Design Principles & Practices

Cultures of Transformative Design

11-13 MARCH, 2024

UNIVERSITAT POLITÈCNICA DE VALÈNCIA,
VALENCIA, SPAIN

Design Principles & Practices   Escuela Técnica Superior de Ingeniería del Diseño   UNIVERSITAT POLITÈCNICA DE VALÈNCIA   Cumulus Association

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Research Network

Founded in 2007, the **Design Principles & Practices Research Network** offers an interdisciplinary forum to explore the meaning and purpose of design. In professional and disciplinary terms, the network traverses a broad sweep to construct a trans-disciplinary dialogue, which encompasses a wide array of design paradigms and practices. We move between theoretical reflection on the nature of design and case studies of design practice, and from research-based perspectives to the experience-based perspectives of design insiders. Our aim is to build an epistemic community where we can make linkages across disciplinary, geographic, and cultural boundaries. As a Research Network, we are defined by our scope and concerns and motivated to build strategies for action framed by our shared themes and tensions.

Practices

No longer the technical expert, the heroic aesthete, or the inspired individual of our earlier modern past, the contemporary designer draws upon dispersed sources of creativity and innovation. Collaboration, today, is critical. For design practitioners, a central paradox of our times is the increasing specialization, on the one hand, but on the other, the need for more broad-ranging and holistic integration of design tasks, working between and across design disciplines. Design is becoming an ever-more social, indeed sociable process.

The imperative to collaborate, moreover, extends well beyond the domain of professional interaction and working in design teams. It also extends to the relationship with the users, clients, and consumers of design. Designers today need to build deeply collaborative relationships with their 'public.' Participatory design and user-centered design are just two key phrases that capture the spirit of this imperative.

Broadly speaking, the balance of design agency is shifting from the all-knowing "designer" who creates things that are good for passively grateful consumers, to a dialogue which involves more careful and systematic processes of user consultation, research, co-design, testing, evaluation, and continuous redesign. The emerging design democracy turns the designer into a conversationalist, facilitator, mentor, and pedagogue. As a consequence, the legacy self-understanding of the designer as artist, technocrat, and expert is thrown into question. The new politics of design plays through tensions between historical roles and contemporary expectations. Along the way, what's lost and what's gained? What is inherently difficult about the new designer-user relations, and what is intrinsically liberating?

As soon as the balance of agency shifts, a polymorphous, polyvalent social world presents itself. 'Any color you like, as long as it's black,' said the heroic Henry Ford, who conveniently assumed that every consumer in his mass-market had identical needs and interests. But as soon as you start talking niche markets, usability and customization, you discover diversity in an ever more dazzling range of hues and shades—local and global, of different abilities and disabilities, of ages and cultures and genders and affinities. The paradox of today's design democracy is that designing for everybody means designing for many different interests and uses.

Then there are some new lines of social insistence: that designers work to objectives of sustainability, access, safety, and the social good. These are matters of increasingly intricate regulation and compliance. Or, if you will internalize these insistences, they become matters of self-regulating professional ethics.

These are some of the things that are, quite simply, changing the job of being an architect, urban planner, industrial designer, engineer, visual designer, web designer, knowledge manager, communications or media designer, fashion designer, usability researcher or instructional designer – to name just a few of the design vocations.

www.designprinciplesandpractices.com/about/scope-concerns

Modalities

The result is a new "multimodality" and "synesthesia." Design conceptualization requires that designers move between modalities of language, image, sound, space, touch, and gesture. The meaning of their design might be articulated one way, then another, or all at one time in a deeply integrated process of synesthesia.

Designers need to able to 'do' a multimodal professional design discourse. They must speak and write their way through complex collaborations with co-designers and interactions with users. They need to be able to 'do' visualization as they explore design alternatives through mental images and picture their visions into reality. They need to be able to represent spatial realities, prefiguring the three dimensional through the two dimensional and turning plans into tactile artifacts, manipulable objects, architectural spaces and navigable landscapes. The new, digital media provide newly flexible and accessible tools for multimodal and synaesthetic thinking. Today's media inventions have become the mothers of design necessity.

Such innovation is not merely for innovation's sake. It is also for the most practical of reasons. There is an increasing need to document for planning and project management, regulation and compliance, risk assessment and risk management, and project specification and contractual clarity.

Principles

The word "design" has this fortuitous double meaning, simultaneously describing the intrinsic structure and the willful act of making. Design is at once morphology and construction.

Morphology: design is inherent, whether its sources be organic, unconscious, common sense, or the carefully deliberate product of the professional work of the designer. Design, in this sense, is structure, form, and function.

Construction: design is also an "act," a manifestation of agency, a process of transformation. The narrative of design runs like this: take the available designs in the world, inherent to found objects, architectures, landscapes, processes, human relationships, cultures. Then engage in the act of designing, or rework and re-voice these designs. This is never just a business of reproduction and replication. It always involves an injection of the designer's social interests and cultural experiences–their subjectivity and identity, no less. The residue, as the narrative draws to a momentary close, is the world transformed, no matter in how small a way. But the world is never quite the same again, and the redesigned is returned to the world. Design agency traces of transformation that join the repertoire of available designs–new openings to new design narratives.

Such a view contrasts with prior understandings of design in which designers were passive recipients of expert routines. Their apprenticeship into professional practice had led them to learn to reproduce received, sanctioned, and authoritative design forms. This may have been appropriate for a world that set store on stability and uniformity.

But today's world is a place of change and diversity. Designing, in a dynamic, transformative sense, can be enabling, even emancipatory. It is a process of changing the world.

Theme 1: Design Education

On learning to become a designer.

Living Tensions:
- Design Thinking – cognitive modes and learning styles
- Problem Solving – recognition procedures, hypothesis development, reasoning processes, solution testing
- Residues – learning from our historical and contemporary design experiences
- Innovation and Creativity – meanings in theory and practice
- Cases – empirical studies of design practices
- Professional Stances – acquiring the designer's skills, capacities and attitudes
- Methods of Observation – frames of interpretation and criteria for assessment of design
- High and Low Theory – the everyday and theorizing the empirical
- Conceiving Design – complexity, heterogeneity and holism
- Design Pedagogies – teaching and learning in the design professions
- Educational Designs –teacher as instructional designer
- Points of Comparison – precedent, analogy and metaphor in the design process

Theme 2: Design in Society

On the social sources of design and the social effects of design.

Living Tensions:
- Design in Social Policy – planning and politics
- Health and Safety – public welfare in design practice
- Design as Business – Markets for design and designing for markets
- Human Systems and Cultural Processes – globalization and the design professions
- Design Without Designers – everyday, amateur, organic and living designs
- Design for Diversity – culture, gender, and sexual orientation
- Design Politics – making technologies, spaces and institutions more responsive to human needs
- The ends of Design – pragmatic, aesthetic, and emancipatory
- The Humanistic and Technological –tensions and synergies
- Values, Culture and Knowledge Systems – the role of perspective, subjectivity, and identity
- Cross-cultural Encounters – working on diverse and global design teams
- Niche Markets – working with diverse clients and users

www.designprinciplesandpractices.com/about/themes

Theme 3: Designed Objects

On the nature and form of the objects of design.

Living Tensions:
- People and Artifacts – exploring uses and usability
- Design Narratives – stories and sense making in the design process
- Cultural Studies – difference, diversity, and multiculturalism in design
- Embodied and Disembodied – ethnographies of design
- Material and Immaterial – mediating ideas and materials
- Function and From – the politics of Industrial design
- Sociology of Design – decorative arts, folk movements, and communities of practice
- Science and Technology in Design – critical analysis of techno-determinism
- Media Ecologies and Object Orientation – designed artifacts and processes as learning experiences
- Co-designed Process and Objects – designing with users and communities
- Close to Customers – design as dialogue
- Universal Design and Access – measuring participatory design systems

Theme 4: Visual Design

On representation using mediums of the visual communication.

Living Tensions
- Media and Mediation – singular and universal visual grammars
- Viewpoint, Perspective, Interest – designer as agent or advocate
- Negotiating Authenticity and Authority – power of continuity and change
- Forms for Communicating Design – photography, film, animation, graphic design, and typography
- New Media and Digital Aesthetics – the evolving avant-garde
- Modeling and Representation – graphic, symbolic, logical, and mathematical
- Synesthesia or Crossing Representational Modes – language, image, space, and medium
- Fine Arts – illustration, photography, film and video
- Visual Economies – advertising, marketing and logos
- Information Systems and Architectures – interface design, digital, software, and social media design
- Public and Professional Understandings – the role of the designer as communicator
- Copyright, Patents, and Intellectual Property – proprietary and the commons, commercial and in the public domain

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Theme 5: Design Management and Professional Practice

On the organization of design, design work, and design as a professional practice.

Living Tensions:
- Designing Design – from conceptualization to specification
- Common Knowledges – sharing insights, research, theories, and designs in communities of practice
- Multidisciplinary and Cross-Professional – approaches to design
- Professionalism and its Trajectories – narrowing specialisms and/or multiskilling
- Working with Research – design practitioners as researchers or users of research
- Business of Speed – the economics and pragmatics of rapid delivery and design alongside construction
- Logics of Collaboration – interactivity, responsiveness, and reflexivity in communities of practice
- Democratization of Design and Public Accountability – consultation and consensus building
- Evolutionary Design – collaborations over time
- Expertise as facilitation – designers who know what they might not know
- Designing Projects – planning, management, and project afterlife
- User-Centered or Client-Centered Project Management - the changing role of the designer as advocate

Theme 6: Architectonic, Spatial, and Environmental Design

On constructing spaces, environments, and sustainable design practices.

Living Tensions
- Common Spaces – ecological footprints, atmospheres, biospheres, eco-spheres
- Life Cycles – designing products and services for the longer term
- Relations of human and Ecological Value – static or dynamic
- Standards and Regulations – implicit, explicit and social certifications
- Planning the Urban – cross-disciplinary perspectives on cities of the future
- Nature Designed – parks, wilderness, and elementary ecologies
- Understanding Human Impacts – natural resource use and environmental footprints
- On Sustainability and Eco-Design – design in an environmental, economic, social, and cultural setting
- Interdisciplinary Ecological Practices – working with scientists, social scientists, and economists
- Scenario Planning – designing for alternative futures
- Making and Breaking Codes – regulation in the design industries
- Documenting Sustainable Design Process – methodologies, heuristics, and routines

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Loredana Di Lucchio

Architect; Researcher; Professor, Sapienza University of Rome, Rome, Italy

Dr. Loredana Di Lucchio is an Architect and Strategic Designer. She earned her PhD while studying the relationship between design and production as phenomena involved within semantic, technological, and consumption aspects. She currently directs research activities for the Arts, Design and New Technologies section of the I.T.A.C.A. Department at Sapienza Università di Roma. She has lectured on strategic and advanced design topics at several national and international conferences. In her work she examines the relationships between design, technologies, production, and consumption. Currently, her research focuses on the collaborative possibilities between the Italian and Chinese Design and Productive System for developing a new network to overcome the idea of delocalization and, at the same time, the idea of globalization towards a glocal dynamic of consumption.

She is the author of Il Design delle Strategie. Un modello interpretativo della relazione tra design e impresa [Design of Strategies. An interpretative model of the relationship between design and business], Gangemi Editore, 2005. She is co-editor of the "Factory" section of DIID – Disegno Industriale Industrial Design, which focuses on on innovative company "case histories."

Lorenzo Imbesi

Architect; Professor, Sapienza University of Rome, Rome, Italy

Dr. Lorenzo Imbesi is an architect, with a PhD in Environmental Design, and a Professor at Sapienza University of Rome in Rome, Italy. Previous to his position at Sapienza, he was Associate Professor at Carleton University, School of Industrial Design (Ottawa, Canada). He is a critic and essayist for many reviews, and is currently Co-Director of the magazine DIID – Disegno Industriale. He has also served as a keynote speaker and coordinator for several international conferences and curated design exhibitions and events. His interests include the impact of new technologies and artifacts on design culture--especially its critical expressions and theoretical inter/trans/post-disciplinary implications with regard to our contemporary knowledge society and the social, cultural, and ethical.

Advisory Board

The **Design Principles & Practices Research Network** is grateful for the foundational contributions, ongoing support, and continued service our Advisory Board.

- **Sam Buccolo,** Australian Design Council, Australia
- **Flaviano Celaschi,** Università di Bologna, Italy
- **Aldo Cibic,** Tongji University, Shanghai, China
- **Luisa Collina,** Politecnico di Milano, Italy
- **Rachel Cooper,** Lancaster University, UK
- **Loredana Di Lucchio,** Sapienza University of Rome, Italy
- **Paul Egglestone,** University of Newcastle, Australia
- **Luigi Ferrara,** George Brown College, Canada
- **Jorge Frascara,** University of Alberta, Emily Carr University, Canada
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- **Lorenzo Imbesi,** Sapienza University of Rome, Italy
- **Lorraine Justice,** Rochester Institute of Technology, Industrial Designers Society of America, USA
- **Ezio Manzini,** Politecnico di Milano, Italy

Eighteenteenth International Conference
on Design Principles & Practices

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Past Events

- 2007 – Imperial College, London, UK
- 2008 – University of Miami, Miami USA
- 2009 – Technical University Berlin, Berlin, Germany
- 2010 – University of Illinois at Chicago, Chicago, USA
- 2011 – Sapienza University of Rome, Rome, Italy
- 2012 – University of California, Los Angeles, USA
- 2013 – Chiba University, Chiba, Japan
- 2014 – UBC Robson Square in Vancouver, Canada
- 2015 – University Center Chicago, Chicago USA
- 2016 – Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil
- 2017 – Institute without Boundaries at George Brown College, Toronto, Canada
- 2018 – ELISAVA Barcelona School of Design and Engineering, Barcelona, Spain
- 2019 – St. Petersburg University, Saint Petersburg, Russia
- 2020 – Pratt Institute, Brooklyn, USA (Virtual)
- 2021 – Universidad de Monterrey, Mexico (Virtual)
- 2022 – University of Newcastle, Newcastle, Australia (Virtual)
- 2023 – Polytechnic Institute of Lisbon, Lisbon, Portugal

www.designprinciplesandpractices.com/about/history

Design Principles & Practices

The **Design Principles & Practices Research Network** is thankful for the contributions and support of the following organizations.

Escuela Técnica Superior de Ingeniería del Diseño

Cumulus Association

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

The European Academy of Design

PUC RIO

SAPIENZA UNIVERSITÀ DI ROMA

Design Principles & Practices

Eighteenth International Conference on
Design Principles & Practices

11-13 MARCH, 2024

Cultures of Transformative Design

UNIVERSITAT POLITÈCNICA DE VALÈNCIA, VALENCIA, SPAIN

Cultures of Transformative Design

Participating in the construction of society through transformative design requires patient and constant reflection, study and adaptability for survival. Contemporary society builds and destroys at the same speed, excessively manipulated by particularized interests, seriously polarized and riven with desires and projects so contradictory that they engulf the essential social nature of the human being.

In order to aspire to recover a more naturalized environment, our area of responsibility, design studies, invites us–indeed, sometimes it forces us–to think and rethink transformational solutions that also coexist with systems proven harmful to personal and global survival.
With full awareness of the power of design, its powerful emotional effect and its capacity for positive transformation, we propose a courageous discourse of transformation. Firmly grounded in humility, can we can nevertheless set our set ourselves the task of creating realistic, social, ecological and sustainable proposals, viable in the moment in which we are bound to live yet, above all, humanizing.

It is proposed to analyze current design cultures that set out to transform the world. It is boring, even demoralizing, to listen to speeches and transformative proposals incapable of positive practical implementation in a society formed of people with differential capacities to enact change. Constructive criticism is necessary, certainly painful, and this can lay the foundations for a sustainable, socially inclusive and normalized future.

Transformative design may not be perfect. Its focal interests and programs may not be homogeneous. Their agendas may be minimal, recycled or reused. Often, they fall outside the standardization parameters to which we have become accustomed. Nevertheless, they raise possibilities that we might not contemplate in more formal environments. As such, they may break with certain conventional design schemes, and prompt necessary change to our way of being in the world–our ways of creating, producing, acquiring and consuming. In these circumstances, design becomes a strategic tool and engine of social change.

Begoña Sáiz Mauleón

Professor, Universitat Politècnica de València, Valencia, Spain

Begoña Sáiz Mauleón has a PhD in Fine Arts from the Universitat Politècnica de València (UPV), Master's in Graphic Arts from the UPV and Master's in Physics from the Universidade de Vigo. She is researcher in the Institute of Information and Communication Technologies (ITACA) of the UPV and Professor of Design and University Cooperation for Development in the Degree in Industrial Design Engineering and Product Development and the Master's Degree in Design Engineering, both taught at the School of Design Engineering (ETSID) of the UPV. She mentorize the Spontaneous Generation Group of the UPV Youth University Design (YUDesign), which works to promote design culture, innovation and creativity through multidisciplinary projects. Her work in University Cooperation for Development has been awarded in 2019 by the Commission for the Evaluation and Monitoring of Innovation and Educational Improvement Projects (CESPIME) of the UPV. Her work in teaching and research applying immersive virtual reality as a tool for project development and dissemination of results has been awarded in 2020 by the CESPIME of the UPV. She has recently received the Award for Innovative Activity in Communication and Scientific Dissemination from the UPV, awards that are part of the strategy of excellence in Human Resources for research (HRS4R), recognized by the "Seal of Excellence in Resources Humans in Research".

Design Principles & Practices

Ximo Roca

Designer, Studio XIMO ROCA DISEÑO, Spain

Ximo Roca es el referente de una generación de diseñadores que inició su andadura profesional en los años 80. En 1989 creó su propio estudio, Ximo Roca Diseño. La trayectoria de éste se caracteriza por un diseño real y funcional. Un estilo único y multidisciplinar que se proyecta a España, Italia y más recientemente a Latinoamérica y Australia. En sus proyectos, todos ellos adaptados a cada cliente, se comprometen desde el concepto inicial hasta el final dando como resultado productos de vanguardia temporales que han sido galardonados con numerosos premios.

TECNICO SUPERIOR EN DISEÑO INDUSTRIAL.
- Graduado en Artes Aplicadas, especialidad DISEÑO INDUSTRIAL, en 1980.
- Componente de la ADCV (Asociación de Diseñadores de la Comunidad Valenciana) Miembro del BEDA (The Bureau of European Design Associations)
- Miembro de ADP (Associació de Disenyadors Professionals)
- Imparte docencia en la ESDICEU (Escuela Superior de Diseño Industrial CEU desde 1.990. Participación en la Comisión Consultiva de Ingeniería Técnica Diseño Industrial con la función de asesorar a los Órganos de Gobierno de la Universidad CEU Cardenal Herrera.
- Departamento de Diseño de FOLQUES S.A. durante los años 1981 y 1982.
- Jefe del departamento de Diseño y Producto de la empresa ANDREU WORLD 1983 – 1988.
- Marzo de 1989 crea su propio estudio XIMO ROCA DISEÑO.
- Coordinador del departamento de diseño de la empresa BONESTIL 1989 – 2010 Coordinador del departamento de diseño de la empresa FEDERICO GINER 1990 – 1997 Coordinador del departamento de diseño de la empresa CHUECA HNOS. 1992 – 2000 Coordinador del departamento de diseño de la empresa PORVASAL 2001 hasta la actualida

Jorge Pensi

Designer, Pensi Design Studio, España

Buenos Aires, 1946. Studied Architecture at the University of Buenos Aires. In 1975 decided on a change of life by moving to Barcelona and obtaining Spanish nationality.

He worked together with Alberto Lievore between 1977 and 1984. In 1984, he set up his own studio in the Gothic Quarter of Barcelona.
Jorge Pensi maintains close personal and professional relations with his team of collaborators, thus ensuring that his projects are run to perfection.
Pensi Design Studio has been internationally consolidated as a benchmark for contemporary design. Its minimalist designs have received a large number of awards.

Bay Backner

Web3 Artist, Producer, Founder of MESH, Co-founder of Vueltta, Valencia, Spain

Bay is an artist and producer of collective digital experience. She is founder of MESH, the art fair for 3D, metaverse and VR creators, and co-founder of Vueltta, an international art collective producing immersive installations in the Decentraland metaverse. Bay was the curator of Metaverse Art Week 2023, and is Assistant Professor of Emerging Technologies at Berklee Valencia. Her work has been seen in Vanity Fair, Dazed, Vogue and Architectural Digest, and was recently featured by CNN in their series The Next Frontier.

Mariví Calvo

Co-founder of LZF, Valencia, Spain

LZF was co-founded in 1994 by Mariví Calvo, Graduate in Art History by the Literary University of Valencia (1982) and in Fine Arts, specialising in Engraving by the Polytechnic University of Valencia (1983). Also, she is specialised in "Collagraph" by the Pratt Institute in New York (1984-1987), and Sandro Tothill, an Australian musician. Together, they shared a passion for creativity and experimentation. On one auspicious occasion, while playing with wood veneers, Mariví and Sandro hit on a novel idea for enveloping light. LZF has since crafted an extensive collection of innovative lamps. Through developing Timberlite®, a patented process for treating natural wood veneer–making the veneer both pliable and non-breakable–a multi-talented roster of designers have worked with LZF to create a great number of handcrafted lamps.

LZF has been a creative hub from the outset. In its exciting journey to date, the company has embraced art, design, craftsmanship, innovation, technology, and sustainability. While wood veneer is the staple of LZF's craft, it is now working with novel materials, including hand-blown borosilicate glass. Never losing touch with its creative history or its roots, LZF's lamps are produced in its bustling factory in the village of Chiva, Valencia. Each lamp is handmade by skilled and diligent craftspeople, from FSC certified natural wood veneers. LZF is committed to the preservation of traditional skills and know-how. Its lamps have journeyed across the world and are part of a showcase of great Spanish design.

As artisans, it is always a privilege to have any work recognised, but LZF remains ever humble. The company has received more than thirty-five national and international awards. In October 2020, LZF was the proud recipient of Spain's Premios Nacionales de Innovación y de Diseño 2020 (a National Innovation and Design Award) in the 'Companies'category. In 2011, LZF won the Spanish National Craftsmanship Award (Premio Nacional de Artesanía), recognising the company's dedication to artisanship. It is the first time that a Spanish company has won both of these prestigious accolades.

Today, Mariví, Sandro, and the entire LZF family, continue to share a passion for creativity and experimentation. At its core, LZF remains devoted to, and fascinated by, the possibilities found in wood touched by light.

Design Principles & Practices

Sandro Tothill

Co-founder of LZF, Valencia, Spain

LZF was co-founded in 1994 by Mariví Calvo, Graduate in Art History by the Literary University of Valencia (1982) and in Fine Arts, specialising in Engraving by the Polytechnic University of Valencia (1983). Also, she is specialised in "Collagraph" by the Pratt Institute in New York (1984-1987), and Sandro Tothill, an Australian musician. Together, they shared a passion for creativity and experimentation. On one auspicious occasion, while playing with wood veneers, Mariví and Sandro hit on a novel idea for enveloping light. LZF has since crafted an extensive collection of innovative lamps. Through developing Timberlite®, a patented process for treating natural wood veneer–making the veneer both pliable and non-breakable–a multi-talented roster of designers have worked with LZF to create a great number of handcrafted lamps.

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Design Principles & Practices

Birgit Mager

Professor, Cologne University of Applied Sciences, Germany

Birgit Mager is Co-Founder and President of the International Service Design Network and editor-in-chief of Touchpoint, the International Journal of Service Design. Since 1995 Birgit Mager has held the first European professorship on "Service Design" at the CologneUniversity of Applied Sciences (Germany) and since then has developed the field of Service Design constantly in theory, methodology, and practice. Her numerous lectures, her publications, and her projects have strongly supported the implementation of a new understanding of the economical, ecological, and social function of design in the domain of services. She received the Sir Misha Black Award 2020 for distinguished services to design education.

Alonso de Paco Sánchez

Clinical Psychologist, Project of labor integration "A La Lona de Valencia", Spain

Psicólogo clínico. Experto en rehabilitación psicosocial de personas con enfermedad mental. Responsable del proyecto de integración laboral A la Lona de Valencia.

Diego Soliveres Rodríguez

Co-founder of Timpers, Valencia, Spain

Nació el 24 de septiembre de 1980 en Sta. Cruz de Tenerife, con una discapacidad visual de nacimiento. A los 6 años, se trasladó con su familia a Alicante, para recibir su primera educación en uno de los colegios de la O.N.C.E. que había en España y porque allí contaban con su familia paterna, lo que siempre es un apoyo. Cursó el BUP y el COU en un Instituto de Alicante, en el que no tuvo ningún problema para integrarse y llevar una vida totalmente normal con el resto de compañeros y, tras finalizar los estudios, comenzó la Carrera de Derecho en la Universidad de alicante. Pero, entre que nunca llegó a gustarle del todo el Derecho y que surgió por otro lado su gran pasión: la música y, concretamente, la batería, fue apartando los estudios y decantándose por intentar poder ganarse la vida como músico, realizando varios proyectos importantes, entre los que destaca Born to be Queen, grupo tributo a la banda británica Queen, con la que realizaron importantes actuaciones por toda España, llegando a actuar en la Convención Anual de Fans de Queen España, en Madrid, o incluso, compartir escenario con bandas nacionales, de la talla de Danza Invisible. Por desgracia, por algunas diferencias entre los componentes de la banda, el proyecto tuvo que disolverse y Diego se vio en un impás en el que no tenía la carrera terminada, no tenía ganas de volver a montar proyectos musicales de cero y, aunque no era lo que había pensado para sí en el pasado, pidió la venta del cupón a la O.N.C.E., trabajo al que, como afiliado a la Organización, tenía derecho y comenzó a trabajar como vendedor. No obstante, al ser el cupón un trabajo tan esclavo y al ser Diego una persona activa, a la que le gusta aportar, trabajar en equipo, hacer piña, etc., decidió apuntarse al equipo de fútbol para ciegos de Alicante y eso fue lo que le cambió la vida: en el equipo técnico, estaban Aitor y Roberto, las personas que, a día de hoy, son sus socios, compañeros y prácticamente, su familia en Timpers. Tras constituir la empresa, a mediados de 2019, se trasladó a Valencia con sus socios para iniciar la andadura empresarial en Lanzadera, la aceleradora de Empresas de Juan Roig, Presidente de Mercadona, lugar en el que trabaja a diario, con el objetivo de hacer de Timpers una gran marca.

Emerging Scholars

Each year a small number of **Emerging Scholar Awards** are given to outstanding early-career scholars or graduate students. Here are our 2024 Emerging Scholar Award Winners.

Nandhini Giri
Purdue University, USA

Yuzyil Aydin
Bahcesehir University, Turkey

Syeda Asia
Udhyam Learning Foundation, India

Claudia Ribeiro Pereira Nunes
Universidad Complutense de Madrid, Spain

Eunmi Moon
University of Illinois Urbana-Champaign, USA

Laureen Mahler
Aalto University, Finland

Neela Imani
York University, Canada

Arda Çalışkan
Bahçeşehir University, Turkey

Dalia Sendra Rodríguez
Universidade Europeia of Lisbon, Portugal

Angelica Sibrian
University of Illinois at Urbana-Champaign, USA

Tarryn Rennie
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Presentations, Presenters, Participants

Regeneration of Historical Building Sites: Innovative Architectural and Design Practices Used in the Adaptive Reuse Transformation of the World War II Aircraft Museum in Edmonton, Canada

Tim Antoniuk, Associate Professor and Head of Industrial Design Program, Art & Design (Industrial Design Program), University of Alberta, Alberta, Canada

Globally, the modern transformation of historical buildings and architectural sites is not only a trend in urban renewal, it is an opportunity to preserve and celebrate cultural heritage. This paper will explore how historical sites can be protected and transformed into vibrant multifunctional and cultural spaces that can better connect people and heighten human trust and tolerance, and increased safety for all community members. Focused on disseminating the goals and evolving outcomes of an active 13,000m2 adaptive reuse project of a World War II aircraft museum in Edmonton, Alberta, Canada, the project founder, lead designer and author of this paper and project will provide detailed insights about the challenges, opportunities and design methods that have been used. Given the 4,900m2 site size, 160 residential units, biophilic interior environments, and large 3,700m2 eat/drink social hall that is integrated into the historical building and site, it is believed that the conclusions of this paper offer significant theoretical and practical implications for guiding future historical site preservation, urban renewal, and for profitable large-scale adaptive reuse projects.

Participatory Pedagogies for Student-led Designs at Scale: A Study of the Entrepreneurial Action Programme in India

Syeda Asia, Curriculum Specialist, Research & Development, Udhyam Learning Foundation, Karnataka, India

Researchers studying design education for vocational practice in India clearly point to centre-periphery relations of colonial legacy that have led to grave challenges in bringing a change or a significant shift in the practice of vocational and design education in India (Agrawal 2017, Singh: 2010). With streams like plumbing, fashion, carpentry, welding, food technology, turner, fitter and many more, we see that the labour market perspectives govern majority of the design pedagogy, leading to systematic deskilling and a rising uncreative rendering of the instructional practice. This keeps the average salary for first employment opportunity for students anywhere between USD 70 to 100 per month, barely making it to the figure of minimum wage parameters. This paper explores reflections and learnings from the design of a radical design pedagogy experiment at scale in a populous developing country like India. The student-led entrepreneurial action programme, conceived to invert some of these conditions, uses entrepreneurial mindsets, agency and self-directed learning as its core principles to enable thriving career action for students in Industrial Training Institutes. Based on 14 months of rigorous engagement in the field since the inception of the project, this paper explores unique insights on participatory approaches and cultures of co-creation with the users and communities for a transformative design executed at scale in 100 institutes impacting 30,000 vocational and design education students. It brings to light critical dilemmas and reflections on designing for democratised entrepreneurship at scale in context that lacks basic infrastructure and affordability.

Learning From Star Wars: How We Can Build Future Cities

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Belinda Torus, PhD Candidate, Istanbul Technical University, Architectural Design Computing Program

Science fiction films are based on scientific developments that existed or may have emerged at the time the film was made. In these films, subjects of interest or arousing curiosity of the period can be mentioned. Star Wars movies have been pioneering the future in many subjects since their release in 1977 in terms of future cities, sustainability and many more. In this study, the futuristic values of the Star Wars cities: Cloud City and Coruscant will be evaluated in detail. Supporting features from other places such as Tatooine are also considered. Cloud city is a self-sufficient bloating city in planet Bespin. Coruscant is a planet wide city which is also centers the Empire. In this study, the existing literature is reviewed as a research method, all Star Wars movies were watched, and visual evaluations are made on selected examples.

Designing for a Sustainable Future: Empowering Undergraduate Communication Design Students through Pedagogical Practice

Carla Cadete, Associate Professor of Communication Design, FCAATI, Lusófona University/HEI-Lab: Digital Human-Environment Interaction Lab, Porto, Portugal

This study focuses on a pedagogical approach implemented in an academic context with second-year undergraduate Communication Design students at Porto Lusófona University during the Spring semester of 2021/22. As part of their Communication Design II unit, students had the opportunity to create an environmental awareness campaign for Porto, supported by the Porto City Council. The project centred around citizenship behaviours and sustainable practices: waste reduction and recycling, promoting initiatives to decrease traffic congestion and carbon emissions. The goal was to raise awareness among residents and tourists in Porto about the importance of sustainable practices intended to generate local and global Impact. The creative process used the Design Thinking methodology (problem definition, project ideation, prototyping and implementation). The paper is structured into four main parts: Introduction, Literature Review, Work Methodology, and Conclusion. This Pedagogical Practice has demonstrated preparing Design students to use their skills to promote positive societal changes. It empowered them with a strong sense of purpose, social relevance, and the ability to contribute to a sustainable and innovative future. Additionally, the opportunity to showcase their work in the city added practical value to their academic efforts and enhanced the quality of their portfolios. They became motivated to identify opportunities, take initiative, and become agents of transformation. Instilling responsibility and ethics equipped them to become conscientious designers capable of making a significant positive difference through their creative solutions.

Smart City or Smart Home: Examples of Movies and TV Series

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Belinda Torus, PhD Candidate, Istanbul Technical University, Architectural Design Computing Program

Combining the ideas of smart homes and sustainable cities provides a futuristic perspective on urban living. Smart homes, which include systems that manage various aspects of domestic life, have transitioned from fiction to reality. These systems optimize illumination, heating, security, and entertainment, resulting in increased resident comfort, safety, and convenience. Meanwhile, the sustainable city paradigm aims for eco-aware urbanization by combining technology and ecology. Using 18 diverse films and television series as inspiration, this study examines the intersection of these concepts and offers insights into a future in which smart residences are an integral part of sustainable urban environments. Important to this exploration is the discovery that, while these narratives primarily emphasize service and security functionalities, the urban fabric is also affected. Integrating smart home systems into the urban fabric of sustainable cities offers a variety of advantages. Through the incorporation of smart home technologies, sustainable urbanism's fundamental principles of energy efficiency, waste reduction, and enhanced resource management can be enhanced. The combination of user-centric simplicity and sustainable urban living has the potential to significantly alter the urban landscape of the future. Envisioning this symbiotic relationship, the future urban environment is poised to integrate smart homes seamlessly, optimizing resource utilization and enhancing citizen experiences. This study traces the evolution of smart homes from science fiction to pragmatic reality and highlights their confluence with the ethos of sustainable cities, propelling humanity toward a future in which technology, environment, and lifestyle cohere in harmony.

The Potentials of the Concept of Autonomy: Transformative Capacity of the Discipline of Architecture

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Fatma Erkök, Associate Professor, Architecture, Istanbul Technical University, Turkey

This study explores the roots of disciplinary autonomy in architecture in terms of Kantian philosophy. Autonomy is usually understood in architecture as a formal autonomy and a detachment from a political or social engagement. However, recent studies offer autonomy as a unique kind of knowledge as a builder of self-confidence or self-awareness of the discipline itself. These views argue the concept as knowledge embedded in the architectural design ideas that transform factors of real life through its ideal position or reservoir of knowledge. Although the notion of autonomy has ethical, political, and social origins, it seems that it is usually considered as a tool for formalistic research by modern architecture. Some views offer the philosophy of Deleuze and Guattari as a solution to this aporia of the concept of autonomy. This study aims to understand the concept of autonomy with its original roots, promises, problems, and potentials as a foundation of the knowledge activated through design in architecture. The study recognizes that some potentials of the concept are neglected by the formalistic approach. It seeks to comprehend the concept as a feature that protects the ideal position of the discipline, conveying the transformative capacity through its methods to real life.

Exploring Product Design for Active Birth Rooms

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Healthcare spaces are demanding a more humanised approach that is becoming more relevant for design in some particular healthcare environments. In this line, birth rooms stand out, which try to provide a less surgical but more familiar and active environment for women at their birthing experience. This study summarises previous research carried out to address the design of the most commonly used products in this physiological process for women. Based on a documentary analysis of this type of space, products used and registered models, we have worked iteratively with the different stakeholders (midwives/health personnel, biomechanics specialists, manufacturers of some products and users). This made it possible to focus the design brief on two elements of use that are decisive in the quality of the experience: the bathtub and the birthing chair. The results of this analysis constitute the briefing for the design of these products in the research project "Estrategias y modelos para la mejora de la seguridad, funcionalidad y experiencia de usuario en centros de nacimiento" GVA. INNEST/2023/93.

Transformative Immersive Design: Shifting Perspectives through Disruptive Storytelling

Eleonora D'ascenzi, Student, PhD, University of Florence, Italy
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Nowadays, in the face of countless current challenges, there is a need to stimulate society toward a critical attitude that can address contemporary complexity. In this context, design, and especially storytelling design, can play a fundamental role: designing transformative experiences capable of generating positive behavioral changes. Design, and especially, communication design, through its provocative nature can indeed question our assumptions, beliefs and perspectives, exposing us to new ideas, alternative viewpoints or unknown scenarios, encouraging critical thinking and open-mindedness. Indeed, design can help overcome preconceived ideas, paving the way for personal growth and transformation by disrupting existing paradigms and by embracing unconventional thinking. Such a reversal of perspective can be made possible through collaboration with other disciplines that may be far apart, such as, specifically, social sciences, immersive technologies, and performing arts. Thus drawing on a plurality of methodologies and tools, far from schematic and rigid impositions, we could adopt a transdisciplinary, or even "in-disciplinary," approach, which applied to the context of transformative immersive design is enabled to challenge conventions, break boundaries and imagine innovative solutions, giving full expression to a strongly cultural, formative and innovative approach.

Fluidity in Education - a Visionary Approach to Interdisciplinary Learning: Visualizing Congenital Heart Disease through the Lens of Transformative Design Education

Jennifer Duby, Assistant Professor, Department of Design, MacEwan University, Alberta, Canada

This paper intricately explores the intersection of interdisciplinary education, liminality, and the transformative process, employing the poignant case study "Visualizing Congenital Heart Disease" as a central lens. Focused on mitigating anxiety during the critical transition from pediatric to adult care, the study orchestrates a collaboration between design students, cardiologists, and patients facilitating life-saving knowledge transfer. Within this dynamic framework, the roles of students, healthcare professionals, and patients undergo a profound evolution, casting a spotlight on the collaborative creation of knowledge. Embracing the concept of transdisciplinarity, the study goes beyond traditional educational boundaries, advocating for a visionary future marked by work-integrated learning. This vision is anchored in the deliberate harnessing of interdisciplinary collaboration and the inherent dynamism of the third space. As this research unfolds, it envisions a revolutionary shift in educational paradigms—a future where knowledge and practices are not merely transmitted but co-created, fostering innovation and transformative approaches. By championing interdisciplinary cooperation and embracing the fluid nature of the third space, this study anticipates a transformative landscape where education becomes a catalyst for co-created knowledge and practices that transcend traditional boundaries.

Transdisciplinary Research, Collaborative Innovation and AI Tools: New Challenges for Design?

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Artificial Intelligence (AI) has become a high buzzword across many industries. For some, AI could be the solution to world problems. For others, it is a terrifying technology that could destroy society by making many professions and skills obsolete. Worldwide, ongoing conversations exist between designers, innovators, futurists, educators, and developers about the impact of AI, Machine Learning, Deep Learning and Digital Technologies such as VR, AR, and MR. Questions about how AI will transform design realms arise frequently. However, AI potential and challenges are still to explore. For the more optimistic, AI holds much potential for the design world, seen as a powerful, innovative tool, leading to an 'augmented intelligence' that will allow the optimization and speed of design activities. Furthermore, new design spaces and business opportunities will occur, building on innovative relationships between customers, products, and services and relying on new interactions, creative practices, and strategies. The KBAI project presented in this paper will support this reflection and contribute to this line of inquiry. As a collaborative applied research project carried out in a transdisciplinary mode, it had as its main goals and challenges the development of an innovative co-creation dynamic, the establishment of a common language and base of understanding and a management tool for business supported by AI potential. The KBAI I&Di process and outputs, prototyped and tested by three different groups of users, brought new light to these issues and new digital products that become smarter and have higher levels of knowledge management, functionality, and empathy.

Mutating Leadership Awareness through Transformative Cultures: Speculating on the Role of Negative Knowledge and Power in Empowering Creative Talents

Francesco Galli, Prof. Leadership and Creative Thinking, Department of Business, Law, Economics and Consumption, IULM University, Italy

This paper explores how leaders must "transform" their awareness and adapt it to conflicting and uncertain contexts. Firstly, I argue that creative leaders may benefit from acquiring a mutated awareness. I then suggest that to withhold a leading attitude, leaders must reinforce their leadership role in a creative and cultural system. Secondly, I introduce Deleuze's binomial concept of "territories" and argue that this knowledge prepares future leaders with the potential to empower their awareness and acknowledge the power dynamics from a geopolitical dimension. Thirdly I introduce the paradigm of "power dynamics" and suggest that the speculation of "negative knowledge" is essential in the creative education. In conclusion, to cope with the complexity and uncertainty, creative talents must absorb knowledge apparently excluded from the visible "transformative design process" which is generated by apparently collateral cultural crises and conflicts of interest.

Cross-cultural Design Approaches to Games and Gamified Applications: A Pedagogical Study on Students' Perception of Culturalization in Games

Nandhini Giri, Assistant Professor, Computer Graphics Technology, Purdue University, Indiana, United States

This empirical study aims at understanding student game designers' perception of cross-cultural design concepts in games and gamified applications. The main objectives of this study are (1) to study common patterns in student project work that explain how students conceptualize cross-cultural game design approaches for effective player engagement (2) to develop pedagogical approaches to discuss culturalization topics in classrooms. Gamification, the introduction of game play elements such as digital animations and rewarding gameplay mechanics into non-game applications, is a technique commonly used to enhance end user engagement, enjoyment, and learning experiences with interactive digital applications. However, these approaches often fail to acknowledge the impact of cultural variation among end users. This necessitates an understanding of the influence of cultural variation on user response to gamification for diverse end-users. The data for this study was collected from 25 students enrolled in the course titled player-centered approaches to designing games. Students had a background in game development and user experience research and were asked to explore culturalization aspects in an existing game and to develop cross-cultural design strategies to re-design the experience for a culturally specific video game audience. A textual analysis of the students' work and their reflections provide a better understanding of how students perceive cross-cultural game design concepts in existing games and gamified applications. The results provide pedagogical guidelines for discussing culturalization topics in game design education.

Experimenting Community-Based Design Strategies to Transform Post-industrial Buildings in Balance with Nature

Yong Huang, Assistant Professor, Architecture, Bowling Green State University, Ohio, United States Jack Collins, Student, Master of Architecture, University of Michigan, Michigan, United States

Ecological urbanism is not a theory to create new cities. To fundamentally establish a human habitat in balance with nature, we must work within existing cites and legacies of urban form, infrastructures, and social practices, as biophysical, economic, governance, and social contexts for the people, cultures, and practices (Hes& Bush, 2018). Designed by Albert Kahn in 1905, the Packard Automotive Plant in Detroit is an icon of the era of Fordism. The original facility employed 40,000 workers at its peak and was innovative with its use of a large open warehouse floor plan supported by reinforced concrete for its 3.5 million square feet. This once goliath of industry slumped during postwar luxury automotive decline and has been abandoned since 2010. Now, the 'eye sore' for Detroit locals serves as a beacon attracting urban explorers, vandals, artists like Banksy, and shows like the GrandTour, that celebrate its haunting beauty. In this design-based research, we use photogrammetry combined with other digital media, not only to document and represent this legacy site and building of the Packard Automotive Plant, but also to generate a series urban design prototype, showcasing opportunities and possibilities to foster a vibrant community to transform its neighborhood. These prototypes, on multiple urban, architectural, and interior scales, focus on both eco-diversity as well as its integration with diversified building programs, including interchangeable public and private spaces, flexible communal and discrete functions, and multi-scaled vertical urban farming.

Discover Your Inner Systems Convenor : Fostering Boundary Relations for Transformative Design

Hira Javed, Student, PhD, University of Toronto, Canada

The complexity of current societal challenges is pushing designers to work across various levels of abstraction. This is necessary to understand how intentionally and collaboratively designed small interventions by interdisciplinary actors can lead to systemic changes. Although this type of change is slow, iterative, and outside of a designer's control, designers can play a critical role in triggering and steering systemic change by connecting people across silos using various tools, activities, and facilitation methods, as well as surfacing the hidden systems and processes that enable or hinder desired value. In the language of social learning theorists, Beverly Wenger-Trayner and Etienne Wenger-Trayner, systems convenors oscillate between different boundaries and levels of scale within complex systems and create learning opportunities, usually between unlikely partners. Boundaries are subjective lines of division and are imposed when an individual experiences something unfamiliar during social interactions. Designers facilitate the conditions needed for others to navigate uncertainty present at the boundaries and work towards making a difference they collectively care about. Relying heavily on the seven areas described in The Work of Systems Convening framework, and the four dimensions of the systems convenors' mindsets, this workshop provides an opportunity for designers to learn, uncover, and reflect on different levels of salience and strands of intentionality in their work towards designing systemic change. The workshop intends to equip designers with the concepts and language to articulate what they do as systems convenors, collectively recognize it, and develop strategies for facilitating fruitful relationships at the boundaries.

Nouns So Abstract - Part One, Birth: Marginalized Images in Generative AI

Zhifang Li, Assistant Professor, Digital Arts, La Salle University, United States

"We explained her diagnosis to her, about the tumors, the cells, metastasis. Nouns so abstract that we might as well have been describing witchcraft." –Ocean Vuong, On Earth We're Briefly Gorgeous Inspired by Vuong's metaphor of medical terminologies' equivalence to witchcraft and the inaccessibility of language through intergenerational assimilation, Nouns So Abstract explores the visualization of a "Chinese Witch." Part one, Birth, explores the designer's experience giving birth to her first and only child, from midwife pre-natal visits, failed doula coaching, acute hospital trauma, and postpartum depression. For Birth, she has created interactive animations from collected AI still renderings of keywords (aka nouns) that include: "chinese" + "witch" + "natural" + "bonding" ++. The AI platforms are all open-access and includes DALL-E 2, Midjourney and DeepAI. The AI renderings showcase what the Internet believes is a Chinese Witch, highlighting misconstructions, demonization, and stereotypes inherent in these AI learning algorithms; and questions who owns the images of marginalized people?

The Smallest Book in The World: An Exploration of Identity Through Multimodal Design

Thomas Marotta, Lecturer, Creative Industries, University of Technology Sydney (UTS College), New South Wales, Australia

This practice-based research utilises design to explore the metaphor, "the smallest book in the world," a disingenuous colloquial phrase that, when prefaced with the question "what is?" can then be associated with the speaker's choice of "punchline", answers, sometimes as a light-hearted look at the world and on other occasions transforming the seemingly benign question into a derisive statem3ent of ridicule with racist connotations. An example of the phrase's racist connotations has been its association with Italian military performance in World War II. The research uses images, text and sound from an autoethnographic viewpoint. It allows the researcher to reflect on their experiences using multimodal communication forms to understand identity through broader cultural, social and political phenomena. The research contemporises storytelling through design, using found primary elements of images, prisoner-of-war letters, and artifacts as catalysts for new insights. It combines past, present, and future, extending the meaning of these found objects through digital interpretations expressed through image, video, and sound modalities. These modalities are enhanced by AI and augmented reality technologies, making tangible the researcher's experience of the metaphor "smallest book in the world." The resulting work intends to contemporise the storytelling of first-generation Italian migrants and to give a presence to those whose very being and contribution were omitted or diminished from post-World War II histories and popular culture.

Designing Architectural Processes: Creating a Trauma- and Violence- Informed and Participatory Approach to Women's Shelter Design

Isobel McLean, Student, School of Architecture and Landscape Architecture, University of British Columbia, British Columbia, Canada
Nadine Wathen, Professor & Canada Research Chair, Arthur Labatt Family School of Nursing, Western University, Ontario, Canada

This workshop presents existing research regarding trauma- and violence- informed approaches to service provision within violence against women (VAW) emergency shelters, along with emerging research examining how design engagement usually occurs between architects and VAW organizations. The emerging design research uses interviews from both leaders within VAW shelter organizations and architects who have designed VAW shelter spaces, or similar projects, along with key informants within the social housing and VAW policy environments in Canada. It focuses on the current practices of architectural engagement between shelters and architects, while also asking participants to reflect on their past experiences to propose new methods of design engagement, with a specific focus on participatory design practices that engage both shelter staff and clients in meaningful, trauma- and violence-informed ways. Though the selected studies focus on the VAW service sector, they could shape trauma- and violence-informed participatory design processes for equity-deserving groups in many other contexts. After hearing about the above research, group discussion will ask participants to draw on their own experiences of design engagement processes, and methods employed to better engage end-users of space in the design process in a trauma- and violence-informed way. The session will close with emerging strategies to develop a survivor-centred, trauma- and violence-informed participatory space design and planning guide.

Empathic User Experience Research Method: Bridging the Gap Between Users and Makers' Perspectives

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Angelica Sibrian, Teaching Assistant Professor, School of Art and Design, University of Illinois, Urbana-Champaign, Illinois, United States

The Role-playing Living Lab (RpLL) method in this research merges experiential role-playing with empathy and communal coping principles and involves user-expert in the user experience research process. The term 'user-expert' refers to those who have acquired expertise through lived experiences and education to deal with challenges in the built situation and environment. The significance of this method is that the designated user-expert creates the experiential content based on their lived experiences and facilitates makers to play the roles of users in the workshop. Makers immerse themselves in users' perspectives, environments, and experiences to enhance empathic connections and gain firsthand insights into users' challenges, bridging the gap between themselves and users to resonate with user needs. The RpLL method promotes ethical user-centric design practices by incorporating collaborative problem-solving. This approach benefits individuals and society by promoting sustainable design practices and enhancing overall well-being. This workshop is based on the RpLL method: 1) the facilitator (user-expert) presents scenarios, 2) participants (makers) will play designated roles, and 3) will reflect on the role-playing workshop. This workshop intends to give participants (makers) a chance to experience the perspective of others (users).

User Interface Creative System: Study Based on Aesthetic Theory

Chen Peilin, UI Engineer, Digital Education Institute, Institute for Information Industry, Taipei, Taiwan

The method of this study is to use the Generative Adversarial Network (GAN) to learn the style features of the ten aesthetic principles, and use the generator in the GAN to generate user interface (UI) images of various design styles, and then label them through the classification model. When designers enter style keywords, the system can output related architectural pictures as their reference materials. This system is designed to help designers complete tasks within a limited time while improving design quality. Through machine learning and generative technology, it provides diverse reference materials to stimulate designers' creativity while ensuring work efficiency.

Into the Field: Empathy at the Center of Teaching in Design

Cátia Rijo, Assistant Professor, Art and Desing, Escola Superior de Educação do Politécnico de Lisboa, Portugal

This article delves into the difficulties encountered in the realm of education, particularly emphasizing the teaching of design and the importance of thinking with a specific emphasis, regarding the transmission and acquisition of skills by students in design curricular units relating to soft skills, such as empathy, and the ability to work as part of a team, observation skills in the field and critical analysis of contexts. More specifically, by explaining the case study of a design project, under the theme "Designing Our Cities", focused on the urban context of the city of Lisbon, a reflection is made on how design practice, with a teaching approach and the transmission and acquisition of knowledge, consolidated outside the classroom, can contribute to a better –and more comprehensive– training, providing students with more operative tools in design, and consequently more effectiveness in the long term. In this way, we intend not only to understand but also to analyze how the transmission of knowledge in the field of design, with a practical application through project development in a real context, can not only provide students with more tools but also create new opportunities for the development of urban spaces and consequently open space for innovation in the communication and identity of places. The paper presents initiative projects on the essence of a community, as well as connecting with, and understanding, the individuals who constitute each neighborhood.

Sitting in Uncertainty: Untangling Personal Identities and Bias towards Equity-centered Design Education

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Rim Fathallah, Student, PhD, University of Toronto, Ontario, Canada

How can one engage in a design process, through constructive relations and co-creation within diversity, if one does not understand the positionality of their 'Self'? In 2016, the Stanford d.school added two design modes to its Design Thinking model seeking equity-centered design: Notice and Reflect. These new steps involve bringing more transparency around the Self of the designer. Before transformative thinking and practice can begin, designers need to engage in a process of untangling the makeup of their identities (a term intentionally pluralized to represent the multiple intersecting identities and cultures we all possess) and the systems of oppression they have been part of, or subjected to. Through this process, we can develop a greater potential for engaging diverse perspectives and inciting a new universal paradigm of inclusion and equity-oriented design. Our arguments are supported by data collected in 2021 & 2022, from undergraduate interior design students and instructors participating in global cyber design charrettes focused on cultural bias and identity. Participants were located in varied universities throughout North America, and the Middle East. Data was collected through reflection logs, video footage, individual and group interviews with students and teachers, and post project surveys. Intended as a qualitative study on intercultural dialogue through design, one of the unexpected research findings was the struggle that design students faced, across all locations, in untangling their cultural identities. This 'untangling' should not be taken for granted and requires self-reflection/reflexivity, which can be uncomfortable and uncertain. This is the focus of our presentation.

Empowering Youth and Strengthening Communities Through Community Asset Mapping

Samira Shiridevich, Assistant Professor, Arts and Art History, University of North Carolina at Charlotte, North Carolina, United States

This initiative represents a collaborative and iterative endeavor between an Iranian graphic designer and educator and Project YouthBuild (PYB) students and staff in Gainesville, Florida. The project's primary objective is to foster sustainable communication and collaboration between the local East Gainesville community and PYB participants, who strive to support youth facing educational challenges. By embracing co-design methodologies and involving PYB students at every stage, the project has crafted an interactive game and map, facilitating PYB's Community Asset Mapping initiative. Aligned with the principles of Asset-Based Community Development, the CONNECT project addresses a fundamental question: how can we effectively uncover latent knowledge within vulnerable communities and visualize it to drive profound social change? Integral to this transformative journey is co-design workshops centered around conversational trust-building, radical mapping techniques, and serious games. These workshops have proven instrumental in unearthing innovative solutions that emphasize horizontal problem-solving. The process thrives on diverse disciplines and the invaluable insights of PYB students. CONNECT empowers PYB students by providing valuable resources and support to establish reciprocal and respectful relationships within the broader community, particularly with elderly residents near the PYB campus in East Gainesville. By fostering meaningful connections between youth and their neighbors, the project aims to cultivate a sense of community ownership and shared responsibility, culminating in sustainable social transformation. The session will openly discuss the project's outcomes, challenges, and invaluable lessons learned. It also will underscore the transformative power of horizontal problem-solving and stress the essential nature of embracing diverse perspectives within community development endeavors.

Nudging Child Participation in Care Contexts through Norm-creative Support Tools

Britta Teleman, PhD Candidate, Health and Welfare, Halmstad University, Sweden

There have been calls for tools that amplify child perspectives and counteract adult-centric and bio-medical norms in care contexts. To contribute to such development, our paper investigates the experiences of 11 care professionals who tested a digital support tool to facilitate child participation in paediatric and social care. Professionals' narratives of the tool's effects on their meetings with children were analysed from a socio-technical perspective. We found that different aspects of the tool's design and materiality were perceived to improve the participatory conditions for some children. In these cases, professionals described how a redistribution of control also affected the meeting dynamics, and how guardians and professionals were involved in conversations. Based on their experiences, professionals could identify shortcomings in current approaches and practices. They expressed an increased openness to new tools and proposed ideas for alternative ways of working. We discuss what properties of the tool were perceived to facilitate instant participation, and what implications such experiences may have for norm transformation in care contexts over time. This paper will help designers aiming to nudge participatory formats for children in care contexts.

Unfolding the Vertical: Architecture as a Open Field of Interactions

Eda Yeyman, Student, PhD Candidate, ITU, Turkey
Ayse Sentürer, Professor of Architectural Design, Istanbul Technical University (ITU) Faculty of Architecture

Understanding architecture through relationality and interactions allows open-ended cosmic potentials and flexible perception of the material world. This understanding not only alters the relationship between architecture and materials but also, by shifting the emphasis from architecture itself to invisible forces enabling its existence, prompts architects to contemplate interventions in the physiological, biological, chemical layers within the space. This shift signifies the emergence of an architecture capable of accommodating the microscopic, biological and atmospheric. It relies on novel material configurations based on the metabolic models of bacteria, microorganisms, evolving into a 'cosmic narrative' through interactions across different scales, rendering the relationship between bacteria and planets visible. In this context, the paper explores the transscalability of architecture through verticality, prompting non-cartographic scale considerations and originating not from the desires of an architect but from micro-subatomic dimensions. Verticality goes beyond establishing relationships between adjacent scales; it signifies a jump, discontinuity into an entirely different scale, deemed necessary to 'establish during the moments of resolution.' To illustrate this concept, the paper delves into two practical cases where the configuration of the subatomic level is associated with the establishment of architecture, revealing verticality: Louvre Lens Museum (Catherine Mosbach); Living architecture (Rachel Armstrong). The critical aspect is identifying filters of a novel reading method defining scale conditions, aiming to stimulate new design processes. This study seeks to understand the infiltration of synaptic capacities establishing verticality in unconventional scales, unveiling a new toolset for architecture and reshaping contemporary practices by forming relays between scales, agents, and fields.

Design in Society

Cultivating Transformative Design: Satisfaction on Building Performance and Perceived Well-being of Adolescent Occupants in Malaysian Juvenile Institutions

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Good health and well-being (Sustainable Development Goal 3-SDG3) is part of the 2030 Agenda for Sustainable Development established by the United Nations. Ever since so, the well-being of building occupants has gained more traction within the discourse of the built environment. Vulnerable groups, for instance, adolescent occupants residing in juvenile institutions for their remand and rehabilitation purposes has been less explored by built environment researchers. This calls for an exploration on the perceptions and satisfactions of adolescents during their occupancy in juvenile institutions through Post-Occupancy Evaluation (POE) procedures. Via cross-sectional survey, 188 adolescent occupants collectively from seven Probation Hostels (Asrama Akhlak – AA) and six Approved Schools (Sekolah Tunas Bakti – STB) in Peninsular Malaysia were surveyed to explore their satisfaction on building performance of juvenile institutions and its relationship with their perceived building well-being. The analysis has demonstrates that the satisfaction of building performance has a positive relationship with the building wellbeing. Implications from the findings are useful to inform policymakers, architects, and planners about the importance of designing juvenile institutions that prioritise the well-being of adolescents, leading to some recommendations for specific design features or interventions aimed at enhancing the overall living conditions and rehabilitation outcomes for the adolescent occupants.

From Stigma to Solution: Plastic as an Ecodesign Ally

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In a scenario where plastic is often stigmatized as a particularly environmentally unfriendly material, a noticeable shift towards substituting it with paper, composites or other materials is emerging. However, these shifts frequently transpire without thorough evaluation, leading to the creation of new products that, rather than benefiting the environment, might compromise it. This paper underscores the critical necessity for in-depth analysis, emphasizing the pivotal role of Life Cycle Assessments (LCA) in making environmentally conscious decisions. Moreover, we highlight the urgent need to educate the next generation of designers, empowering them to make genuinely sustainable choices. The focus is on the significance of robust data that substantiates decisions, transcending public perceptions and steering clear of "greenwashing" practices. Lastly, we explore ecodesign principles that encourage careful use of plastic, making the most of its various benefits while reducing its impact on the environment. This comprehensive approach aims to lead the industry toward practices that are both more sustainable and informed.

Design Ethnography Driven Innovation for Urban Sport Communities: A Roman Case Study

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Sport serves as a valuable social tool, promoting connections between individuals in society and fostering the creation of safe spaces by developing spontaneous infrastructures in urban areas. This contribution delves into the impact of ethnographic design in innovating the field of sport by acting on spontaneous urban communities, showing tangible effects in urban settings and contributing to the understanding of sport as social phenomena. Its proximity to sociology, design research, and social issues, offers a multidisciplinary perspective on the roles of design. Using a previously developed ethnographic toolkit, a living lab of designers collected and translated raw information into empirical data for design practices. The study investigates the dynamics of sport as spontaneous catalysts of interactions by focusing on urban sport communities and their societal roles, inclusivity, and main challenges. Considering the municipality of Rome, 65 communities have been identified, of which 8 have actively collaborated with young designers to explore their identity and define tailored solutions. Finally, the toolkit's findings were compared to the designers' projects to evaluate the toolkit's effectiveness and relevance. The outcomes demonstrate design's capacity to investigate specific connections and interactions within each sport community (such as game setup, training methods, communication within and outside the group) and promote their growth and cohesion using insight derived from the research toolkit. Findings of the Research, as the individual projects derived, hold significance for citizens as for policy makers and urban planners who want to design and advocate for more inclusive urban social development models and thriving neighborhoods.

Addressing Technology's Unintentional Consequences: Maslow's Hierarchy of Needs

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The product design process focuses on features that engage and retain people (users) whose needs are at the heart of the design initiative. The workflow includes precise budgets, schedules, and dedicated design teams to engineer requirements. The design process aims to combine business and user objectives that drive the workflow to a user-centric product. This enthusiasm for featurism inevitably nudges designers to develop superfluous functions for users' prescribed behaviors. The drive to create an abundance of functions is to have a competitive advantage; instead, it furthers technological misuse, abuse, and subversion. A product's function can exceed utility, efficiency, and optimization into unintended use and exploitation of its intention. The function can be dynamic and dependent on social contexts. This article provides a potential solution to technological misuse by applying Maslow's Hierarchy of Needs as a paradigm for developing products and services. A translation of Maslow's Hierarchy in product design called the Design Hierarchy of Needs centers on progressive, creative enhancements. The framework in this paper is a new integration of a needs model that prioritizes people's well-being. The new structure will better predict a product's diverse usage based on human capabilities. The rearrangement of Maslow's Hierarchy may be necessary to address the Hierarchy's universal generalizations that all people are the same. Three case studies are reviewed to illustrate how Maslow's Hierarchy of Needs impacts the unintended consequences of technology: Airtag's coercive control implications, the long scroll's replacement of the next button, and Instagram's Face Filters.

Designing Diverse Profiles: Unveiling Age Bias in HR and Beyond

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With the global population aging rapidly, experts point out that the number of individuals aged 50 and over will double by 2050. In this demographic landscape, preserving the well-being and health of older individuals is paramount. Ageism against this demographic has emerged as a significant challenge, threatening active aging and mental health. This study outlines the creation of visual profiles for job applicants in the administrative sector, focusing on candidates under 30 and those over 50. The profile design process involves selecting images from the KAEF database and digitally aging them to represent older candidates. Researchers then craft resumes to match the job requirements and present images and profiles to judges for evaluation. Criteria include age, visual impressions, alignment of experience and qualifications with job requirements, and consistency across candidate resumes. Following evaluation and modifications (when necessary), researchers present the 16 profiles created to two groups: human resources professionals evaluating hiring suitability and non-HR individuals evaluating for potential coworker compatibility. This experiment seeks to challenge ageist perceptions and foster inclusivity in the workplace, aligning with principles of human-centered design and social equity.

Innovation and Transdisciplinary Dialogue in Fashion Design: Research Design and Challenges for a New Product for a Medical Disorder

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Fashion plays a dual role by intertwining innovative design with an impactful social component, revealing itself as a creative expression and a source of social innovation. Although intimate fashion has evolved considerably in recent decades, child intimate fashion has followed a different path. As part of an ongoing PhD work, the need for a new line of research in adolescents´ intimate fashion is highlighted through a case study on faecal incontinence (FI) medical disorder. There is a consensus that FI affects the quality of life of children and families, impacts healthcare systems, and contributes to a decrease in the psychological well-being of these adolescents. This paper presents an overview of the state of the art, and the research design anchoring on a transdisciplinary dialogue, as a basis for developing an innovative and fashionable product which could increase the quality of life at the age of adolescence.

African Walls: Many Different Voices

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Cave markings, rock art and drawings go back to prehistoric times, they are most probably the earliest examples of human creativity and culture. Today, wall art and graffiti still have a presence in contemporary urban space. In Africa these have immerged in wall paintings and graffiti, commercial signs and in the design of new workspaces. Considering the techniques of these wall creations: their images, the style of markings, and their textual content on one can witness their unique place in the global metamorphosis of contemporary African culture. This paper considers the different typologies and uses of wall art and graffiti in contemporary African culture. Demonstrating a diverse creative contemporary medium that fluctuates between urban political manifestations; personal expression; domesticated interior designs; and commercial implementations.

Multilevel Coordination Strategy for Service Design Aimed at Supporting Inland Areas

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Due to the demographic, economic and political power of the central urban areas, the more distant territories – known as inland areas – tend to be subjected to rather than determine new development policies, such as investments in essential services and infrastructure. Therefore, actively heeding the voice of citizens becomes a problem of institutional design, so heading towards multi-level coordination seems to be a convincing solution in order to improve citizens advocacy towards policymakers and thus correct this imbalance. This research analyzes three forms of engagement in service design, designing a single, complex interconnected system: civic activism at the micro level, advocacy in umbrella-institutions at the middle level, and knowledge circulation and capacity building in European multi-actor organization at the macro level. Through six evaluation criteria – relevance, coherence, effectiveness, efficiency, impactfulness and sustainability – and with the help of service design and strategic design tools, as well as case studies, the research analyzes the possible scope of potential interventions to improve policies, programmes and projects determining outputs, outcomes and impact meaningful medium to long- term effects on citizens, enterprises and public administrations in inland areas.

Rural Play: Design for Learning for Children and Adults

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Playgrounds are common in cities, but in rural area in the United States as well as in many other places in the world, they are scarcely available due to many factors, mainly financial constraints. Some might argue that since there are so much land and nature in the rural area, there is no need to design and build manmade structures for play. Indeed, children can organize their own play in a natural and unaltered environment. However, in today's security culture, rural children are no longer roaming the forests unsupervised. Rather, in the absence of play areas, they are being isolated in their homes. As a result, children fail to develop adequate social skills due to the lack of interaction with other children and adults. A playground brings together children and families live far apart in the rural area to help build these social skills and environmental knowledge. Especially considering the increasing numbers of home-schooled children in the rural area, a new form of playground that blends play and learn is much needed. Therefore, a rural playground should be designed to teach children about their surrounding environment. Our paper discusses the research conducted for a small organic permaculture farm with a business plan to create a "u-pick" operation to provide more attraction, and to teach ecology, agroforestry, aquaculture, and climate science to both children and adults. The paper discusses the challenges and opportunities in this ongoing process and offers suggestions for future development in rural play and learn plans.

Unboxing the Pizza Effect: Cultural Appropriation in Package Design - a Case Study

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Western brands are extremely adept at appropriating the Other. Whereas most consumer packaged goods appropriating minority cultures target non-minorities, occasionally they target the very culture being appropriated. While the former glorifies colonial imaginaries, reconstructing ethnocentric tourism via domestic regime, the latter brings these hegemonic ambitions to fruition, subjecting the racialized consumer to the racist simulacrum. Inspired by the culinary evolution of Italian gastronomy amidst globalization, this process of re-enculturation informed by Western, imperialist values is understood as the pizza effect. And although this theory was originally meant to describe the cultural appropriation and re-exportation of performative mechanisms, in graphic design, the pizza effect is applied quite literally. Package designers routinely appropriate the visual material of Othered cultures to facilitate the monopolization of the multicultural market. Generally, these colonial versionings are met with positive reception, with the cultural form garnering a heightened sense of social significance due to its popularity with the appropriating culture – a coolnessification, if you will. However, racialized and ethnicized consumers who are familiarized with the implications of their racialization and ethnicization – particularly diasporic enclaves within the Western context – historically object to the superficial commercialization of their cultural identities, therefore problematizing the pizza effect. A visual analysis of Golden Temple® Atta helps to further deconstruct this lens.

Conservating Traditional Heritage in the Digital Age: A Virtual Reality Approach to Preserving Folk Culture

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Over the past decade, an increase in young people's engagement with social media platforms such as Facebook, Instagram, and TikTok has led to a concerning trend: a growing disregard for their own folk cultures. This cultural disconnect has resulted in widening generation gaps and frequent intergenerational miscommunications, thereby posing a threat to the preservation of traditional cultures. The presented experimental research represents an innovative project aimed at documenting and preserving folk culture using Virtual Reality (VR) technology. This is accomplished by digitally recreating cultural artifacts and symbolic objects within a virtual environment and narrating stories in a spatial context. Our theoretical framework is informed by the concept of 'narrating space and spatializing narrative' proposed by Ryan (2015) and Ryan, Foote, and Azaryahu (2016). The Mid-Autumn Festival, a widely celebrated event in many Asian countries, serves as a case study to illustrate this concept. Our VR project conveys folk culture by integrating text, images, symbolic objects, and audio-visual elements within a narrative space. At the heart of our project are ten photogrammetry-scanned 3D models of symbolic objects from the real world, providing users with an immersive educational experience. Our VR application employs a narrative structure featuring chronological and thematic storylines, ensuring a coherent user journey. By adopting this spatial narrative approach, our aim extends beyond preserving the cultural richness of the Mid-Autumn Festival. In conclusion, the VR application offers a platform through which folk cultures from around the world can be preserved, celebrated, and shared with a wider audience.

Enhancing Environmental Awareness Through Interactive Education: Design and Implementation of a Mobile Urban Module

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This is a social responsibility project that aims to provide design-oriented solutions to create a positive change by fostering awareness about recycling, and environmental issues among children in disadvantageous neighborhoods and all the public spaces prioritizing schools in İzmir, Turkey. The project used a co-design approach to gather insights and determine the needs of the community in disadvantaged neighborhoods, offering an interdisciplinary perspective to the design process. Based on the workshop session findings which is conducted with a focus group of children a mobile urban module is designed to circulate within the city and host activities according to the needs and dreams of the community. The "PLAY" concept was the central aspect of this social responsibility project; therefore, students from the İzmir University of Economics (İUE) collaborated with children and stakeholders – the İzmir Metropolitan Municipality (İBB) and Izmir Chamber of Commerce (İZTO)- to design various aspects of the mobile urban module, including graphic identity, service-system strategy, interior design, and product design. We believe that children need to be actors in their own education life and raise their voices in the situations and decisions that affect them. This approach allows them to be included as a designer in the design process without disregarding their ideas. With this project, an interactive education model is offered that will put a trace in children's daily academic routines.

Environmental Graphics Reflect Cultures Creating a Sense of Place and Belonging: An Immersive Study in Valencia

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Environmental graphic design, recently adopted as experiential graphic design by SEGD, is the process of planning and shaping a space to elicit a response, creating a connection to the occupant. During the 1970s the term "EGD" began to define the trade, but the practice has roots in elements that can be traced hundreds, even thousands of years ago. Two primary substantial elements of EGD are communication and storytelling. Those elements are seen in Paleolithic cave drawings and Egyptian hieroglyphs that use storytelling and iconography to define spaces communicating events of local history. Places of worship historically used murals to tell biblical stories to communicate important events, crossing language barriers, evoking emotion, and developing a strong connection to the space and devotion to the religion. The trade has since evolved to be an integral element of the customer experience in retail, a reflection of the employee culture in the workplace, an elevation of the patient experience in healthcare, and a community connection to public murals. Valencia has a rich history that uses experiential graphic design to inform and connect to the local community and visitors by: Public art that uses storytelling to educate and create a sense of place; Historic cathedrals that utilize murals to create a connection and inform. During a summer teaching session, the communities below were studied and photo-documented seeking to uncover the unique cultures, and how EGD helps visitors to connect to them - La Roquetta, Russafa, El Cabañal, Benimaclet, El Carmen, Ciutat Vella.

Design of a Virtual Voice Assistant (Way2age-2) for Screening Cognitive Impairment and Dementia in the Elderly Using Artificial Intelligence

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This study presents the process of developing and adapting WAY2AGE-2 for the Spanish context. WAY2AGE -2 is a voice-based virtual assistant (VA) designed to screen for cognitive deficits in the elderly using natural language processing (NLP). Language plays a central role among the cognitive domains that can reveal early signs of cognitive decline. Spontaneous speech analysis is garnering increasing interest in neuropsychological research for the early detection of cognitive decline, owing to the high complexity of tasks that require not only lexical-semantic skills but also memory and executive functions. WAY2AGE-2 consists of various tasks assessing cognitive functions such as attention, temporal and spatial orientation, verbal episodic memory, verbal fluency, and language. The application works by the user (healthcare professional) logging in and identifying themselves in the system. Credentials are stored in a database for security reasons. Once logged in, healthcare professionals can create new sessions or check results and recordings. The healthcare professional accesses the application, which interacts with the elderly via voice. The elderly person's words are recorded and then transcribed using an audio transcription template. A large language model (LLM), like GPT, analyzes the transcription without human interpretation. Based on the results, the elderly can be classified into one of three options: healthy, mild cognitive impairment, or dementia.

Building Partnerships from the Doing in the South: A Pluricultural and Decolonial Approach towards Collaborations between Artisans and Designers in Latin America

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This paper presents the methodology applied by an interdisciplinary team with experience in industrial design and anthropology to foster mutual understanding and collaboration between designers and artisans in a Latin American context. The research team aimed to understand the processes by which handcrafted objects are produced, traded, and used by artisans, local vendors, and consumers by conducting a research project in two cities in Peru – Lima and Cajamarca– as a case study. During said process, the team recognized the implications of the traditional definitions of 'design' and 'artisanship' and the impact of these concepts on individuals, communities and other contexts. Furthermore, by reusing the original methodology from a product-oriented approach to a systemic approach, the research team understood the need to redefine such concepts to ensure intercultural and horizontal collaboration between artisans and designers.

Product Design, Food and Wellness: Exploring the Symbiosis of Artificial, Natural and Human Experience

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The global significance of the human-food relationship in the 21st century spans social, economic, and environmental domains, raising serious questions about people's well-being and lifestyle, as well as its impact on the planet's environmental balance. Despite technological advancements in modern kitchens, the dwindling time spent on daily home food preparation intensifies stress, unhealthy and unsustainable human development. This article aims to provide insights on how product design can promote mindful living and foster a sustainable human-food relationship, enhancing wellness in contemporary and future kitchens. Accordingly, to advance product design, food and wellness literature, we explore the interconnected dynamics of food preparation, kitchen design, and human behavior. The study advocates a paradigm shift in kitchen spaces and food preparation, started by "change makers" to initiate holistic design changes influencing the kitchen's ecosystem and its users. Product designers act as key influencers in shaping future sustainable and mindful cooking practices rooted in Slow movement principles and emphasizing the symbiosis of artificial, natural, and human experiences. This work concludes that product design holds transformative potential to drive behavioral change toward sustainable and healthy food preparation, accounting for intrinsic wellness and acknowledging the limitations of current frameworks.

Between the Everyday and the Everything: Designing as a Praxis of Community Flow

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In Politics of the Everyday, Ezio Manzini, refers to our increasingly common condition of "connected solitude" in which we live in loose social networks and collections of people organized around individualistic ideas and neoliberal economies. Although many past community structures reinforced colonial and inequitable societies, simply transcending these with individuals empowered with technologies for having a voice and networks seems not to provide us with substantial formative agency for community. The paradox of "connected solitude" centers on the critical issue of the interstitials among the individuals, institutions, environments, and occupations of daily living. Here we find dysfunctional connections between everyday activities and the whole of society leaving us with little knowing of how to act beyond the consumer pathways defined by designed products and services. There is a dearth of method, energy, and space to participate in a community of reciprocal living. Our economic, governance, and social structures and processes resist alternatives and leave room for design initiative to either reinforce them or simply provide critique of our living in gathering crisis. Inspired by perspectives of ontological design theory this paper offers a framework of interrelated functions, processes, and flows to serve as a point of departure in constructing alternative practices of designing as a praxis of community flow. The paper illustrates the application of this framework with imagined scenarios based upon existing organizational and social innovation initiatives. This consideration of design is summarized into a set of formative principles of how design practice can activate the interstitials among us.

Reclaiming Public Spaces: A Case Study from Lympia-Cyprus

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The research presents a paradigm in the village of Lympia (Cyprus), bordering the buffer zone, where over the last three years residents have begun to reclaim their public spaces, adding colour and energy through artistic interventions. Without any warning on social media, residents gathered at project sites and spread the word of the interventions by word of mouth. To date, every project outing has turned into a street party, uniting the community and promoting respect towards public spaces. The aim of this study is to understand the changing role of public spaces in the growing pace of the 21st century, with almost all operations going electronic/digital, and where interpersonal relationships have begun to erode. Society has become alienated and values such as mutual help, coexistence, socialization, selfless giving, and respect seem to be disappearing concepts. When the act of social interaction declines, our social bonds become increasingly impersonal, eventually reducing our skills and methods of communication. Through the demonstrated projects this presentation shows how a back to basics approach to participatory and artistic design revitalized a village and its community, encouraging it to be a center for all as well as a touristic landmark which now invites numerous villages and encourages new economic ventures for the inhabitants.

Development and Validation of Ludic Psychological Instruments for Therapeutic Assistance

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In recent years, numerous interventions have been created to assist psychology professionals in therapeutic work. Some of these interventions can take the form of dynamics or games, bringing the ludic to therapy. They present themselves in fun, creative and light dialogue forms between the therapists and their patients. The creation of these interventions for therapeutic assistance is an activity with high constructive potential, but requires care so that they are functional and have therapeutic value. The objective of this project is to develop ludic therapeutic technical instruments to assist in psychological treatments by promoting engagement and psychoeducation. To this end, three studies are being developed, which are a game to strengthen the initial bond in psychotherapy, in addition to developing social skills, behavioral repertoire, psychoeducation, working on coping techniques and identifying emotions to initially work with children and adolescents; a game to develop narratives through the creation of a unique story developed during the intervention to also initially work with children and adolescents; and a card game to work with adult users of psychoactive substances to psychoeducate about disorders induced by substance use, share their experiences in a group and adopt more positive behaviors aiming at a behavioral change that facilitates abstinence. The development of these products has been carefully thought out and brings together a playful activity correctly targeted with clear rules and a functional objective together with a fundamental theoretical basis that allows the functionality of the activity and brings with it an intrinsic therapeutic value.

Design for Sustainable Social Innovation: Crafting New Forms of Co-creation

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Living in a world where inequality and complex challenges affect people's quality of life (United Nations, 2023), we propose a participatory workshop inviting participants to explore challenges and speculate design-led social innovation opportunities in the crafts field. Given the relevant role designers may play in conducting co-creation and collaborative processes to find solutions (Muratowski et al., 2022; Margolin, 2014; Manzini, 2015; Savva et al., 2020), we propose the experience of acting as agents of change (Bernarda et al., 2016) by confronting specific situations and spotting potential skills, resources, tools, and actors that will help them to foster social good through design. The workshop explores a craftsdesign framework for co-creation (Sendra & Ferreira, 2023) based on literature review methods and multiple design-led social innovation case studies analysis. It aims to set up a design research method of co-creation in communities through systemic collaboration using design methods and considering our interconnected system, the growing inequality and the complexity of sustainable development in its social, economic, cultural and environmental dimensions. The workshop will be implemented using a toolkit and a canvas, and participants will be organised through groups. The objective is to raise awareness about the role of social innovation and craftsdesign-based entrepreneurial actions as vectors of positive impact and change (Sendra & Ferreira, 2021) and inspire participants to become activists for transformation and change (Fuad-Luke, 2009). The workshop proposed is in line with the work and practice developed by the Crafts Chair of the Polytechnic University of Valencia.

The Tangible and Intangible Value of a Design Community: Developing the Identity of Designer Based in the City of Bologna through a Process of Co-designing a Hybrid Community

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Building communities to develop and consolidate the identity of designers is a crucial aspect of current design research and practice. Design communities serve as catalysts for the co-construction of knowledge, values, relationships, and projects with the goal of promoting sustainable and inclusive professional growth in society. In this context, this paper focuses on a significant case study: the "DZain Community" (DZC) in Bologna, Italy. The DZC is a dynamic network composed of students, alumni, researchers and professionals related to the design context in the Emilia-Romagna Region. This community was created with the intent to address the specific needs of designers and contribute to the co-construction of identity in the territory and then globally. In the paper, we will examine in detail the operating model of the DZC and its initiatives aimed at promoting sustainability, inclusion and responsibility in design, starting with the experience of co-constructing university spaces where the community came to life during workshop days for the UNIBO Decennial of Design celebrations. The DZC represents a tangible example of how the co-construction of hybrid spaces, relationships, and proximate actions within a design community can contribute significantly to the formation and affirmation of designers' professional identities. Our analysis of the Bologna case study offers a concrete perspective on community co-design strategies in the design context, underscoring the importance of a responsible and inclusive approach to address current challenges in the field.

Unleashing the Future: A Speculative Design Project that Explores the Relationship between Individual and Generative AI through Fictional Scenarios that Apply a Human-centered Mentality

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McKinsey Global Institute's report on the economic potential of generative AI emphasizes the capacity of generative AI to dramatically transform our world and our purpose in society. However, it also calls us to act now to contain the potential of generative AI to upset our lives and livelihoods. The author of this speculative design project seeks to understand the realities of the 'AI race' and its effect on our humanity by developing a speculative scenario where AI experiences human struggles for independence and equality. Thus, the author presents the audience with a human-centered mentality applied to a fictional AI-centered world. The first phase of this project is a fictional social media campaign for an AI-led protest movement on Instagram. It promotes safe and responsible AI practices and opposes unethical training and use of AI. The account shares activist messages generated with publicly-available generative AI models and prompts used to create them. This project widens an accessible and inclusive discourse about the human aspect of new technologies and our responsibilities as their creators.

Edible Futures: Design Activism, Fighting Plant Blindness

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The "Eat Me!" project aims to showcase the abundance of edible plants surrounding us using the plants themselves as a means of communication. Plant blindness, described by Wandersee and Schussler (1999), refers to the tendency of humans to pay little attention to plants in their surroundings and to rank plants lower than animals. This is problematic because we are dependent on plants for our survival. Many wild edible plants are perceived as weeds or simply a green backdrop, which raises an important question: How might we, as communicators, encourage people to care about and actively relate to the plants around them? Through design activism and guerilla communication techniques, the project´s intention is to inspire greater knowledge and understanding of the many uses of edible plants in Norway. Our survey indicates that most people have limited knowledge and understanding of plants but are interested in learning more. The "Eat Me!" project has a series of events aimed at raising awareness of local plants, particularly the richness of edible wild plants. By holding recurring "Eat Me!" events, the project can alter and improve its communication activities from event to event. Analysis so far has uncovered that the combination of activities, taste tests, and the researchers' presence at the events are important factors in raising awareness. The "Eat Me!" project aims to enhance our understanding of people's relationship with plants and to sustain Norwegian plant traditions for the future.

Unveiling Black Feminist Design: Exploring Identity and Creativity in Black Hair Styling

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This paper explores design through the lens of Black feminist perspectives. By examining Black hair styling, this study uncovers profound design lessons embedded within the cultural practices and identity negotiations surrounding Black hair. Central to this analysis is the recognition of Black hair as a site of both oppression and empowerment, where historical legacies of colonialism, racism, and sexism intersect with contemporary struggles for self-determination and visibility. I unpack the ways in which Black women navigate these complexities through creative acts of styling, braiding, and natural hair care, reclaiming agency over their bodies and identities in the process. Furthermore, this study highlights the broader implications of Black feminist design, challenging conventional notions of beauty and aesthetic norms within the design industry. By centering the experiences of Black women, I underscore the importance of intersectionality in design practice, advocating for more inclusive and equitable approaches that honor the diversity of human experiences. Through the use of critical discourse analysis, I interrogate how Black hair serves as a locus for identity construction, self-expression, and resistance against societal norms. By scrutinizing the narratives, symbols, and practices associated with Black hair, I unravel the intricate web of meanings and ideologies that underpin Black women's experiences. This paper offers a nuanced exploration of design, highlighting the transformative potential of Black hair styling as a site of resistance, resilience, and creativity.

Special and Inclusive Pedagogy for an Integrated Design: Co-designing Museum Accessibility Pathways with People with Disabilities

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The recent years have seen a notable evolution in the relationship between museums and communities. This tendency, particularly relying on information and communication technologies, led to an increasing focus on the design of immersive experiences to increase visitors' engagement. However, still to this day, the pursuit of such trajectories does not guarantee all visitors full and equal participation opportunities. Indeed, multiple barriers can impede the physical and cultural accessibility of cultural heritage, especially with reference to people with disabilities. The importance of participation to cultural life, recreation and leisure, emphasized by the UN Convention on the Rights of Persons with Disabilities (2006), remarks the need to address these accessibility challenges through universal design solutions oriented by special and inclusive pedagogy frameworks. Indeed, scientific literature underlines how access to culture is a fundamental right, connected to the self-determination and Quality of Life of people with disabilities. In this context, this contribution illustrates co-design educational experiences of an integrated inclusive museum pathway aimed at enhancing the physical and cultural accessibility of a local museum in the Marche Region. With the direct involvement of people with disability through a participatory methodology, our research group co-designed, developed and tested innovative solutions incorporating multisensory technologies and accessible storytelling to create an inclusive museum experience. The findings of this study provide valuable insights for the development of inclusive design solutions in museum contexts, promoting equal opportunities of participation in social and cultural life.

Design in Society

Designing Good Rebuttals : Supporting Design as a Sociable Process

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This conference embraces a view of design as a sociable process that describes designers as conversationalists, who interact dynamically with a diverse public. Unfortunately, this sociable model of design is challenged by a world in which public discourse is increasingly polarized and divided. "Argumentation" once described an orderly process of providing thoughtful reasons for claims, to promote mutual understanding and respect. But "argumentation" has degenerated into a hostile process, in which adversaries simply shout without listening. When society is divided and polarized, it is much more difficult to advance design as a sociable process. This poster revives the traditional understanding of "constructive argumentation," which can support design as a sociable process. It makes three points: 1) Models of argumentation are, in fact, products of design. By viewing argumentation as a process that we can design, we are able to use principles of design to improve our communication. 2) A critically important feature in the design of constructive argumentation is the "rebuttal," which points out the exceptions to an argument. By critically examining the structure and function of the rebuttal, we can design a more respectful, empathetic form of rebuttal, one that supports collaborative dialogue. 3) It is vital to put this design structure into practice, to give agency to the idea of a well-designed rebuttal. Drawing upon decades of experience in running university-level debates, I give practical examples of how well-designed rebuttals can improve public discourse.

Designing Gender-responsive Models for Community Development: A Study of Women-led Participatory Grassroots Labs in India

Lakshay Talwar, Co-Founder, AeSha Foundation, India

Mainstreaming of gender in policy and development design in developing countries like India has consistently seen complex challenges. As the country prospers economically, leveraging innovative policy and social designs to integrate women from marginalised and vulnerable communities as active agents in the development process has been a struggle. Women often find themselves as passive recipients of gender-linked social welfare schemes, credit facilities for income-generating work, and other public participation activities. While policy tables have extended their space to women as a stakeholder group in consultative roles, the outcomes of such consultations have been far removed from what participatory and human-centred designs can do to be more gender-responsive. This research chronicles a three-year-long journey of attempting a more robust participatory approach in designing women-led grassroots labs in low-income settlements in India. The grassroots lab model keeps women's agency at the core and envisions them as dynamic "solution-makers". It emphasizes principles of co-creation and co-designing to increase women's economic and civic participation in slums and urban villages. This paper presents reflections, dilemmas and insights on what participatory design can do to shape women-led community models with scalable development trajectories.

Design in Society

From Screens to Swatches: Transforming Digital Textiles into Tangible Reality

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Textile swatches historically are important in the design and prototyping of new products for accessories, apparel, footwear, interior and exterior design, and many other areas of design. Originally, creating a textile swatch meant cutting up fabrics or materials into small pieces to be sent to interested parties or provided a reference. While making these swatches is still very important, virtual swathes are now seen as an avenue to pursue prototyping without as much associated waste. With the increasing demand for virtual textiles, the researchers wanted to evaluate and compare large websites that provide digital swatches to users for their virtual designs. The primary focus of this study was to see how simple it was for users to turn their ideas or virtual swatches into physical textiles. To do this, a ranking scale was created, and the researchers evaluated the asset websites, accordingly, based on ease of use. The researchers discovered that there is much room for improvement on these websites. Many of the websites reviewed provided the digital swatch, and occasionally the vendor information. However, it did not give users access to order fabric from the vendors, except for the one brand that had an integrated website. Users still need to contact the vendor directly or go to the vendor's website to order, which could be difficult as not every vendor lists their contact information. The researchers concluded that it would be beneficial for these websites to integrate a method of ordering from the vendors and simplify use.

Enhancing a Sense of Community Through Urban Design: A Case Study of Hilo, Hawaii

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This research investigates the intricate interplay between economic and cultural structures, explicitly focusing on transforming public spaces in Hilo, Hawaii, following its annexation into the United States. The primary aim is to cultivate a sense of community among the city's diverse population by establishing a shared language and strengthening community bonds. Utilizing a comprehensive approach that incorporates both oral and visual documentation for data collection and analysis, the study examines how the Country of Hawaii, originally an isolated settlement, experienced a demographic shift with the arrival of foreign settlers. Selected exemplary public spaces in Hilo showcase dynamic, community-oriented designs that celebrate cultural diversity and encourage adaptability, aiming to foster a sense of community. Findings illuminate the historical transformation of Hawaii, including the decline in the native Hawaiian population and alterations in socio-cultural dynamics, significantly impacting public space structure and usage. Additionally, the study explores cultural dimensions proposed by Hofstede, highlighting behavioural distinctions between Americans and Hawaiians and how national culture influences user behaviour. In conclusion, this research underscores the bidirectional relationship between behaviour and culture, as manifested through urban design, emphasizing the pivotal role of public spaces in fostering a sense of community, nurturing a shared language, and enhancing social cohesion.

Design in Society

Environmental Graphic Design for Social Change: A Visual Revolution

Rozina Vavetsi, Associate Professor, Digital Art and Design, New York Institute of Technology, New York, United States

Environmental Graphic Design (EGD) is a multidisciplinary field that breaks traditional design boundaries by using persuasive visual language integrated into architectural structures and built environments to elicit a response, inspire feelings and convey compelling messages. Through the deployment of captivating visuals and immersive installations, EGD elevates mundane spaces into potent platforms for advocacy, knowledge and community engagement. This study investigates the profound societal impact of EGD and its pivotal role in communicating ideas, raising awareness to diverse audiences, challenging conventional social norms and driving social change on pressing contemporary issues. Using real-world applications and case studies it highlights the transformative influence of EGD as an indispensable ally to kindle inspiration and evoke social reform.

The Poster as a Mechanism for Creative Integrity: Conversations with Contemporary Poster Design Masters

Lisa Winstanley, Assistant Professor, School of Art Design and Media, Nanyang Technological University, Singapore

Through in-depth semi-structured interviews with three contemporary Poster Design Masters, this ongoing study explores the critical societal stimuli influencing their design practice alongside motivations behind their socially driven, culturally relevant, and often unmonetised poster design. The research involves not only a textual analysis via the interviews but also a supporting visual analysis, and by curating a selection of posters from each designer, this study aims to uncover emerging trends, shared influences and the unique qualities and inspiration behind their work. Early observations reveal commonalities in altruism, advocacy, and intangible cultural heritage and offer insights into the challenges faced by Posterists in navigating the tension between personal expression and societal relevance within non-commercial design spaces. The anticipated outcomes extend beyond the initial findings, encompassing a designed, print-based volume documenting the creative processes and critical insights behind the posters, a virtual poster exhibition and photographic documentation of the resulting publication. These outcomes contribute to the graphic design community's understanding of the integrous creative process within poster design, transcending the boundaries of consumerism and commercial advertising.

Visual Design

Scheme and Methodology for Graphic Designer's Conception: Individuality Through Layers and Assembly

Marcos García-Ergüín, Full Time Professor, Audiovisual Communication, University of Burgos, Spain

This poster exposes a methodology questioning digital media and its homogenisation of the image conception, which has absorbed graphic design and the images's construction by a re-mediation of previous procedures (photography, illustration, etc.). We take, therefore, Manuel DeLanda's 'assemblage theory' to show how digital creation takes into account numerical and digital assembly. Then we confront our results to show its application by a system of composition based on layers. Consequently, we expose our methodology and the layer system to provide the creative individuality of designer remaining in digital procedures against the homogeneity of the Internet, software and AI.

Brands of War and Disruption

David Gardener, Student, MA, Northumbria University, Newcastle, United Kingdom

Much has been written over the years, concerning the separate domains of conflict and branding, however, the combination of the two and how one is impacted by the other is rather scarcer, especially from a British perspective. Conflict and the well-documented effects of war can be argued that it had a direct influence on the visual development and positioning of a brand during the Second World War. Furthermore, this can also be aligned to contemporary brand strategy and that of recent events concerning the COVID-19 pandemic that impacted on the world in early 2020-22 and continues to have considerable economic impact. This paper offers insight into how modern-day brands have evolved when referencing and adapting their brand's identity, influenced this time not by wartime conflict, but an equally pernicious global event as the recent COVID-19 pandemic. How have modern-day brands leveraged and adapted their visual persona to reflect their new environment, brands that traditionally are not related to pharmaceutical and healthcare. What circumstances enabled them to change their brand persona and tone of voice?

Culturally-situated Emojis as a Non-verbal Communication Created for Naxi Society, Li Jiang, China

Yun Ji, PhD Student, Academy of Creative Arts and Technologies, University of Malaysia Sabah, Sabah, Malaysia

The Naxi ethnic group is one of the ancient ethnic groups in China with the richest cultural legacy, comparatively the most distinctive cultures, and comparatively the most endangered cultural characteristics. Although there are many culturally distinctive aspects of the Naxi community, most of them are at risk of Sinicization and are currently on the edge of extinction. According to Capella and Palmer(1989), the meta-communicative value of non-verbal cues is higher than verbal cues in receiving information during conversation. As for efficiency, non-verbal signals amount to a more effective way of communicating than verbal signals. Accordingly, emojis as non-verbal signals on the Internet have been dramatically popular globally. This study explores the situation of usage of non-verbal communication within the Naxi community, the habits of members within the Naxi community use emoji to interact online, the reason why creating a new set of emoji for the Naxi community is of great significance based on semi-structured interviews. In this study, exclusive emoji designs for the Naxi community are initially developed. The pictorial properties of emoji can facilitate the acquisition of more Naxi cultural knowledge by the general public, regardless of whether they are in-group or out-group members. In addition to its extraordinary disseminating capacity, akin to a swift vehicle, the Naxi culture can go viral on a global scale. This is the first study on the emoji designed for Naxi culture that contains culturally specific elements such as the Dongba Funerary Scroll, featured costumes for women, etc.

Subject, Material, Tool: A Method for Harnessing the Visual Communication Possibilities of Physical Materials

Anna Jordan, Assistant Professor, College of Art and Design, Rochester Institute of Technology, United States

I am a book cover designer, working with typography as image. I aim to find that perfect point of verbal-visual connection, where the title and how that typography was made reinforce each other. I do this by incorporating image-making techniques that harness the visual communication possibilities of physical materials. Over the past fifteen years, I have developed a unique process to turn physical materials into engaging digital images that I call "Subject, Material, Tool." This process is a structured way to create images in which the materials used to make the images both form and inform the meaning of the typography. "Subject, Material, Tool" is a set of limitations designers can play with in order to get the most image-making possibilities out of any given material. Essentially, it prompts designers to examine each material through three distinct lenses: as a subject, as a raw material, and as a tool. My study demonstrates exactly how "Subject, Material, Tool" works via a series of applied case studies in book cover design. Image-making, the verbal-visual connection, and type as image are topics that have been well researched by colleagues such as Nancy Skolos and Thomas Wedell, Annabelle Gould, Renee Seward, Keetra Dean Dixon, and others. This is for good reason, because finding an ideal verbal-visual connection is one of the biggest challenges designers face. "Subject, Material, Tool" is a new take on image-making process, offering a unique structure and point of view, therefore adding valuable scholarship to this important area of research.

Cosmological Design Principles Reconsidered: Exploiting Cosmological Traits and Pattern Toward Expression and Resiliency

Keelan Kaiser, Professor, Architecture, California Baptist University, California, United States

This paper explores the reintroduction of complexity / pattern systems in the built environment based upon influences found in nature and evidenced in premodern material finishes and cladding. Striving not to merely appropriate, but rather seeking methods for exploring universal genomic, archetypal systems at these scales, the paper analyzes pathways for innovation in new and emerging materials that are synthesized with cosmological traits to reclaim elemental meaning and signification. Precedent studies include expressions in tile, carpentry, plaster, and wall coverings, while future works explore the incorporation of emerging material constructions such as bio-composites, possibly waste related composites.

Enhancing Rotoscoped Animation with Artificial Intelligence: A Proposal for the Use of Enhanced Trackable Shapes and Patterns

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The implementation of artificial intelligence (AI) technology in the field of animation-making has resulted in the development of innovative tools such as Deforum and Mixamo that potentially offer new possibilities and improve the efficiency of animators' workflows. EbSynth (EbS) is another one of these tools that allows users to animate existing footage in the rotoscoped animation technique using just a few styled keyframes. While EbS is not generally classified as an AI application, it utilizes Example-based Synthesis algorithms that can be considered AI-informed according to the broadest definition of the term. Our research goal centers on the use of enhanced trackable patterns and shapes in EBS and their impact on the efficiency and quality of rotoscoped animation. We seek to identify the most effective patterns and shapes for this process while establishing workflow guidelines for EbS users. Adopting a practice-led research approach, we employ our creative practice to generate insights into the effectiveness of trackable patterns and shapes applied to rotoscoped animation using EbS. Our study encompasses male and female models performing various actions, including facial muscle movements and emotions, with a focus on patterns, trackable markers, contours, and character design shapes. Through a series of experiments and iterative analyses, we evaluate the impact of enhanced trackable patterns and shapes on the quality and efficiency of rotoscoped animation. Our findings support the hypothesis that this approach improves the rotoscoping process, offering valuable insights for artists and animators.

Visual Design

Presentation of Design Strategies in the Form of Visual Communication

Onur Mengi, Associate Professor, Vice Dean of Faculty of Fine Arts and Design, Faculty of Fine Arts and Design, Deptartment of Industrial Design, Izmir University of Economics, Turkey

In today's dynamic and visually-driven world, effective design strategies are essential for conveying ideas, solutions, and concepts. From the perspective of design strategies, incorporating visual communication design is a tactical decision that significantly enhances the effectiveness of presentations. It serves not just as an aesthetic choice, but as a strategic tool for clear and impactful communication. In developing a design strategy, the use of visual elements is a deliberate approach to transform complex data into easily digestible and visually engaging formats. This strategic use of visuals is crucial in ensuring that the strategy is accessible and comprehensible to a varied audience. The paper considers the use of visual communication design for innovative product development. It explores the role of visual communication in translating complex design strategies into compelling and accessible formats. From infographics to interactive presentations, the paper focuses on the diverse tools and techniques available to designers to articulate their vision in strategic thinking and research into the political, economic, social and technological contexts of new products, services or systems. The methodology involves analyzing different aspects of communication design, focusing exclusively on the final stages of strategic decision-making. It consists of reviewing student outcomes related to tasks such as planning, creative thinking, research, product and design concept development, presentation skills, and business proposal composition. This analysis presents the evaluation of coursework, assignments, and project submissions to assess the effectiveness of design strategies in these final phases. The results discuss how visual communication design influences strategic decision-making.

Identification of Different Types of Motion Graphics That Can Support English Classroom Education: Effective Design of Motion Graphics For Chinese Primary School English Teaching

Zijun Li, Student, PhD student, Lancaster Institute for the Contemporary Arts, Lancashire, United Kingdom

Motion graphics as part of the course material can encourage learning vocabulary by fostering both an entertaining and informative educational environment in Chinese primary schools. However, there is a gap between course material production and motion graphics design research, which is targeted at Chinese primary school students learning English vocabulary in the classroom. There is limited information on how to design effective motion graphics to support teaching and learning. This ongoing PhD research proposes a set of design guidelines for motion graphics based on the theories of motion graphics application in education and the practical study of complex classroom education. In the first sub-question, there is a difference in the understanding of motion graphics between designers and teachers. Therefore, for designing effective motion graphics for this particular scenario, designers need to know what types of motion graphics are available to meet the needs of use, to make a contribution in this particular classroom environment, and to find out where they can be empowered. This poster presents a three-aspect combined discussion by the author on this sub-question, which includes the aspect of academic terminology, user awareness, and analyses of actual course materials. From this combined discussion, a preliminary summary is drawn on the types of motion graphics that are effective in current classroom education.

Visual Design

The Climate Change Communication Research for Action as a Design Issue

Manuela Maia, Assistant Professor and Researcher, School of Communication, Arts and Creative Industries, ISEC Lisboa, Lisboa, Portugal

Climate change communication studies how individuals and groups develop and share knowledge about climate and the ways they can be moved to act. To make the use of this knowledge viable in communication solutions capable of impacting audiences the applications of this knowledge in the real world rest on three dimensions: ability to associate thoughts, abductive reasoning and creative collaboration. Although there are conditions for effective communication, nevertheless the key connections between scattered pieces, revealed by research, are like a puzzle waiting for a piece that fits together to manage the existing knowledge workflow and identify its priorities. We reflect on the contribution of design to realizing the missing connection based on the nature of design cognition. In design practice, the cognitive resources used to produce meaning in the creation of visual communication solutions are the same used in visual exploration to support the definition of a problem. Design processes are intensive in information and knowledge involved in the definition, configuration and construction of solutions. Starting from scientific knowledge about the climate, for its sharing with different audiences, seeking to produce an impact on the capacity to change behavior, design can configure the image, in its different forms, either as a composition of a message or as a frame of knowledge on climate change usable to trigger action. Eliminating the risk of simplifying knowledge is the biggest challenge in practice context. The opportunity to apply knowledge about climate change communication is an opportunity to achieve impacts that cannot be lost.

Visual Design

Finding Jiang Jian: A Visual Design Project Unfolding the Forgotten Stories of the Mothers' Movement During World War II in China

Jing Zhou, Professor, Art and Design, Monmouth University, New Jersey, United States

This paper presents the motivation, exploration, and growing outcome of the Jiang Jian project—a forgotten heroine who was the "Mother of Wounded Warriors," "Mother of Refugee Children," and "The Chinese Nightingale" during World War II. Through an unexpected journey, this project evolved from a web design initiative to scholarly research. Not only does this project portray Jiang Jian's extraordinary life, but also entails the overlooked Mothers' Movement—a major achievement of the Chinese Women's Movement in the first half of the 20th century, in which Jiang participated—to a broader audience. During its eight years of operation, about 30,000 wartime refugee children were saved and educated in more than 60 Refugee Schools throughout China, Hong Kong, and Southeast Asia organized by the Chinese Wartime Refugee Children's Relief and Education Association (中国战时儿童保育会) supported mainly by donations. Furthermore, the Mothers' Movement in China and the Women's Voluntary Service (WVS) in the UK during World War II have inspired my latest project Cradlr: An Interaction Design for Refugee Children, which is a human-centered digital product and network concept designed to keep displaced children—a vulnerable population without cell phones—connected with their families, resources, and heritage on a global scale. The social impact of the Chinese Mothers' Movement and the WVS in the UK will continuously influence my work in the near future.

Designed Objects

A Case Study on the User Experience, Interaction Design, and Automotive Design of Driverless, Autonomous Vehicles for Las Vegas Smart City Tourism

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The rapid growth of artificial intelligence in the early 2020s has disrupted industries worldwide. These advancements have poised AVs (autonomous vehicles) to revolutionize transportation and smart cities to improve the quality of life in urban areas with unprecedented feasibility. This research explores the potential relationship between these two emerging technologies, in the context of Las Vegas tourism. This research, conducted at the University of Nevada, Las Vegas, proposes designs for AVs in smart cities and synthesizes the best practices from the fields of UX (user experience), HCI (human-computer interaction), HF (Human Factors), and IxDF (Interaction Design). Our methodology incorporates an initial survey, literature review, user storyboards, and user flowcharts. The scope of this research involves designing conceptual UX design prototypes for theoretical UX problems and considers how smart city AV fleets ought to be designed for users. Furthermore, our hypothesis suggests that conceptual service design solutions could be developed to address tourism challenges in Las Vegas smart city AVs. To investigate, this study harmonizes the literature on UX design with modern design thinking methodologies to develop automotive design prototypes, revealing and supporting user preferences for autonomous transportation. Our findings in this case study indicate that UX problems with AVs can be effectively divided and approached as pre-ride, mid-ride, and post-ride stages. Within the context of Las Vegas tourism, our designs take into account traveler expectations, perceptions, and preferences. The proposed design solutions in this study underpin a foundation for empirical studies within various AV design and manufacturing industries.

Consideration of the Aesthetic Value of Design: Somaesthetics and Design Products

Mei-Hsin Chen, Professor, ISSA School of Applied Management and School of Architecture, University of Navarra, Navarra, Spain

Within this discourse, I explore the nuances of aesthetic appreciation within the realm of design. While conventional views often emphasize an external focus, I turn attention to somaesthetics, which focuses on the embodied experience of the appreciator. Through this lens, I propose a holistic framework for understanding how individuals engage with design objects by considering the intricacies of their somatic experiences. By exploring this dual perspective, I provide insights into the dynamics of appreciating design objects by highlighting the importance of the subject's bodily engagement. Drawing on arguments and examples, I illuminate how our understanding of somatic encounters with design products is deeply intertwined with the relational nature of these artifacts. Ultimately, I seek to demonstrate the practical implications of these findings for both design theory and practice, highlighting the transformative potential they hold for enhancing our understanding and application of design principles.

Naturing Fashion: Bio-material Explorations for Textile Development

Derya Irkdas Dogu, Lecturer, Industrial Design, İzmir University of Economics, Turkey

Integrating biodesign processes to explore the potential of biomaterials for novel and sustainable design alternatives for the fashion industry has become an increasingly growing field. Several biodesign methods are used for designing and manufacturing processes either for creating textile surfaces or textile dyeing. Textile surfaces from mycelium and bacterial cellulose are most common types of living systems that are used in the co-creation -design by growth- process of biodesign practices. Textile surfaces act as a second skin and embodies human form and design. What if we could transfer such knowledge from other living systems? Would that challenge our understanding of textiles and reinforce a new dialogue between nature and fashion? This paper tries to find answers to these questions as it presents two biodesign experiments to provide tools for developing bio-based textile materials and surfaces. Methods and processes used for creating these experimental textile materials were based on material behavior and the opportunities and challenges of biomaterials for construction and decomposing properties of textile surfaces. The aim was to imagine a more simplified alternative to high-tech or lab grown methods to produce bio-based textile materials and surfaces. Methods used for material experiments were bio fabrication and crafting. Biofabrication experiment focused on the sustainability aspect of materials, where low-tech production and composting was the main concern. Crafting with organic matter was the second experiment, and the aim was to exclude all biodesign methods and focus on the aesthetics of organic matter to create an interplay of texture, structure and color.

Designed Objects

Substrate Fantasia: Speculative Fabrication of a Co-evolving Future With More-than-humans

Nanyi Jiang, Student, PhD, Cornell University, New York, United States

Substrate Fantasia is a speculative fabulation of a substrate-centered world called Substratocene in 2180 - a transitional era between current Anthropocene towards an ecological utopia. Through a short film, a living mushroom chair and a series of livable sporing suit, the project takes a radical position to use design objects and lifestyles to portray a more-than-human future. Rather than consuming constructed objects, humans use bodies to co-create objects with fungi: human body weight becomes the shape transformer of chair seating area while the mycelium is growing. A new kind of wearable also is also being invented to help transport spores of fungi. This material possibility enables a new social system of sporing via human bodies, representing multispecies co-evolution and entanglement.

Designing Playables: A New Perspective on the Design of Objects for Play

Jesper Falck Legaard, Associate Professor, Design for Play, Designschool Kolding, Denmark

Design has a profound impact on our experiences and interactions. While there are generally acknowledged principles for what constitutes good design, there are also a need for nuances that set objects for play apart from e.g. utilitarian objects. This paper introduces the concept of playables, defined as tangible artifacts intentionally designed to afford wondrous immersion in play, and explores how the qualities of such objects may require differentiations in the principles for good design. Playables are founded on the concept that immersion in play adheres to a state of wonder, meaning that they have a purpose that transcends functionality, and fosters creativity and curiosity in the exploration of the captivating play worlds. The study seeks to draw out the distinctive qualities of playables and clarify the aspects that distinguish them from conventional industrial design. This is done by aligning the characteristics of playables with established design principles, as advocated by e.g. Dieter Rams and Don Norman. Furthermore, the research delves into the profound layers of experiential needs, drawing upon Maslow's hierarchy of needs and Aristotle's four causes, to expose the deeper meaning that playables may offer. To gain further insights, the study also incorporates interviews with toy designers, enabling a comparison of their design approaches with the proposed principles that are essential for the design of playables. Recognizing the need for distinct design perspectives in relation to playables is essential for unfolding the potential of immersive play experiences, igniting a state of wonder.

Designed Objects

Structure and Construction: Investigating Perceptual Space through the Making Process

Laureen Mahler, Doctoral Researcher, School of Arts, Design and Architecture, Aalto University, Finland

The relevance of Gestalt theory to art and design has been well documented, from the primary texts on the Gestalt concept of perception to subsequent works from Arnheim, Gombrich, and Dondis which apply those notions to art, aesthetics, and visual design. Lesser known is Kurt Koffka's 1940 essay on the psychology of art, in which he expands the concept of perceptual space and discusses the role of both creator and observer in the experience of the phenomenal object. The research presented here takes as its basis the examination of perceptual space in the context of designed objects: specifically origami tessellations, which are dynamic, three-dimensional structures created by technical folding (origami sekkei). Making as part of the design process provides a medium for conceptual and literal exploration of perceptual space, in which a dialogic process unfolds between the designer-maker and object. The physical act of folding, unfolding, creasing, and collapsing the paper structure for a tessellation is an immersive, sensory experience that uniquely captures the thoughts and actions involved in practice-led design research. Material itself plays a vital role in this research process, in which object agency and the conversation between designer and material become apparent—concepts originally proposed by Koffka in his aforementioned essay. My research includes multimedia documentation of the making process—video and audio recordings, sketches, photographs, and written diaries—in order to analyze how the mediation of technique and materials provides a unique investigation of perceptual space, yielding insights for both designers and researchers in medium-designated practices.

Reduce, Replace, Recalculate: Analyzing Sustainability Differences between Polymer, Aluminum and Steel Injection Molds and the Parts They Produce

Kiersten Muenchinger, Professor, Product Design, University of Oregon, Oregon, United States

Recent innovations support the production of molds for injection molding through additive manufacturing. Print resolutions are high enough for smooth mold surfaces. Printable resins can withstand the temperature and pressure extremes encountered in the injection molding process. Printing molds can replace cutting molds from solid blocks of steel or aluminum, reducing waste material and the embodied energy of the molds. This study quantifies the environmental impacts of a 3D printed polymer mold, an aluminum mold and a steel mold, and analyzes the aesthetic differences between parts produced. The hypothesis is that a polymer mold has a lower impact than the steel and aluminum molds, and for a short production run, will produce parts that are equally aesthetically appealing.

Metamorphosis in a Box: A Media-driven Approach to Overcoming Entomophagy Resistance in Western Culture

Cecilia Padula, PhD Student, Architecture and Design, Politecnico di Torino, Torino, Italy
Silvia Barbero, Student, PhD Candidate, Productive Systems and Industrial Design, Politecnico di Torino

In the pursuit to foster a more sustainable dietary landscape, this study delves into design strategies addressing cultural resistance to entomophagy in the West. With Gen Z identified as a pivotal demographic influencing the food sector, the research examines the challenges encountered by implemented interventions to enhance insect-based food acceptability including educational programs, cooking workshops, and tastings. To comprehensively understand these, the study conducts a literature review spanning diverse fields such as food science, community and environmental sociology, and economics. The research introduces a Product-Service System (PSS) positioned at the convergence of media ecologies and object orientation. PSS favours media-driven interactions as a food box delivery service, allowing users to customize boxes based on food intolerances and individual and local community taste preferences through an accompanying app. Leveraging media ecologies, the PSS transcends cultural resistance by integrating insect-based ingredients into curated food boxes, fostering a positive and participatory culinary exploration. The app extends this narrative, providing an immersive platform for taste matching, feedback sharing and environmental impact analysis, creating a holistic educational culinary experience. Object orientation is evident in tangible and intangible PSS elements. Food boxes facilitate hands-on exploration with insect-based ingredients, while the app serves as a digital guide through a dynamic food literacy journey. The research supports the integration of media ecologies and object orientation, enhancing the design of interventions for entomophagy acceptability. The proposed PSS reshapes the narrative by promoting domestic culinary exploration and participatory literacy toward sustainable and culturally attuned food choices through engaging user-centred experiences.

A Different World : Contextual Crossings in Design

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Presenting the experience of a design object according to the Heideggerian and Husserlian notions of Intentionality, Reduction, Thingness, and World, generates possibilities within which the relationship between the viewer, the objects themselves and their contextual framework, becomes intensely personal, dynamic and complex. For example, a Ming Dynasty porcelain bowl in a Giovanni Bellini painting of 1529, is first perceived by the viewer as an artefact to be looked at as an 'Old Master' painting with all the theories and preconceptions associated with such a context, the work of art. In fact, the bowl is an item of Chinese Ming dynasty porcelain produced in the fifteenth century for export purposes and intended to be sold to the Persian market for use as a serving bowl, a design object, for a pilaf or stew and therefore originally belonging to the world of equipment. Additionally, the bowl is the first representation of Chinese porcelain in Western painting. By altering presentational context and allowing designed objects to become able to move back and forth between their worlds of fine art, design, temporal location, and equipment, the possibility of defining relationships between viewer, artefact and context becomes increasingly problematic. This paper explores how the presentation of objects with a phenomenological contexture may be adopted to unlock previously unexplored histories within designed objects.

Neo-craft as a Response to the Relationship between Tradition and Innovation

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Esteve Sendra Chele, Professor, Universitat Politècnica de València

Based on the previous experiences at the end of the twentieth century, there is an important development between 2008, when the economic crisis poses new ways of understanding the craft with young initiatives, and 2014 with the consolidation of these new businesses. The artisanal format or the activity of novice artisans, bring interesting innovations in spaces where the comfort of tradition (represented by those who promote technique for technique's sake) or the industrial production model (characterized by massive standardization), do not respond to contemporary reality. These innovations appear, thanks to these neo-crafts, from a collaborative context, from new business models, from circular projects, from an approach to luxury or premier brands, from the relationship with the art market or from new technologies. Our experience, both with the design students at the educational level since 2012, and with the work developed at the Craft Chair since 2022, show that these transformations are taking place.

Architectonic, Spatial, and Environmental Design

Planning Parks and Natural Spaces for Inclusive Elderly Engagement with Companion Animals

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The aging population has been growing over the years, leading to the need to create environments that contribute to healthy aging. With the increasing value placed on pets in society, it is expected that a growing number of elderly individuals will own a pet. Living with pets brings physical, psychological, and cognitive benefits to the elderly and may indirectly contribute to cognitive reserve. Cognitive reserve can be understood as a set of cognitive resources that an individual can acquire over their lifetime, potentially delaying declines caused by healthy aging, brain damage from dementia, and slowing the progression of neurodegenerative diseases. Specifically, dog ownership is more frequently associated with these benefits. Elderly individuals who own dogs have fewer chronic diseases and greater functional capacity, and dogs seem to encourage the elderly to engage in the habit of walking. This association may be due to the dog walking. Therefore, it is crucial to include accessible squares, parks, and sidewalks in urban planning, allowing the elderly to enjoy walks with their dogs. Thus, the aim of this study is to propose spaces that facilitate dog walking, promoting social interactions and contributing to a more inclusive and healthy aging process, prolonging the autonomy and independence of the elderly.

The Gifts of Time, Space, and Attention: Advocating for Biodiversity through Participatory Design, Speculative Scenarios, Performative Drawing, and Foraging

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According to the US Northeast Climate Adaptation Science Center, the climate change will exacerbate invasive plants spread northward. Coincidentally, the projected future hotspot of invasive plants abundance is predicted to center in Mid-Atlantic Region of the US, specifically Maryland/Pennsylvania border – author's current home. This workshop consists of provocations, speculative objects, and if time/ space allows bodystorming (somatic exercises), nature walk/scavenger hunt and a tree witnessing meditation. In the world with novel ecosystem (plants, insects, and animals, that created a patchwork of food webs after human-made disturbance), a new daily rituals and practices can engage people in ways to heal themselves, the land, and its non-human inhabitants. Activities and instructions will address multiple ways people can adopt to the hypothetical world where daily life will include everyone's participation in the monitoring, preventing the spread, and managing impacts of ever-growing number of invading plants. After the bodystorming provocation, participants will be asked to use the methods of biomimicry to linger in the questions about introduced invasive plants, their adaptation to new environments, and people's anxiety around nature. The goal of the workshop is to create a collection of the hypothetical objects/ concepts in the form of small sketches that will be added to the display and will engage visitors in the participatory activity for the remainder of the conference.

Temporal Interventions and Layered Memories: Exploring Alternative Futures in Architecture through Spatial Cuts

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Every encounter reshapes our perception of the constructed environment, much like the way memories are altered with each recollection. Each time a memory is reframed, it transforms visions of the past, present and future. Thus, this research analyzes various spatial cuts that could reframe urban narratives, acting as memory rifts unfolding in time. These spatial cuts expose, wrap, conceal, fragment inside-out relations, revealing other ways of repairing and remaking in-between remembering and forgetting, preserving and destructing, monument and ruin. In this context, five examples are selected for examination, spanning different disciplines and scales: SuperStudio's Restoration of Historical Centers (cut1), Rachel Whiteread's House (cut2), Gordon Matta-Clark's Splitting (cut3), Christo Jeanne-Claude's Arc de Triomphe (cut4), Yeesookyung's Translated Vase (cut5). Although these practices have tactical and operational differences, they create critical alternative approaches to ongoing demolitions and renewals, revealing creative, critical, affirmative possibilities in the act of remembering. Examining examples from various disciplines, it can be said that spatial cuts afford diverse temporal and action-oriented possibilities in architecture, potentially transforming meta-narratives into everyday stories. The intervention of spatial cuts as memory rifts in urban space can contribute to a temporal and layered understanding, holding the potential to fill in missing information and reframe the future by attaching differences.

On Energy and Alternative Small Infrastructures

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This paper presents alternative proposals for the energy sector in Lebanon, through the work of an architecture course that intersects visualization, design advocacy, and speculative design. The work centers around the potential of small-scale hybrid architectural interventions to incorporate infrastructural services with lower environmental impact, while prioritizing community needs. The fuel-based energy sector in Lebanon is a notorious example of a highly corrupted and inefficient infrastructure that, to this day, remains largely inoperative. Degraded after years of civil war, political cronyism and corruption, the sector's public energy supply has been replaced by a huge network of private generators, controlled through political exploitation and monopolies. Today, with the economic collapse the country is living, it is clear that the energy sector, which strains the government budget with the biggest losses, must be tackled first prior to any other anti-corruption strategy or economic plan. The possibility of change and growth in this sector is great where investing in new energy approaches and efficient infrastructure, can result in a positive ripple effect for the recovery of the local economy. Taking this as a main premise, this study shows how the energy sector in Lebanon can become an opportunity for change, when coupled with other spatial and communal needs. With potential advancements in sectors such as solar and wind power, hydropower, and bio-fuel energy production, a diverse network of small-scale spatial infrastructures can be a powerful mechanism to provide renewable energy, while addressing the scales and needs of the community and the environment.

Form Follows Fiber - a Case Study for a Low-Carbon Bioplastic Chair: Prototyping Methods for Greener Manufacturing

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Since the industrial revolution, manufacturing practices have prioritized speed and the financial bottom line, rather than the health of the environment and its inhabitants. Industry's over-extraction of natural resources, open-loop production models, and the reliance on fossil fuels have led to skyrocketing carbon emissions and the proliferation of toxic waste. A selective transition to bioplastics presents significant opportunities for curbing emissions and landfill loads. Bioplastics are derived from renewable resources, rather than petroleum, and break down into soil components and water. When blended with crop fiber, an abundant waste product of agriculture, they make resilient composites that can displace the plastics and monoculture lumber in engineered timber. Historically, the chair has been the platform to experiment with new means of production in a discourse over emerging technologies and novel materials. In this case study, an ergonomic task chair is built from scratch using experimental biomaterials and digital prototyping methods. It is free from petroleum ingredients, made from 100% renewable materials, completely compostable, and has a fraction of the footprint of conventional competitors. This showcase features samples of the Chair and a presentation of its prototyping and methods of manufacture. I share lessons learned sourcing, processing, and molding the ingredients, results from early sample testing and life cycle assessments, and applications for where this practice can go in the future.

The Transformational Technique of Fragments: The Design Language of Renovations beyond Eclecticism

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In this paper, a design technique of fragmentation is discussed in relation to the current phenomenon of architectural renovations. There are growing numbers of building renovation projects by merging diverse formal languages in urban areas. This paper specifically questions the transformed qualities of form and meaning by representing a formal language next to one another. The narrative is based on a series of design research projects focused on the recomposition or reconfiguration of forms and meanings in the premise of creating a new. Looking closely, today's renovation projects often seem to carry on the previous forms and meanings under the outward expression of transforming old buildings. The synthesizing technique of fragments increases the capacities of architectural design by continuing and transforming the legacy of architectural form and meaning at the same time. This paper situates the main argument of fragmentation technique in a couple of postmodern design theories from the 1960s to the 80s. Today's transformations in the building renovation projects often show unusual qualities in form and meaning similar to the postmodern architectures. However, today's renovation languages are much more subtle than their predecessors' languages which are neither direct collages nor simple eclecticisms. Although complex and difficult to grasp at a glance, today's transformations from fragments look more rational or reasonable than the conventional formal languages.

Changing Places: Using the Transformative Power of Art to Change People's Experience and Use of Public Spaces

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The efficacy of strategies to improve perceived safety in public spaces will depend on a strong understanding of how women and girls use public spaces and how they perceive and experience personal safety in public. To address these outcomes public policy and planning strategies need to optimise perceptions of personal safety; increase accessibility and activation of public spaces and promote feelings of belonging and inclusivity for safe use at any time. Changing Places is a transdisciplinary design collaboration led by the Future Arts, Science and Technology Lab working with the NSW State Government in Australia. It aims to generate improved understanding of women and girls perceived or real lack of safety in urban and rural public spaces through play, using the transformative power of art to change people's experience and use of public spaces. Changing Places is an iterative process that involves different custodians of place, together with procured digital media artists and technologists, and women and girl authors in the creation and deployment of a range of digital media interactive experiences. Each of these are calibrated to the local place-based characteristics whilst remaining true to the experiences and feelings of safety of women and girls.

Architectonic, Spatial, and Environmental Design

Dalma Isle Unveiled: Revealing Architecture through Visual Deconstruction

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The design and research project delves into the heritage of the United Arab Emirates, specifically focusing on the architecture of Dalma Island situated on the western coast. Inhabited for over 7,000 years, Dalma Island holds a significant place in history as one of the Arabian Gulf's foremost pearl-diving centers. The island boasts a collection of some of the oldest buildings in the UAE, spanning the modern heritage period, characterized by their resplendent beauty and intricate details in textures, front doors, door aisles, window designs, and overall architectural structures. The primary objective of this proposed project is to immortalize and document a selection of architecturally distinguished examples from the local neighborhoods on Dalma Island through the medium of digital photography. Subsequently, the plan is to employ visual deconstruction and collage techniques to craft design and art pieces that explore the visual elements of these architectural systems. The project's foundation draws inspiration from the theoretical concept of visually deconstructing structural systems. As a mode of representation, the deconstruction method scrutinizes the arrangement and composition of distinct elements within a system, thereby creating diverse classification structures that highlight various functions through the resultant imagery engendered in my creative endeavor. The creative segment of the project, is created utilizing digital media, aided by visual manipulation software in conjunction with applied art techniques. The photographs sourced from Dalma Island undergo digital deconstruction during the post-production phase, subsequently finding their place on canvas through the utilization of collage techniques.

Exploring Local Circular Design Strategies for the 9Rs of Circular Economy in Turkey: Insights from Designers' Perspectives

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This research explores the potential ways of integrating the 9Rs of the Circular Economy (Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recover, Recycle, and Rethink) within Turkey's design practices. The circular economy promotes resource optimization and waste reduction by encouraging the reuse and recycling of products and materials, a pivotal concept for sustainable growth. As a developing nation, Turkey navigates the dual challenge of financial constraints and the opportunity presented by its rich tapestry of traditional practices that resonate with circular principles. While developed countries, endowed with extensive resources, grapple with shifting from linear consumption models to the circular economy, this research explores Turkey's potential to integrate circular design into its developmental framework. The research explores ways of aligning circular design principles with real-world practices and to propose sustainable local/global approaches for Turkey by taking advantage of the valuable perspectives of local designers at various stages of the product life cycle. While foundational understanding is sourced from existing literature on circular economy and its potential adoption in developing countries, the core emphasis lies on primary data collection through discussions with designers, particularly within the context of Turkey. Participatory workshops and design charrettes tailored for designers would foster knowledge exchange on the 9Rs' application in design by providing a holistic understanding of the landscape. Ultimately, this proposal offers insights into the evolving practice of circular design in Turkey, aspiring to contribute to the broader dialogue on sustainable development in a global context, serving policymakers, businesses, and communities alike.

Linear till Proven Circular: Wicked Challenges in Construction Practice

Bob Geldermans, Assistant Professor, Faculty of Design Sciences, University of Antwerp, Belgium

'Circularity' is increasingly present in architecture and design education. But also in policy documents, tenders, competitions and debates on housing and construction practice. One of the main recurring questions is: (how) can actors remain aligned throughout design, production, construction, operation and disassembly stages of buildings and building components? Diverging perspectives and interests, together with availability and affordability of materials, knowledge, data and other resources will weight heavily on decision-making processes. In the face of ecological challenges there is no room for stalling or conflicting strategies. The alignment of decision-making processes throughout the supply and (re)use value chain necessitates a concerted tour de force: both in the development and in the adoption of innovations. This socio-technological conundrum challenges existing priorities in practice as well as in research and education. In this workshop, we focus on discrepancies between intended design concepts and the – in many cases sobering – reality during construction, operation and disposal stages. Next to case-studies from the Netherlands and Belgiums, introduced by the workshop leader, participants bring in their own cases. By means of a 'Circular Design & Implementation Matrix', the ins and outs of selected cases are discussed.

Adaptive Facade for High-performance Tall Building Design

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The substantial surface area of façades in high-rise buildings presents a unique opportunity for significant energy savings. Studies indicate that employing innovative building envelope systems, particularly Adaptive Façades (AF), can result in substantial reductions ranging from 20% to 50% in total energy consumption. This statistic underscores the immense potential these systems hold in transforming the energy efficiency landscape of high-rise structures. However, despite the growing interest and recognition of Adaptive Façades as a promising solution, evaluating their precise impact on energy performance remains a challenge. The complexity of these systems, which dynamically respond to varying environmental conditions, adds layers of intricacy to the assessment process. Traditional evaluation methods often fall short in capturing the nuanced dynamics of AF, leaving a gap in our understanding of their true energy-saving capabilities. In this pursuit, the research meticulously examines different AF technologies, such as electrochromic windows, thermochromic materials, and kinetic shading systems. By analyzing these variants, the paper seeks to elucidate how each type uniquely influences the building's energy consumption patterns and, concurrently, enhances the comfort levels of its occupants. Understanding the interplay between these technologies and their effects on both energy efficiency and user satisfaction is crucial for devising effective strategies in sustainable architectural design. Ultimately, this endeavor not only advances the understanding of AF systems but also paves the way for their optimal integration, ensuring buildings are not only energy-efficient but also conducive to the well-being of their inhabitants.

Architectonic, Spatial, and Environmental Design

What's Old Is New: the Study of Transformative Potential of Suburban Malls: A Methodology for Adaptive Reuse in the Case Big Box Retail Environments

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In recent years the adaptive reuse debate has seen a growing interest in emerging theories in which the concept of potential plays an essential role. This research focuses on highlighting transformative patterns within adaptive reuse practices and addresses the concept of potential in the dynamic of building transformation. It examines the adaptive reuse possibilities for the big box stores and malls in terms of economic, social, architectural, and environmental impact and their 'transformative potential'. According to Credit Suisse estimates, between 20–25% of existing malls will close between 2022-2025, and developers around the world are looking for ways to reposition these underperforming assets. In many cases, these abandoned big box stores and malls did have a historic impact on their communities. Many of these buildings represent a time of economic growth and provide for the community with local taxes, jobs, and opportunities for small business development. They also became large social hubs and shaped how the community physically developed and grew. The vacant space is a blemish on the community both economically and physically and the effort to repurpose the space and to reinvest into it to help the community grow and strengthen the identity of the area has become even more important. This study proposes a conceptual framework specifically for decision-makers linked to the adaptive reuse of shopping malls. Through the methodological approach that includes multiple case studies, this research analyzes effectively adapted buildings to test the "transformative potential" as a relationship between matter and space in a specific time.

CoForum and the Chapel of Many : De-Sign and the Role of Radical Craft in the Public Realm

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De-Sign: to avert the use of signs; to erase the creators signature; to embrace ambiguity. The kinematic, ambiguous, crafted object, placed into the hands of the public, is an act of trust that is reciprocated by those who interact with the structure and each other. The care with which the structure is crafted, stimulates an equal response of care. The public realm is re-invented as one of responsive respect, rather than robust anonymity. Traversing the scale between furniture and building, reconciling the hand-constructed artefact, at human scale, with the built environment. We explore this direct line between natural material, hand assemblage and the architectural building, which facilitates the direct agency of the individual as a co-curator, not only in the constructed space but also in the object production.

Cultivating Ecological Citizenship - Transformative Design for Sustainable Communities: Exploring Place-Based Approaches, Creative Practices, and Community Engagement in the Pursuit of a Resilient Future

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Our roles as citizens within our communities can sometimes be unknown and raises questions about our collective efforts. Are we doing the right thing to promote sustainable change and empowering the next generation with resilience? Humanity faces serious challenges in the coming decades: climate change, biodiversity loss, growing inequality, and more. In their current form, our systems seem to incentivise overconsumption, degrade communal bonds, and destroy natural wealth. The message is clear, we can use spaces within our communities better to become better citizens and help ecology thrive for future generations. We can do more to embed and encourage proactive change in our communities by using spaces and materials in a better way through thoughtful design. The researchers in this project believe that place-based approaches and community engagement around the theme of sustainability and ecology, can enable a growing network of ecological citizens. In this paper we explore how through creative practices, the sharing of ideas and thoughts, learning from best practices at a local, national, and international level from a variety of partners can create sustenance for a community-based network, which has the potential to include children and young people in the decision-making process. We consider how examples with embedded creative practice, such as community growers/larders/kitchens and forest schools support partnership working within place-based projects. We show how diverse groups of people can begin to make impactful change through community-focused approaches and community-led practices, activism and collective learning, advocacy, and design thinking in projects.

Urban Mobility Design Policies for Inclusive European Cities

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Urbanization is currently one of the most important global trends of the 21st century. Urban environments, infrastructures, facilities and services, depending on how they are planned and built, can impede or enable access, participation and inclusion of members of society. Decisions about place design, planning and management can enhance or restrict a sense of belonging policies. The research questions are: Can they increase or reduce feelings of security, stretch or limit boundaries, promote or reduce mobility, and improve or damage health? Can they remove real and imagined barriers between communities and foster understanding and generosity of spirit? The research core is that accessibility has improved over the last decade, and planning policy has shifted, with investment providing new facilities to once-excluded communities. The fact remains that poor and disadvantaged people are far more likely to live in poor-quality environments. Social, cultural and economic inequalities are still being built into new places, and planners and designers need to examine the impact of their decisions. The methodology is the literature review of EU design regulations.

Incubator Services of Urban Circular Economies

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Cities can be seen as a source of services, supply chains and processes where numerous business models and products are developed, which can be controlled and rethought from the circular economy point of view. The focus is on two main targets, citizens and companies, as two major entities who play a key role within the urban ecosystem, activating different dynamics and strategies. This paper examines the C-city PON METRO research, based on European Urban Agenda funds for the cohesion recovery provided within the Next Generation EU and defined in the Italian portion of ReactEU. The city is conceived as an energy catalyst, the project aims to address the circular economy through three macro-processes: eco-design, long-use and reuse. The first output is the Circular Desk: a digital service and an incubator of circular economy actions, which aims to connect agencies and companies. A place where arrange meetings between demand and supply of solutions and practices to drive circular economy strategies. The exchange is the element on which the second action realised within C-city also works: with the creation of the new reuse and repair centre, a former abandoned market transformed into a new function for the neighborhood. In this centre users can exchange goods, bringing objects they no longer need and giving them a second chance. In this centre, the intangible exchange of knowledge and know-how is also practised through workshops, meetings and repair space registered as the first Repair Café.

The Power of Change to Go Green: Renovating School Buildings to Promote the Sustainable Culture in Taiwan

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The concept of "Green School" has become one of the solutions for the ever-more serious environmental issues. "Green School" being a viable solution is because schools can model best practices for energy efficiency and sustainable design, and can teach students, staff and faculty the sciences behind the concepts and encourage them to also carry those concepts as sustainability culture forward into their own lives and those of future generations. Schools are not only great places for educating, practicing, and demonstrating the culture of sustainability, but they can also provide healthy, applicable, efficient and environmentally friendly spaces for teachers and students in their daily lives. As the sciences behind the Green School concepts are applied and taught, the health and wellbeing benefits are experienced first-hand, with students, staff and faculty as the primary beneficiaries. The goal of this renovating for sustainability thesis project is to establish a set of guidelines for Green School design, by creating a flexible, comprehensive, and universal design system tailored to the unique conditions, culture and climate of Taiwan. The guidelines will be used to redesign one of the school buildings in Taiwan to promote the Green School concept and sustainable development. Also, the design will be utilized as a lead for local community to promote sustainable culture and develop the interdependent relationship between conservation efforts and environmental education.

Designing for Complex Change: Lessons Learned from Designing the World's First Regenerative Farming Certification Approved by the USPTO

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Twelve years into the development and six years into the launch of what became the World's first Regenerative Farm Certification approved by the US Patent and Trademark Office, there have been a lot of lessons learned about creating change within the many systems such a program operates within. A program like this holds a lot of potential in reversing climate change by empowering customers to purchase regeneratively grown products and supporting Permaculturists on their farms. The various forms of Regenerative Agriculture and Permaculture practices have been identified by Drawdown.org as the best strategies to begin to reverse climate change in 30 years. However, little did we know that such a system would come with so many challenges, perils, and opportunities. It ultimately went on to have expanding impact by inspiring people and organizations that have gone on and influenced industries to work on developing such ideas. In retrospect, though, is this the result we want or do we need to continue to fine-tune the proposal? This is a snapshot of what we learned when we looked to change systems that are inherently built upon large energy footprints, consumption and relative simplicity and try to align it with the most highly efficient, complex system on earth, nature. However the results are now stepping stones for new transitional models that can help move us towards a post-carbon world. A world that balances ecological needs and societal needs in an energy-transitioning world.

Shifting Formats: Representation of Light in Spatial Design

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This paper proposes an exploration of formats in spatial design contexts for expressing and representing light. Lighting design demands careful reflection of architectural tectonics, materiality, texture and loci of each architectural composition in relation to the consequential perception of the lit space. The study provides insights into design studio pedagogy to support the advancement of representational tools for engaging with light and communicating lighting effects in architectural settings. Through this lens, the research focuses on the learning methods and outcomes of groups of design student participants. Emerging dialogues and visualisations challenged the representation and communication of lit atmosphere through critical investigation of; the rationale for dimensional shifts between formats in architectural visual expression (2D – 3D – 2D), translation of meaning between formats and boundaries of perception and imagination defined by the selected format. Students explored both digital and hand tools to express light, journeying from hand-drawn charcoal renders to AI prompts, moving between 2-dimensional and 3-dimensional representations. As a visual narrative, this study aims to support designers and educators in reimagining design outcomes by examining the dimensional shift between each format and tool. Through shifting formats, the participants had to re-evaluate their ideas and renew their position of passive observer to immersed occupant as they worked between modes. This study highlights that the exploration of format in expression and communication of ideas has value to the designer, by inviting critical thinking and provoking design thinking out of familiar territories and beyond our assumed boundaries.

Geobacter Microbial Fuel Cells for IoT System Support: Microbial Fuel Cells in Marine, River and Coastal Environments

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The research focuses on the aquatic, marine, and coastal landscape, where through the use of "Geobacter Sulfurreducens" microorganisms[1] found in lagoon and marsh sediments, it is possible to produce electricity through a determined Microbial Fuel Cell system. Such electrolytic capabilities offer a twofold result, firstly in the production of renewable energy from organic substances (particularly iron oxide), and secondly in the bioremediation of water. Analysis and field testing have aimed at the development of a regenerative system for marine renewable energy production. The paper is divided into an introductory part in which the energies involved in the project, the bioelectrochemical principles behind the operation of a MFC (Microbial Fuel Cell) and an MFC in an open environment are explained. In addition, the introductory part explains the characteristics of geobacteria and the various places where they can be found, with a focus on the structures studied so far. Then experimentation is addressed focusing on service design, public sector, IoT, and sensing and then conclusions are drawn and the real possibilities of application in different scenarios related to aquatic and coastal scenarios. The research project uses in part the methodologies of biomimesis and bio-inspired design that start from the understanding that biological systems are like databases of sustainable design solutions and innovations (Benyus, 2002; Langella, 2007) that can be used in flood monitoring and forecasting. These, enabled by IoT, combine AI, IoT and big data for advanced flood analytical research (Negi, Harendra Singh et al., 2020).

Architectonic, Spatial, and Environmental Design

A Sensory Exploration of Green and Sustainable Community Living: Exploring Intentional Communities through Sensory Ethnography

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In recent years, intentional communities have gained popularity as an alternative to the fast-paced and often unsustainable lifestyle of industrialized cities. These communities are built around a shared set of values and have organizational principles, which often include a deep appreciation, sometimes spiritual in expression, for the natural environment and a desire to live in harmony with it. However, the ways in which these communities self-govern and embody these values are not well explored nor understood. In this research and through case studies adopting sensory ethnology, and with reference to the work of Sarah Pink, I explore the foundational ideas of such intentional communities across the world, including amongst others: Findhorn, and the Earthship community of New Mexico. Visiting a variety of intentional communities and observing how members interact with their built and natural environments and each other, paying particular attention to how they use their senses to navigate and make sense of their surroundings I explore a shared sensibility. Through this research, I elaborate on a deeper understanding of how intentional communities govern themselves in relation to different values and how these values manifest in the designed and built environment. I examine the glue that holds the communities together. This research has the potential to shed new light on the ways in which humans can create more sustainable and fulfilling ways of living together and hold we can design in recognition of new sensibilities.

Design Management and Professional Practice

Integration of Social Constructionism in a Design Thinking Toolkit: Advancing Transformative Applied Research

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Practice-based research conducted by at universities of applied sciences can take multiple forms and adhere to a variety of research paradigms. Although the official requirements, dedicated effort and competence development in doing applied research changes yearly, many degrees still necessitate some type of research attitude and products. More often than not, it seems that these programs teach and assess as if there is only one reality that students need to grasp, operationalize into a research instrument, report findings as objective as possible and discuss them in the light of earlier reviewed literature. Variations to this research paradigm elsewhere in a degree program may result in confused students and sound preparations for their final research product, for example a bachelor thesis. Applied research can (also) be, however, more creative, transformative and innovative, especially when integrated with design thinking. In our innovation studio, we guide students in design thinking. Whilst doing so, students in various steps develop their research competence. To explain students how, why, when and where they actually work on research skills whilst doing design thinking, we use a social constructionism paradigm. The design thinking toolkit that has been created for and used by students in their project processes explicitly address the research involved and how it differs from more traditional approaches in applied research as performed by university of applied sciences students. Social constructionism therefore allows design practitioners to use the research of others as well as acting as researchers themselves.

The Future of Fashion Communication Strategies in the Age of Visual Rhetorics and Digital Transformations

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Over the years, the landscape of product marketing has dramatically shifted, owing to advancements in technology and communication. Gone are the days when products were simply placed on shelves and advertised on billboards. Today, fashion brands rely on visual rhetorics and symbolic representations to connect with their audience. Emotions have evolved into a currency in our increasingly digital world, and fashion brands are leveraging this development to draw customers from various socioeconomic backgrounds. These brands appeal to consumers' deep-seated needs to feel loved, acknowledged, understood, and seen by leveraging smart visual presentation techniques. This study seeks to delve into the trending fashion communication strategies and propose innovative techniques for consumer engagement through visual communication in the digital transformation era. By analyzing the evolving trends in the industry, the research provides valuable insights into the most effective methods for brands to captivate their audience and drive sales.

A Zeitgeist Theory of Appearance and Dress

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This paper explores a Zeitgeist (spirit of the times that pervades the ideas, attitudes, and feelings of a particular society in a specific historical period), a view of history of theory in the context of appearance and dress. It also examines the role of such situational factors as economics, technology, culture, tradition, gender, and religion. In any historical study literary texts should be interpreted within the appropriate historical context, especially analyzing attire and dress. In bygone times, raiment is a form of imitation and therefore of social equalization, however, as societies changed over the centuries, economically, politically and spiritually, psychologically, and ideologically, the emergence of parallel theories were also evidenced. Most importantly, those theories are varied in accordance with the historical eras or centuries. The last millennium has been shaped by successive waves of change, with the leading drivers. Also, each century, especially between 1400-1900, with brief transitional periods between, produced its own unique style/fashion, which was symbolic to that particular era. Men and women dress themselves in accordance with the dictates of that great unknown, the Spirit of the Time, or Zeitgeist, everything in the world was in constant motion: every individual life, nature, history, society. This results in each epoch having its own particular zeitgeist, or general spirit. One historic epoch is not randomly followed by another; instead, there is a principle of logical evolution, the general trend of thought, feeling, or tastes characteristic of a particular period of time, which therefore, must be understood and interpreted accordingly.

Notions of the EU Ecolabel in the Danish Furniture Industry: Co-creating with the Business and Design Students and the Industry

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This paper explores the process of co-creating a set of guidelines for the EU Ecolabel for furniture, together with stakeholders from small and medium sized furniture companies and students from the master's program Strategic Design & Entrepreneurship at the Royal Danish Academy, Copenhagen. The study is a qualitative and ethnographic study of the stakeholders and the notions of the understanding of the EU Ecolabel and sustainability, and business models associated with them. The activities that were studied happened in fall 2023. The paper uses concepts and methodologies from Actor Network Theory, Circular Economy and Design Thinking. The research presented is part of a bigger PhD study, 'Circular Economy in the Danish Furniture Industry'. The core findings highlight the notions of certification amongst the stakeholders and how the process required to attain these licenses affects the small and medium sized companies. It also sheds light on the struggles, dilemmas and hurdles faced by small brands and young designers on their journey to become more sustainable and circular. This paper addresses a discussion of the relationship between a design business owner and certifications like the EU Ecolabel and the bureaucracies that come along with the pursuit of it.

Markets as Catalysts for Design Evolution: Navigating Dynamic Consumer Landscapes

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The current design environment is distinguished by its dynamic and swiftly evolving marketplaces. This abstract examines the interdependent connection between markets and the evolution of design, investigating how designers are compelled to adjust and create due to changing customer tastes, the emergence of new technology, and worldwide trends. This study examines the influence of market-driven pressures on designers, prompting them to explore novel materials, forms, and narratives. Consequently, they create products that not only capture the spirit of the times but also effectively respond to urgent market demands. Through the examination of case examples that illustrate how design adapts to market demands, this abstract emphasizes the significance of being attentive to the market, having foresight, and possessing strategic agility in order to drive the evolution of design and sustain its relevance within a constantly evolving consumer environment.

Design for Circular Manufacturing: Common Knowledge for Made in Italy and Sustainability in European Waste Management Frameworks

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Designing and manufacturing with circular materials is still a major challenge, despite various waste exchange platforms and LCA tools. The present research aims at providing advanced digital tools for the extremely fragmented supply chains of Made in Italy industries, exploring how designers may transform practices by leveraging on local waste streams, with a greater awareness of availability and impact. More specifically, by addressing the need for sustainability in production and design, this contribution focuses on establishing a link between Italian production codification (ATECO) and European Waste Catalogue classification (EWC). Understanding these relations is crucial for providing designers with the necessary quantity and quality of relevant information on possible circular alternatives. Through the data collected via web, the research identified those EWC codes that are potentially related to regional producers, distinguishing those that are responsible to collect and process waste materials and those who are responsible for its production. These stakeholders were then interviewed to determine the effectiveness of this relation. Following a Qualitative Analysis of the responses, the Research provides initial insights on the common knowledge base producers and manufacturers have about waste management within the Made in Italy production chain. Results will be ultimately used to facilitate the exchange of relevant information, as well as the construction of a widespread and scalable network for stakeholders related to production of products and transformation of waste materials.

Strategic Design and Transformation towards Sustainability: Analysis of Strategic Design Methodologies with a Focus on Sustainability, for the Development of a Model Adapted to the Reality of Organizations and Communities

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In the current context of ecological and social crisis, work is being carried out under the brand of Monnou, which applies strategic design focusing on transformation towards sustainability with organizations and communities. The various organizations include, among others, technological institutes, public entities, associations, companies and enterprises. The communities include people involved in some way in the learning and implementation of sustainability, including university students, people with entrepreneurial ideas, or design professionals. In response to this context, a variety of strategic design models and methodologies have emerged and continue to emerge (Abratt, R. & Kleyn, N. 2023; Andersen et al. 2023; Lutz, 2022; Baldasarre et al., 2020; Calabretta et al., 2016; Fabrizio, 2014). On the other hand, during Monnou's work, a methodology of its own is being developed and implemented. However, despite the emergence of new models and methodologies focused on sustainability, and the practical work described, some barriers to real transformation towards sustainability are identified (Godelnik, 2021). The central issue of this research is the analysis of existing models and methodologies, including the emerging Monnou methodology, developing a synthesis of their strengths and limitations. This research serves to develop a first model that leverages these strengths and overcomes the limitations. Designers, consultants, design educators, as well as people in leadership and management positions in organizations, will have knowledge and tools available to make their work a transformational activity towards sustainability.

Designing in the Digitally Mature Museum: Refocusing Design from Technology to Human Practice

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How museums see digital has changed and, as a result, museum design practices have changed. Digital transformation asks museum to deal with more complex, entangled problems acknowledging digital, physical, organisational dimensions as well as the strategic objectives. Human-centred design (design thinking) is a powerful practice to respond effectively to changing realities. It is not just the fashion for organisations but it has become a crucial way of thinking and a skill within the organizational working culture of museums nowadays. This paper considers the role of human-centred design practice and mindsets WITHIN museums to foster innovative practices for digital transformation. We share theoretical insight and best-practices emerged from two, mutually informed projects. A book for a Routledge titled "Museum and Design Practices: A New Critical Conversation" (part of the book series "Critical Digital", edited by Professors Vince Dziekan and Ross Parry) and major AHRC-funded project (£250k) title "Designing in the Digitally Mature Museum: Refocusing Design From Technology To Human Practice." Drawing from real-world museum practice (15 case studies in the UK), my research aims to advance our understanding of human-centred design practices, mindsets, and organisational design culture within museums that are moving toward a digitally mature condition. Human- Centered Design promotes a creative and explorative culture and collaborative working practices. This is changing internal working practices and design activity, where knowledge is created and shared in new ways amongst designers and non-designers, in which new tools are introduced, and workplaces re-configured.

Caring, Confident or Scientific?: Identifying Brand Personality Through Product Design

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Competing brands of consumer products are known to have distinct personalities manifested in their respective design languages. This helps them to communicate their brand values and differentiate from competitors. However, do consumers perceive the same brand personality that the brand intended to communicate? What factors does this perception depend on? Is there a standard way that product designers can use to decode personalities of competing brands? This study was taken up to seek answers to these questions, thereby analyzing brand personality from a design perspective. Shampoo bottles from leading brands were selected as stimuli. We found perceived brand personality to be in sync with core values, and interestingly, not much influenced by gender, age, familiarity or consumer type. We propose a quick and novel method to identify brand personality, that covers the loopholes of the conventionally-used semantic differential method. Mapping category-specific attributes to selected products, this method provides clear insights, enabling product designers to gauge the competitive landscape of any consumer product category.

Design Education

Teaching Towards Design Democracy in an On-site Interior Design Studio: Fostering Care through Spatial Interventions

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In design education, the design studio provides an ideal forum for exploring different design practices. This paper contributes and elaborates on the so-called 'emerging design democracy,' launched in the present call, situating students as agents of sociable processes and incorporating participatory and user-centered design approaches. In this respect, we discuss the scope, approach, and design objectives of an on-site master design studio in interior design. Students designed and realized spatial interventions in an outworn residential building functioning as a foster home for boys aged 12-18. The main objective of the interventions was to improve users' (residents and staff) sense of well-being. Since the building will be demolished within a few years and replaced by a new one, students could experiment and test spatial interventions based on user input. Based on conversations before, during, and after students' design process, we reflect on students' inquiries into the existing built environment, and how it is experienced We paid specific attention to how these inquiries informed their creative processes. The project generated new insights into the value of a thorough analysis of the existing built environment and the physical and social interactions at the site. An evaluation of the studio and the collaboration with the care organization shows the value of students' working on-site for broadening and deepening both their own and the organization's understanding of the site and its opportunities.

Investigating the Influence of Student-Design Tutor Relations on Design Learning: A Critical Analysis

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Design studios are mainly focused on projects and students and serve as advanced learning environments. It is essential to create a social and pedagogical environment for design instruction that enables students to develop mutual trust with their design instructor as well as self-confidence. Novice design students in the first-year design studio often copy the strategies and teaching methods of their teachers. Since every communication moment directly affects students' learning behavior, design thinking, and cognitive structure, it is imperative to carefully plan each one. Using a case study involving 158 first-year students from five different design departments in the project-based design studio, this paper explores ways to regulate teaching the "design process" to students while preserving their motivation and sense of self in balance. There are two concurrent and carefully crafted design projects in this scenario, each lasting two weeks. Through panels and one-on-one critiques, the design tutor(s) involve the students and break down the design process into manageable steps so they can identify their comfort zones. In doing so, this study illustrates what students "can" learn at different stages of the design process and examines how students' self-awareness with direct relation to the design tutor influences their grasp of the design knowledge.

Leveraging Interdisciplinary Integration in Graphic Design Education

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Design, as an integral facet of human creativity, permeates various aspects of our daily lives, influencing communication and interactions in both real-world and virtual environments. Beyond mere aesthetics, it involves the intentional creation of systems, products, and experiences aimed at solving problems. This paper advocates for interdisciplinary training in graphic design education, fostering a multidisciplinary approach to better equip designers for dynamic careers in the industry.

The Evaluation-creation Cycle Knowledge Producing Strategy for Research Practice Partnership in Architecture

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There has been a growing interest in the recent years about theory and practice integration. Nevertheless, the researchers' aim of inclusive theory-based and practice-based knowledge producing remains a difficult task to achieve. Many researchers argue for a closer collaboration between researchers and practitioners now universally known as research-practice partnership (RPP), as a relevant approach for bridging the knowledge gap between research and practice. Yet, it has been argued that creating successful collaborations is challenging. Authors point out that one of the most pressing challenges to creating successful RPPs is the lack of operational mechanism. This study proposes the evaluation-creation cycle (ECC) as operational mechanism for RPPs. The ECC has already been tested in several design-based research projects conducted by the master-doctoral collaboration at Wollega University, Ethiopia. The study aims to critically review the ECC structure including the methods and the practices involved, as well as its performance as inclusive theory-based and practice-based knowledge producing strategy operating within the framework of RPPs. The study draws on empirical data from students case-study work to illustrate how using the ECCs lead to not only advancing design knowledge but also improving the practices of design education and the quality of design research.

"Teaching What Can't Be Taught": The Legacy of Transformative Design Educator Peter Megert

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This paper analyzes the significance of transformative design educational experiences. It examines a case study that demonstrates that pedagogical models used in design have the potential to provide students with new languages and new abilities to see the world in ways that are life-changing. This case examines the contributions of Swiss graphic designer turned design educator Peter Megert (1937-2022). Educated at the Kunstgewerbeschule in Bern, Switzerland, Megert established his own design firm (Studio M) in his homeland prior to his immigration to America. Following time spent working with Paul Rand at Westinghouse Corporation in Pittsburgh, Megert moved into a faculty position at The Ohio State University in Columbus, Ohio (USA) in 1970. His work as a design educator tapped into his professional experiences at Westinghouse as well as the strong influence of his Swiss culture and modern design principles, but Megert's true contribution to his students' success was his knack for sharing his own curiosity. This research draws conclusions about Megert's influence and its potential lessons for the future by articulating themes found through a close analysis of his personal records as well as the contents of numerous interviews with family members, former colleagues, clients, and students. From their memories, it is clear that Megert's many former students credit him with "teaching what cannot be taught;" the love of design and its seemingly limitless potential. Using words and images from Megert's archive, this paper provides a glimpse into meaningful design education practices of the past that remain relevant today.

How First-year Design Students Explore and Share Their Cultural Diversity while Articulating and Using Design Principles to Interpret the Style of a Researched Graphic Designer

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The final project in my fundamental design course asks students to research a graphic designer, examine how that designer uses the principles of design, articulate the designer's style, and use those criteria to create an original poster. To support the university's diversity and inclusion goals, this project has been expanded to foster an understanding of diverse cultures. Students choose a designer who relates to their heritage, neurodiversity, or gender orientation. In preparation, weekly presentations and discussions focus on famous twentieth- and twenty-first-century designers. Students evaluate not just what they like about the work but how these designers use design principles. Students also learn through various formative assignments how to create projects using raster and vector images with programs and technologies, employing design principles. This summative project includes research cataloged in an annotated bibliography and supported by a 20-slide Pecha Kucha presentation that reviews the work and use of the principles. Students summarize "the style of" the designer. Then each student creates a large format work "in the style of" their designer. The finished work is presented in class with a discussion about how their work relates to the designer's style and work. In the past, this assignment has included a Filipino designer, an American black female, a Spaniard, a Hungarian, a Pakistani female, a Swiss designer, a Puerto Rican male, a Hispanic female dealing with femicide and body shaming, and a female designer with ADHD. The outcome is a project that helps students use their learning and share cultural perspectives.

Design Education

Creating Opportunities for '6S': Using a Thinkathon to Engage in Future Strategy Creation at the Quadruple Helix Through Design Thinking

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Delivering impactful stakeholder event experiences which can positively engage industry, policy, societal and consumer perspectives (quadruple helix actors) for future strategy development can often challenge research teams. Finding novel ways to increase engagement, understanding and buy-in of stakeholders is imperative. Through a novel co-creation and guided by design thinking theory a 'Thinkathon' was executed to seek insights and future strategy through idea generation by engagement consisting of eliciting 'what, why and how' information to support specific stakeholders through a specific research context. To aid communication, a '6S community' was developed, consisting of Students, Specialists, representatives of Start-ups, Social Enterprises, Sustainability focused and Social good projects (6S's). Using empathy building, across 6 stations and 2 sessions, students and stakeholders generated 151 specific detailed ideas relating areas they felt could support the 6 specific stakeholder groups through the research project. The experience generated structured engagement and focused stakeholders toward developing future strategy as well as offering opportunities for networking and connection. Critically, the data highlights opportunities for guiding engagement whilst also underpinning core objectives of a Thinkathon. Future research could focus on engaging a #6SCommunity in developing future strategy in other contexts integrating Thinkathons at the quadruple helix nexus of innovation.

Principles of Motion: An Open Educational Resource

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Iowa State University has made extensive efforts at providing grant funding for open educational resources, which are implemented to lower the costs of resources to students by creating high quality, free to use educational materials that are published using the Creative Commons licenses. As a recipient of the grant, I created and published a free, educational 43-minute video explaining the Principles of Motion. These principles provide a new but familiar framework derived from the foundations of visual design, the 12 Principles of Animation by the Disney animators Ollie Johnston and Frank Thomas, and film/TV cinematography. These new principles are presented in a simple and straightforward manner using design terminology that fits with today's design pedagogy, all in a free-to-use online format that is easily accessible.

Cultivating Empathy-driven and Humanity-centered Design Education: Nurturing Designers for Inclusive Futures

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This paper explores the pivotal role of empathy and a human-centered approach in design education, aiming to shape a new generation of designers who prioritize inclusivity, ethical considerations, and societal impact. The study delves into pedagogical strategies, case studies, and best practices that contribute to the development of empathetic and humanity-centered design education.

Investigation of Architecture Education by Using Virtual Reality and Bonding Performance

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Architecture is a technology-intensive discipline both in the design process and in the production process. It is believed that virtual reality will have a great impact on architectural design, architectural teaching and practice. Due to the rapid development of VR applications in architecture, there is a growing need for knowledge within architectural education programs in universities, both nationally and internationally. Therefore, it has become imperative to assess architectural school curricula while also exploring how architecture majors may be influenced by VR. This paper reviews an educational experiment involving VR within architecture history courses, comparing its applicability to traditional methods in the field of architecture. We contribute to this discourse by offering insights from three research cases, with the goal of identifying the optimal educational approach. To gain a comprehensive understanding, a survey was administered to a sample of architects to investigate how this technology can be effectively integrated into architectural practice.

The Value of Flexibility and Adaptability: Personalizing the Innovation Process to Boost the Creative Performance

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Studying design cognition has been considered one of the greatest challenges in the design creativity research community. The cognitive mental process has been the core of creativity studies with abundant research outcomes. However, the effective teaching methodologies for creativity in design education remain dispersive and inconclusive. This paper describes and examines a framework of the creative process that has been systematically tested with clear evidence of effectiveness and success. The framework has been applied to a design project in an undergraduate industrial design studio for six consecutive years. More than a hundred students provided feedback through surveys and discussions about this framework reflecting their creative experience. The assessment of the creative process focuses on measuring the quality and the quantity of idea generation concerning students' creative performance. With attention to the low performers and the analysis of varied and common causes, some shortcomings in the process were identified which hindered students' engagement and performance. A modified framework is proposed to facilitate the individuals' unique ways of idea generation and concept exploration so that the process will accommodate everyone with their unique backgrounds and approaches. Deliberation of students' successes and failures sheds light on the advantages of a more flexible and adaptable creative process to achieve quality innovation. The third party's evaluations signify a strong application potential in design education and design practice.

Exploring the Need for Enhanced Design Education Methodology: A Case Study on Informal Education's New Product Development Process with Generation Z Children

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This research examines a new product development methodology as case studies in informal education delivered in 2022 and 2023 with the involvement of children aged 7-17. Corresponding age groups were formed, and each group had ninety-minute sessions held four times a week. Many children were participants in both informal education years. Through methods such as mind mapping, the worst-case scenario approach, sketching, and prototyping, the children embarked on an imaginative journey to solve challenges related to peace, climate change, and artificial intelligence. The challenge-solving brief encouraged unfiltered exploration and idea generation, pushing the boundaries of innovation. Children were tasked with defining potential clients and market opportunities. The subsequent prototyping process took on a playful and experimental character, transforming into a hands-on, tactile experience. The analysis of case studies found that collaboration and communication emerged as core aspects, along with the alteration of existing methodologies in the design and new product development process to maintain engagement and new experience by Generation Z. It is important not to adhere rigidly to a standardized design education process. The findings suggest the importance of adapting educational approaches to suit the evolving needs of Generation Z students, such as individualism, excitement, and relevance to up-to-date information. That knowledge of altering methodologies can enhance the study experience and emphasize the critical role of adaptability in the design education process for the next generation.

Sustainable Transformation of Textile and Fashion Design: Integrating Education for Sustainable Development as a Guiding Principle in Design Education

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A strong demand for sustainable products and processes in the textile and fashion industry and its global markets imposes a continuous transformation by implementing the guiding principle Education for Sustainable Development (ESD) in design education. The European project Fashion DIET developed teaching and learning materials as Open Educational Resources (OER) for the e-learning platform Glocal Campus. A further education module on ESD for higher education was elaborated with a three-part module comprising 42 lectures on didactic-methodical concepts, sustainable fashion design and production technologies as well as a sustainable orientation of the fashion market. The curricular implementation of ESD in all study programmes is demanded by the UNESCO. The promotion of the necessary skills of knowledge acquisition, critical reflection, autonomous decision-making, and action is also a task of design education and has been elaborated for the textile and fashion sector. A sustainability-oriented textile and fashion design is seen as the key to the sustainable transformation of this branch. Through educational processes, challenges of sustainable development in the textile and fashion design can be reflected upon. An understanding of the complex, multi-layered interrelationships between ecological, economic, social, cultural, and political conditions for sustainable development can be built up and deepened, and values and attitudes can be questioned in regard to design. This can initiate or deepen a change in consciousness of textile and fashion designers and contribute to the individual development of competencies that motivate them to get involved and enable them to responsibly shape the present and future.

An Attempt to Integrate a Generative Artificial Intelligence (AI) Tool into a Design Semiotics Course

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Artificial intelligence (AI) is a current phenomenon that influences every aspect of life. Particularly in the realms of society and design, AI's capacity to generate images from text prompts is increasingly prevalent. Recent studies expand the integration of AI and machine learning (ML) principles into design education. This study highlights an experiment involving AI integration within the Design Semiotics for Interior Architecture and Environmental Design (IAED), a second-year major undergraduate course aimed at imparting essential skills for comprehending design's embedded meanings and decoding cultural and social messages. The study's motive is to foster creative exploration in design education by encouraging interactions among students, design semiotics, and AI using Midjourney, a generative AI tool that generates images from text prompts. Conducted over five weeks and structured into four stages, the experiment fosters iterative analysis and synthesis among student pairs. These stages involve (1) responding to randomly generated question models (i.e. How 'abstract concept' can be defined in the context of 'spatial keyword' based on the / through / as 'semiotics terminology'?), designing prompts for Midjourney, and generating images, (2) providing feedback on peers' images, (3) refining prompts based on feedback, and (4) creating new images through blending previous iterations. The finale of this experiment involves presenting the entire process and reflecting on the experience of utilizing generative AI. The study's findings define both the advantages and challenges associated with employing generative AI programs and their associated ML technologies in design education.

The Virtual Asynchronous Round-Table Project: A Deep Dive into Its Learning Management System and Course Design Implications

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The Virtual Asynchronous Round-Table (VART) project is a transformative teacher-training master program, shining a light on Online Informal Learning of English (OILE). This initiative challenges students to construct a corpus from interviews with TV series actors and creators, offering a unique paradigm in language education. This paper delves into the intricate dynamics between the outcomes of the VART project and its presentation on the in-house MOODLE-based Learning Management System (LMS). In the VART project, students embark on the creation of a corpus, synthesizing interview excerpts from online sources within a virtual asynchronous round-table. The synergy between the project's goals and student engagement is facilitated by a meticulously designed Learning Management System (LMS). Beyond facilitating corpus creation, the LMS fosters collaborative group work and incorporates a dashboard system providing insights and metrics, enriching the overall learning experience. The research objective is twofold: firstly, to highlight the benefits of the VART project, and secondly, to explore potential enhancements through the refinement of course design and the associated LMS. By probing into the symbiotic relationship between the VART project, the LMS, and course design, this study seeks to unravel the collective impact of these elements on student engagement, autonomy, and relatedness within the language learning journey.

Explaining the Nature of Design: A Pragmatic Definition

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Nigel Cross´s much-cited paper about design in education of 1982 explicitly states that design is not natural science and is not the humanities but is a third and exclusively different thing. This paper examines that proposition and proposes an alternative. What we are in need of here is a description of design that acknowledges its distinct character as human activity. We do not wish to subsume it into science, humanities or the arts. For the sake of ontological and epistemological tidiness it would be preferable to avoid proposing that designers have a special way of knowing. In keeping with design´s graphic approach, this diagram paper explains the overlap of science, design and art which is the persistently missing element in the discussion so far of what design is. This element accords with the fact designers don´t just look at the world as it is (as scientists do) and accords with the fact designers make things with intentional aesthetic content (as planners and managers tend not to do). Reference: Cross, N. (1982). Designerly ways of knowing. Design studies, 3(4), 221-

227.

Tuition or Intuition? Towards Culturally Informed Design Education Practices

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Designers today work in international teams and global contexts. To meet these new contexts, it is critical that design education support diversity and multiculturalism. Advancing the cultural consciousness in design education requires a new awareness of the dimensions of culture that impact learning. But what methods of assessment, types of data collection, or knowledge are effective to inform changes to learning environments? R.W. Emerson argued that knowledge has two primary facets: tuition and intuition. The root of tuition is the Latin verb tueor meaning "to look at," or "to watch over or protect." It implies examining evidence gathered from external sources. In contrast, intuition, refers to a deep inner understanding, or insight. This paper addresses the tenuous relationship between tuition and intuition to inform transformative design education pedagogy. It probes the role of data and information in design education, to better inform innovative educational pedagogy for studio-based learning environments. The research shares current research on cultural dimensions in studio-based education and a Cultural Inventory Tool for Studio (CITS). CITS is a pedagogical survey tool designed for faculty that explores the presence and impact of ten cultural parameters and the spectrums of variability to comprehend the dimensions of culture most likely to impact instructional situations. It aids faculty in the examination, evaluation, and discussion of the values and practices present in learning environments. The paper shares the CITS methodology, current findings, and strategies for probing tuition and intuition to advance the level of cultural consciousness in design education.

Are all Mindfulness Practices the Same? Exploring Different Mindfulness Techniques in Design Studio Classrooms

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What is the role of mindfulness in the future of design education? Recently, the design community has embraced mindfulness as a tool to improve educational practices. Practicing mindfulness within the design studio classroom can enhance students' creativity, problem-solving skills, and empathy. Previous research reported positive benefits when mindfulness is integrated in these learning settings. However, this promising research path intersection is a) still in its early beginnings; and b) there has been little research into various types of mindfulness practices and techniques in educational settings. We set out to address these research gaps by conducting a university-based pilot study in which we tested three types of techniques in design studio classrooms: focused attention, open monitoring, and loving-kindness. The findings suggest that different techniques have different effects on students' experiences across the creative process continuum. We discuss these findings, their implications for practice, and future research in this area.

Design Education

Coding Games: New Ways of Educating Web Design Students

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As an experienced and inspired graphic and web designer, I present new methods of teaching the principles of web design and coding to the students. It is necessary for today's web designers to professionally know and understand HTML+CSS coding. Learning coding is like a learning new language. But while the misspelling in a language is usually not affecting the understanding of the whole phrase, the smallest misspelling in coding leads to the failure of the whole coding. In order to stimulate my students to understand the coding and become proficient in it, I come up with the games for them. For example, I give different HTML and CSS tags to each of the students, and then ask the whole group to form the displayed coding. Each of the students represents different tag in a page, and talks about his/her role in the forming of the page, and based on the coding we imagine the final visual design. My students find these exercises productive, as they are actively involved in the creative process of web design. I use quizzes to test my students' proficiency, and base our HTML+CSS games in class on the feedback from these.

Protest.mp4 - a Collaborative, Co-designed Learning Space for Decolonising Archival and Visual Representations of the Brixton Uprising of 1981

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This paper communicates the findings of a project entitled Protest.mp4, a collaborative inquiry between Year 3 BA (hons) Graphic Art students at Winchester School of Art, University of Southampton; the Parliamentary Archives of the Houses of Parliament, and Museumand: The National Caribbean Heritage Museum. Protest.mp4 enabled students to explore representations of Black British history through social and political archives related to the 1981 Brixton uprising. Through dialogue and research with Museumand and the Parliamentary Archives, a co-designed learning experience initiated a more critical approach to design practice beyond a visual first approach. From this, students were able to analyse and reframe the societal and media perception of what was historically termed the Brixton riots and to explore and examine shifting contemporary parallels. Students were able to articulate informed narratives, as well as position their empathic opinions and debate into appropriate visual responses. Students creatively communicated these opinions and ideas through contemporary visual interpretations in animated poster formats. From a design perspective, Protest.mp4 challenged the traditional medium of activism; the poster. Visual outcomes extended the poster beyond the printed page into contemporary digital formats to explore how this medium of active communication is still relevant today within the context of social and political debates. From an educational perspective, Protest.mp4 provided students with a model for interdisciplinary dialogue to explore perspectives around decolonisation, race, speculative practice, technology, and activism.

With Nature in Mind: Raising Awareness Through Design Education

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With increasing urbanization, ecological and environmental problems have increased, affecting a large number of people. Landscape architecture and other design disciplines can play an important role in improving the well-being of urban dwellers and restoring ecological problems. With nature and ecological issues in mind, design education can be shaped to raise the ethical awareness of design students to become more socially and environmentally responsible designers through climate-sensitive design approaches. It is vital to create a 'sustainable' design awareness in students who will be working in the professional world where they will have a significant impact on protecting/destroying the delicate balance of the ecosystem in which we live. This paper discusses the role of design education in raising awareness of climate-sensitive design approaches by analyzing the course "An Introduction to Contemporary Architectural Landscaping". This course teaches the fundamentals of landscape design, with a particular focus on topics such as climate-sensitive design, sustainability, ecological restoration, and carbon footprint. Finally, students develop design projects that aim to reduce the carbon footprint of given sites using sustainable design approaches. By analyzing the structure and outcomes of this course, this paper highlights two key findings. First, the discussion of ecological problems and solution techniques as well as the ethical responsibility of designers enhances students' awareness of being more socially and environmentally responsible designers. Second, instead of fictional projects, places with existing ecological problems that can be experienced in daily life arouse students' interest in developing ecological and sustainable design solutions for these places.

The Role of Contemporary Design Pedagogy: An Industry Perspective

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The role of pedagogy in the creative industries is a subject of debate in an era of rapid transformation, reflecting the dynamic nature of these sectors. This study explores tertiary education's role in Ireland's Atlantic Technological University (ATU) region, focusing on design and screen graduates. Unlike national studies, it offers a region-specific lens, spanning from Donegal to Galway. The goal is to provide educators with industry-specific insights and address the unique demands of creative employers. Employing an inductive, multi-method qualitative approach, including focus groups and interviews, the research uncovers contemporary challenges in working with creative graduates. Drawing on existing research revealing skill gaps in Irish screen-based and design-based industries, the study contributes to a nuanced understanding of the educational landscape. The data collection has concluded, with ongoing thematic analysis revealing patterns among focus groups and interviews. Directly engaging with experiences and needs of creative industry employers in the western region, the study provides timely insights for academia and industry. It aims to create pathways for more industry-focused educational practices, ensuring a smooth transition for graduates into creative industries. This concise study, spanning the ATU region, contributes valuable insights for educators, shedding light on the evolving landscape of creative industries and facilitating a seamless integration of graduates into their respective fields.

Safety in Mind, Safely Designed : Enabling Safety Hierarchy Driven Product Development Processes

Efe Kutuk, Assistant Professor | Program Coordinator of Industrial Design, Industrial Design, Kean University, New Jersey, United States

Product liability is long neglected in industrial design (ID) education despite the exponential growth of new consumer product releases. This subject is covered in engineering, law, and business schools however, not much in industrial design. According to Consumer Product Safety Commission's National Electronic Injury Surveillance System (NEISS), in 2021, national estimate of injuries treated in emergency departments due to malfunctioning or defective consumer products is 11,738,091! In a conference last year, a workshop done for peer educators and ID professionals to measure the awareness of product safety. Findings were as predicted - focus was heavily on aesthetics and functionality. After reviewing multiple curriculums and speaking to several ID faculty, it became apparent that product safety in ID education is either not covered at all or briefly mentioned by a few. How can we create awareness to this matter in the ID education? How can we convey the message without being discouraging yet rather motivating? How can we educate the future generation of industrial designers to advocate for ethical practices and to design with product safety in mind? Eventually aiming for less product recalls due to the design defects. In this paper, several different methodologies to implement product safety hierarchy into the industrial design curriculum are explored. Workshop conclusions, survey results, and student projects of a studio exercise on injury prevention are shared and discussed. The long-term goal is to educate industrial design students in a way that they would proactively consider product safety hierarchy during the ideation and design development phases.

Experience Design: A New Paradigm

Mary Anna La Fratta, Professor, School of Art and Design, Western Carolina University, North Carolina, United States

Graphic design students partnered in cross-disciplinary practice, exploring creative learning tools as part of a larger initiative to preserve the Cherokee language for the Eastern Band of Cherokee Indians in North Carolina. Over several years undergraduate graphic design students at Western Carolina University collaborated with the New Kituwah Academy Elementary, a Cherokee language immersion campus in western North Carolina and, most recently, with the Cherokee Language Program at WCU. The goals have been to design and develop a range of tools/activities for learning the Cherokee language. The collaborating partners selected the topics, wrote the narratives (the scripts), and recorded the voice-overs provided by Cherokee Elders fluent in the language. The topics ranged in subjects including experiences while shopping, animals indigenous to the southern Appalachian region, learning about shapes and using them to make animals and seeing shapes in a landscape, learning about five human senses, and understanding the unique use of action words in the language. The media formats the design students used were both digital and physical: a board game, a card game, animations, a web-based interactive site, and large 4 by 8 feet interactive wall pieces. Empirical evidence gathered as the partnerships evolved informed the media formats used, prompted forms of assessment, expanded the collaboration with university second-language learners, and broadened the scope of evaluating the works to include the design students and their design process.

Truly Transformative Design: Why the Teaching of Global Citizenship is Essential within Modern Design Education

Renee Lamb, Assistant Professor, School of the Arts, Virginia Commonwealth University, Virginia, United States

Our future cultural artifacts will be shaped by the students sitting in our classrooms right now. These students are more globally minded and connected than ever before, yet also increasingly isolated and withdrawn. This drawing away from the world limits our creativity and our happiness. It allows others to shape our world view and asks us to create within limited boundaries – hurdles that must be overcome if one is to be a successful designer. Educators have a unique opportunity to counteract this by teaching global citizenship – by encouraging their students to explore their place within the larger global narrative. This exploration is more important than ever, as our students leave university and enter these complex global contexts, even when they think they are "just" entering domestic industries and trades. The teaching of global citizenship demands that our students examine their own personal cultural heritage as well as the cultural heritage of others from a place of equanimity and curiosity. It asks them to examine the intricacies and discrepancies within the cultural narratives that we collectively and individually carry. It asks them to address cultural topics and conversations more consciously within their pieces. In this talk, we will examine the key elements to incorporate global citizenship into the design classroom. Participants will leave with clear action steps that they can use to incorporate conversations about global citizenship into their own teaching or mentorship, so that their students can more critically and dynamically examine the world within which they create.

AI Tools in Participatory Design: A Case Study of New Chinese Style Semiotic Analysis

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The emergence of the "New Chinese style" heralds changes in lifestyle and consumption habits. Exploring the symbolization of it helps to expand the idea and role of design under today's fashion system. In this research, through the intervention of creative AI tools and participatory design, we investigate how to help designers develop New Chinese styles of fashion and symbols effectively. As a result, the typical symbolic keywords of New Chinese style clothing mainly affected leading designers' decision-making. We further discuss the intervention of AI tools as if it could provide more involvement and initiative in design education. Based on the interview and questionnaire, the typical semiotics keywords of New Chinese clothing analyzed in this study have a good leading and guiding role for both teams of designers. The use of AI tools in the design process, on the one hand, provides designers with more inspiration for creative design solutions. On the other hand, it accelerates the designers' efficiency from the creative process to the final creative design solutions. Furthermore, in the context of the meta-universe, the intervention of AI tools may help learners understand their ideas through visible proposals. We look forward to deepening this research in the future and exploring the possibility of involving learners from non-design backgrounds.

Emotional Landscapes: An Analysis of Student Designs for Columbarium Gardens

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This study explores the potential of design students to create environments that elicit emotions and reflections through physical design elements. Ten students were tasked with designing a columbarium memorial garden in a cemetery, incorporating natural beauty, reflective qualities, intimate spaces, and sensory experiences. Faculty conducted an in-depth evaluation of the students' design drawings, focusing on various physical design elements and layouts. This led to identifying six key themes: soothing natural aesthetics, contemplative spatial design, symbolism and metaphors, serene sensory experiences, intimate and secure spaces, and interactive and creative elements. The results show the students' diverse use of design elements, like the calming effect of water, the vibrancy of native plants, reflective sounds, life-stage water features, sound barrier hedges, and guiding arc circulation, significantly contributing to these themes. The study underscores the importance of physical design elements in creating spaces that promote tranquility, reflection, and emotional well-being. Analyzing the students' work reveals that a harmonious blend of these elements can enhance the quality of landscape spaces, making them suitable for contemplation, healing, and connecting with nature. While some students focused more on physical layout than emotional impact, future designs could benefit from a deeper integration of these elements, resulting in spaces that are impactful and meaningful.

Futures Designed: A Needs Analysis of Integrating the Ideals of the New European Bauhaus into Art and Design Education

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Design pedagogy increasingly includes discussions about ethical considerations in design, as well as considerations of the social and environmental impacts of design decisions. As educators encouraging students to incorporate sustainable practices into their designs is crucial for the development of Design Education. 'Futures Designed' is an EU funded project which aims to develop and integrate Art and Design micro-credential courses into existing Higher Education (HE) programmes focusing on the skills deemed necessary for the Green Transition, Sustainable Developments Goals (SDGs) and the New European Bauhaus (NEB). The project will: transfer targeted knowledge ensuring learners future employment; establish alternative spaces of learning; train and improve sustainable competences; invite current professionals to upskill; and promote behavioral change for the Green Transition. This presentation demonstrates the initial stage of the project focusing on the Educational and Training needs of target groups: Students, Educators and Working Professionals in the fields of Interior, Graphic and Fashion Design. Through Surveys, Focus Groups and Industry Consultations the needs analysis focuses on: opinions related to climate change; current knowledge of the Green Transition, SDGs and the NEB; and methods to produce meaningful theoretical and practical courses to address these needs in the participating countries: Cyprus; Lithuania; Greece; Belgium and Italy. This research is part of the Erasmus + Key Action 2 programme entitled: Exploring Green Futures: Integrating the New European Bauhaus into Art and Design Education. Project Reference: 2023-1-CY01-KA220-HED-000160668

Strategic Design and Entrepreneurship: Cross-institutional Design Education in Denmark

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Strategic Design and Entrepreneurship is a unique master's program in Denmark, representing a close collaboration between Copenhagen Business School and The Royal Danish Academy. The program brings together students, researchers, and practitioners from three disciplines: design, architecture, and business. The goal is to educate graduates with a T-shaped skill set. For design and architecture students, this means gaining business and organizational understanding, as well as learning to work in interdisciplinary teams. The program is highly problem-oriented and is based on the underlying assumption that questions of sustainability are often of such complex nature that they require a combination of multiple types of knowledge to come up with relevant design solutions. This poster-based presentation introduces the structure, learning objectives, examples from students' work, didactic models, and the development of the master's program over the last three years. We present our preliminary empirical research with a focus on design didactics. Both presenters have profound knowledge of the program, serving as the program director and a former design student, respectively. The presentation showcases and discusses our preliminary findings regarding the program's strengths, inherent challenges, and potentials. With this study, we share knowledge and contribute to a discussion about design education and design pedagogy in a world that we believe needs designers' contributions to achieve greater sustainability.

The Creativity Combination: A Revolution is Needed in Higher Education to Teach to the Full Creative Capacities of Students

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For two centuries, the American system of education has prepared students in the mold of an industrial age assembly line categorizing students by specific intelligences and ages while undermining more perceived "artistic" disciplines and discouraging collaboration and mistakes along the way. With the advancement of technologies like artificial intelligence, the often-stigmatized creative practice fields and the lessons they teach are exactly the type of qualities AI and other technologies cannot replace - making these literacies and intelligences more important than ever! We must move past an industrial age model in education and combine creative practice with existing education to produce next-generation students ready for the next generation of interdisciplinary creative challenges. Led by a multi-disciplinary designer, this study demonstrates that while a design process for creating stage, film, industrial, and exhibit design can seem like niche applications, the lessons learned in collaboration, testing and re-testing ideas, prototyping concepts, overcoming fears, venturing guesses, divergent thinking, and the creative process in general are applicable – and valuable – in nearly ALL disciplines and professions both inside and outside of the entertainment industry.

Teaching the Basis of Architectural Knowledge in the Early Period of Architectural Education: An Assessment of SOrg106

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This study discusses the position and methodology of the SOrg 106 course designed to provide students with the basic principles of architectural knowledge through questioning in the early stage of education, with examples from the course process and productions. The scope of SOrg 106 is defined by fundamental topics in all buildings, which guide and even trigger design processes, making the building habitable. The fundamental skills targeted by the course include thinking about the relationship between architecture and users, understanding and experiencing the program/function/scheme processes, analyzing circulation and related spatial patterns, and interpreting building typology and spatial requirements dependent on building typologies. The course includes architectural knowledge, ergonomics, analysis, synthesis, and research, interacting with theoretical, applied, and research applications. In the first part of the course, these topics are explained with theoretical foundations and numerous examples, while in the second part, small designs experience is offered to transform the acquired knowledge into skills. Additionally, students conduct research, allowing them to analyze and evaluate all the topics encountered in the course about a specific building and gain experience in systematically organizing and presenting their work. This study examines the relationship between the fundamental skills the course aims to target and the course outcomes. Evaluation by instructors elucidates the problems and potential of the course structure. This evaluation contributes to analyzing a course in the early stages of architectural education and facilitates the development of future studies and alternative strategies.

Experimental Publishing: Challenging Colonial Ways of Knowings in Design Education Through Student-Led Projects

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How can a design instructor bring anti-racist and decolonization theory into students' design practices? Over 5 years, the Publication Design Project class has evolved from a course that experiments with the idea of publications from a designer's point of view to a student-led class that challenges students to examine their positionalities, explores place-based design practices and expands on notions of accountability in an attempt to decenter white colonial design history and practices. The conceptual potential of artist book/designer publications was explored, decoded and reinterpreted as students were encouraged to observe and implement different ways of knowing and to challenge the idea of "good" design. This paper is a reflection on the latest offering of the class, featuring the students' collaborative work in organizing a tri-campus publication exhibition.

E-book Online Repository: Digital Archiving from Crisis Response to Pedagogical Opportunity

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Nelson Mandela University's (NMU) drive toward greater online and blended learning was expedited by the onset of the global coronavirus pandemic. Staff and students were suddenly confronted with having to transition from contact teaching to teaching via digital platforms. While this was a mammoth task with several layers of complexity related to knowledge of online platforms and more practical issues surrounding equipment and data/wifi access, the move to online and blended learning was ripe with opportunities and affordances. As such, a digital archive of staff and student work was conceptualised by the Department of Media & Communication at Nelson Mandela University. The department needed a consolidated online space where research and creative/practical work could be accessed. An e-book online repository responded to many questions linked to online learning by preparing students for content creation focused specifically on online exhibition and reception, by developing industry level online competencies through novel and experimental digital assessments, and by providing staff and students requisite online exposure. In this way, the project fitted squarely within the NMU Technology Enabled Learning philosophy and the institutional theme of Innovation and Digital Economy. The conference paper details the trajectory of the online repository from conceptualisation though to production of the first editions and the work currently being done on the latest edition. The discussion offers critical perspectives of project planning, challenges faced and the novel approaches developed and applied to address these challenges through the lenses of affordance theory, theory-based-practice teaching and learning, digital archiving and crystallization.

Design as a Messenger: A New Way to Design through Food Waste

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In response to the growing awareness and responsibility of the environmental impacts we generate and the consequent interest in the development of sustainable materials, the figure of the designer takes up the challenge and undertakes new design approaches. In particular, waste, mainly food waste, is transformed into resources through sharing practices and new designs. This attitude transforms the method by which designers conceive and implement their designs, introducing an ecological and ethical perspective to design. What kind of awareness can design create? The paper presents the results of a thesis developed in Ecology Futures in the Netherlands, which then became the basis for doctoral research on the application of design methods in the education and awareness phase of future designers. The project, "Design as a messenger," investigates and understands the development of new sustainable materials produced from waste, and seeks to convey impacts through installations and interactions with people within outreach events. The goal of the master's thesis is to empower a broad audience to self-produce possible reuses and recycling of waste materials and thus gain productive access to knowledge that becomes open and shared. Design as a messenger is a materials cataloging project with the writing of a cookbook that allows for a full understanding of the potential of materials and what they originate from, dividing them into macro-categories: waste material, processing, material output, and cataloging by types.

Perceiving Architecture Design: A Philosophical, Psychological, and Neuroscientific Paradigm

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Architectural thinking and design cognition are topics of interest for researchers and are widely explored in design studies today. The dichotomy between thinking versus experience, deliberate versus spontaneous, conscious versus unconscious, cognitive versus affective, and perception versus emotions are subjects of design cognition discussions. Psychology explains the mind processes in an environment whereas with the latest technological progress, neuroscience provides physiological validation and neurological insights about the cognitive functioning of the brain. The comprehension of philosophy, psychology, and neuroscience can provide better clarity and a detailed explanation of the phenomenology behind architectural thinking and experience. The paper identifies common cognitive dimensions of design that explain the phenomenon behind thinking and experience applicable to architecture design based on philosophy, psychology, and neuroscience. Philosophy of art and architecture, psychology of design-related cognition, and neurological functioning of the brain were studied from the perspective of design experience. The literature review–based research further analyses parallel theories of philosophy, psychology, and neuroscience concerning architecture design cognition. The study identifies and discusses the dimensions common to experience and thinking architecture design. The paper proposes a cyclic diagram of co-relationships among design dimensions explaining the phenomenology behind architectural design thinking and its relationship with design experience touching upon the dichotomy of several subjects frequently discussed in design research. The theoretical framework based on philosophy, psychology, and neuroscience brings a comprehensive understanding of architectural design thinking and experience, and their relationship applicable to design pedagogy, user experience, design empathy, and phenomenology.

Another Curriculum Revision?: The Effectiveness of Curriculum Changes Based on College and Career Success

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A limited access admission strategy in a Graphic Design program permits the selection and admission of those students who are assessed on the basis of the talent and skill exhibited in their portfolio. One of the advantages of a limited access program is the opportunity to select students who have the greatest potential to thrive during their design program and to succeed in the competitive creative discipline of graphic design. To succeed in such a format, curriculum needs to continuously be revised to respond to the industry demands. Yet, there is little evidence to support the idea that evolving curriculum results in greater employability or that those who perform the best in the selection process finish as the best at the end of their educational journey. Similarly, there is scant evidence to suggest that those who perform the best in terms of design are the most sought after by employers. This study uses data collected in the program application process and in the capstone review process to answer such questions. It compares the evaluations of students' portfolios when applying to a limited access program and evaluations prior to graduation. It analyses how and if the changes in the curriculum have made an impact on their design skills. Furthermore, it investigates the connection between their pre- and post-results with their job placement.

Prototyping Solutions for Sustainable Outcomes: Platforms for User Testing in Design Education

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This is a study of modular prototyping platforms focused on introducing accessibility design and user testing to students that haven't mastered the technical processes required for the real-world application of these concepts. The goal of these prototyping platforms is to promote a design process that is in continuous dialog with the communities and individuals being designed for. The platforms introduce students to virtual and augmented reality, circuit design, 3D printing, laser cutting, and other fabrication processes allowing students to prototype for more advanced design concepts and engage in user testing long before they would normally be technically able to. This has allowed students to move into more advanced design thinking and research processes alongside the development of their technical skillset without one hindering the other. An example of these platforms being applied is a collaboration between recreational therapy and design students. Through this collaboration design students created functional virtual reality experiences for recreational therapists to use with clients that have restrictions that limit access to outdoor or mobile activities. These prototyping platforms have also been used for physical interface prototypes where students design and develop screen-based interfaces alongside physical ones which are then used to conduct accessibility testing with the environment and users it is designed for. These prototyping platforms have allowed for an engagement with the user throughout the learning process, shifting focus from theory to real-world application with continuous user feedback allowing for more specific and sustainable design solutions.

Material Design in English for Design Education Using Ren'py Visual Novel Engine: NDL 1.0 - an Interactive Comic for Design Terminology

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The proliferation of educational materials and resources in design education has witnessed a notable surge, owing to the evolving paradigm of education in the context of the COVID-19 pandemic and the advancement of new technologies. However, there is a valid argument to be made regarding the relative lack of progress in the field of design when it comes to the development of professional English. While the field of design has grown and become increasingly complicated over the past few years, little has changed in terms of how English for design is taught in countries where the English is a foreign or second language. This study addresses the aforementioned shortcoming and makes a valuable contribution to the existing literature in the domain. Our objective is to present a comics, and its open-source interactive comic adaptation that has been developed using the Ren'py visual novel engine. Aiming at facilitating the acquisition of professional terminology by aligning it with the fundamental principles of interaction design and visual communication, the instructional materials have been developed to enhance the learning experiences and professional language skills of communication design students.

Designers Ethical Dilemma: Transforming the Design Curriculum

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"Dominator culture has tried to keep us all afraid, to make us choose safety instead of risk, sameness instead of diversity. Moving through that fear, finding out what connects us, revelling in our differences; this is the process that brings us closer, that gives us a world of shared values, of meaningful community" (hooks, 2003). It is in educational spaces where students begin to identify with race, class, nationality, religion, gender, sexual orientation, and social background. And with an increased diverse student body–which bring a wealth of knowledge, skills, and experiences into the classrooms–it is imperative for design educators to continue to transform the design curriculum. Conversely, the traditional Eurocentric ways of learning are no longer sufficient for a globalized industry. Because design involves relating with, connecting to, participating in, and understanding others and the world; it is critical for design students to understand that their own personal beliefs, views, values, and ways of being impact the work they create. This paper will 1). present a framework for integrating ethics in the design classroom, 2). showcase the outcomes and discuss the limitations and implications of the assignments, and 3). conclude with some final thoughts on the value of incorporating ethics to transform the student experience. The framework seeks to empower students to navigate ethical dilemmas and complexities inherit in the design field. Ultimately, the paper argues for the integration of ethics as a core foundational component in the design curriculum.

Democratic Futures: A Collaborative, Co-designed, Interdisciplinary Educational Project for Speculating the Future of Voting

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Democratic Futures is an innovative educational design project which interrogates questions around the future of democracy. Winchester School of Art, University of Southampton and the Parliamentary Archives, of the UK Houses of Parliament challenged design students to develop speculative strategies which investigate the validity, reliability and authenticity of political content and information. Students were initially exposed to archival materials related to the seminal 1872 Ballot Act, which legislated individuals voting in secret for the first time in local or government elections. The project and associated workshops were then conducted to promote articulate ideas, information and debates around voting now, but also the wider implications for voting in the future.

Transdisciplinary Projects for a Design Thinking Mindset: The Impact on Students in the Creative Disciplines

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This paper documents our experience with transdisciplinary project-based modules and their impact on students' mindsets. In our institute, a new creative school in 2020 merged eight creative disciplines (e.g., animation, games, music, marketing communications) into one common diploma. After going into their respective specialisations, students take two project-based modules in year two and three where they work on client projects in groups consisting of students from different creative disciplines. A design-led creative process is used to facilitate cross-learning, deepening and integration of their skills. The project-based modules were designed to cultivate a design thinking mindset in students. We conducted a longitudinal study that tracked the same cohort of students across two years. Thirteen dimensions of the design thinking mindset (Dosi et. al, 2018) were identified to be important for creative students. Students answered a survey at three points: i. before their year two project module, ii. after the year two module, and, iii. after the year three project module. The survey findings revealed that students developed in their design thinking mindset in the year two module, especially in the dimensions of being comfortable with ambiguity, embracing risk, and mindfulness of the process. The growth in their mindsets plateaued in year three, suggesting that one module is sufficient to help students develop the appropriate design thinking mindsets. Students' qualitative feedback further highlighted how beneficial it was to work with students from different specializations. Our experience with transdisciplinary project-based modules in a common creative diploma would be useful to other design educators.

Expectations towards Lecturing Designers: Aspiring the Forthcoming Class Theme

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Future problems will be distinct, combining multiple areas of knowledge and requiring innovative stimulus, "always/never" dilemmas will rise, but also opportunities to design better solutions, using creativity, critical thinking, and intuitive problem-solving involving learning, dialogue, and collaboration towards flexible solutions. (Springer, 2022). Design is a human-centred solution-driven, problem-solving activity, devising tangible solutions to address specific problems. It outlines issues, researching related subjects, gaining specific expertise, towards creating a viable solution. Current design practice has evolved into a comprehensive interdisciplinary planning assignment, overcoming form and function, to develop economically viable sustainable human-centred solution. The purpose of any education is to stimulate perceptions, facilitate the acquisition of knowledge and develop specific proficiencies, and ultimately succeed. Teaching design in a Higher Education Institution (HEI) requires a broad skillset that includes pedagogy, design principles, understanding of individual and group cognition, sociocultural and socioeconomic affairs, problem-solving aptitudes, state of the art technology, processes and methods, innovation, interdisciplinary collaboration, and continuous doctrine adjustments. The tutors' role is to empower students to acquire design skills, developing applied practice, discourse, and ethics regarding a career to create meaning in a global environment. The question that arises from this research is in what manner can design tutors proficiently coach and further inspire design students to adapt and overcome future issues that are not yet identified.

The Impact of Color-filtered Lighting in Connection with Biophilic Design

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This research investigates the influence of color-filtered lighting in relation to biophilic design, specifically within the preschool learning environment where design elements impact early childhood development. Among various architectural design components, research underscores the pivotal role of lighting in affecting children's pleasantness and energy levels. The experiment yielded three key findings: (1) discernible differences in pleasant and energy levels were observed between existing white lights and specific color-filtered lights; (2) varying pleasant and energy levels were noted among different color-filtered lights; (3) a relation was identified between external conditions (confounding variables) and pleasant and energy levels in the context of color-filtered lights. Subsequently, the study delved into the interplay between the effects of color-filtered lighting and natural light, specifically focusing on the Correlated Color Temperature (CCT) level. The study offers valuable insights into understanding the impact of color-filtered lighting and its integration with biophilic design, emphasizing its role in reinforcing the Attention Restoration Theory (ART) within a learning environment. By broadening perspectives on the incorporation of colored lighting, the study provides a nuanced approach to infusing a sense of nature into spaces where natural light is constrained. Rather than introducing colored lighting solely for visual appeal or personal preferences, this experiment offers fresh perspectives on comprehending colored lighting in both physiological and psychological dimensions within the context of biophilic design.

Contemplative Practices in Design Education: Activites that Support Emerging Adults in Higher Education

Martha Sullivan, Associate Professor of Practice and Chair of Industrial Design, Industrial Design, Virginia Tech, Virginia, United States

Contemplative practices are a framework for design education that empowers students, drives cutting edge research and creative work, and cultivates satisfaction in teaching and mentoring for educators. The topic has been under explored in the western world, but is congruent with traditions in India, Nepal, and other parts of the globe that have a higher concentration of buddhist practitioners. In the context of this framework, contemplative practices are defined as those activities that a designer may do to develop awareness, connection, and the capacity for deep concentration. "Contemplative Practices for Design Education" will explain and provide examples of seven contemplative practices in design education that have measurable outcomes in course work. (1) Stillness: quieting the mind; evidence based meditation practice for emerging adults. (2) Environment: established context, immersion, ceremony based on tradition, ritual. (3) Relational: deep listening, storytelling, group dynamics, cultural awareness. (4) Movement: body awareness, perspective, progress. (5) Generative: visualization, the practice of making. (6) Creative: curiosity, art, improvisation, journaling, reflection. (7) Activist: nature of work, equanimity, bearing witness, social justice. The goal of this scholarship is to explore a holistic approach to design education and promote compassion in emerging adults. Composed of both empathy and a spirit of activism, compassion may be what sets future generations of designers apart from their less conscious predecessors. As grounded members of the ecosystem and disruptors to the world's big sticky problems, designers who mix their technical skills with contemplative practices lead with expertise, inventiveness, and hope.

Walking, Observing and Making – Rethinking Plastics in Edinburgh: Co-designing and Digitally Making with Bio- and Waste Plastic Workshops towards ErasmusPlus 2020's 'Reframing Perspectives on Sustainability

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Plastic is a widely used material with great longevity, if designed, utilised, and re-used properly. However, the average usable lifespan for single-use plastic products is as little as 15 minutes and generally ends in landfill. The over consumption and disposal of plastic products have added pressure to pollution of the environment. Solutions to the plastic problem are directly related to people and their actions. Collaborative 'crafting', as a form of environmental education can be effective in raising people's awareness of environmental issues and adopting positive behaviours. This paper presents findings from a public engagement activity carried out as part of the ErasmusPlus 2020, project "Reframing Perspectives on Sustainability: Appreciating Opposing Views to Influence Others and Drive Change" in Edinburgh, UK in February 2023. During a two-day event that focused on plastics as pollution and material resource, using lectures, a making workshop and multiple integrative methods and lo-fi crafting techniques 60 teenage students and 8 teachers from Scotland, Italy, Germany and the Netherlands became informed of plastic and its properties, its affect on the environment in Edinburgh, and co-created mementos that could be taken home. Findings highlighted the participants' interest in alternatives to raw plastic that could be used in producing everyday consumer items, innovative ways to repurpose single-use plastic and an increased willingness to adopt environmentally friendly behaviours towards plastic consumption in the future. Collaborative crafting constitutes an authentic environmental educational approach that should be used more widely.

An Embodied Approach to Beginning Design Education: Using Phenomenologic Hermeneutics to Foster Design Thinking

Stephen Temple, Student, Architecture, University of Texas at San Antonio, Texas, United States

This paper describes a beginning design studio pedagogy that was structured by a phenomenological approach focused on embodied interaction within initial design learning experiences. Students enter beginning design education with little experience with the material realization of creative activities or how those creative activities are transformed by more abstract investigations. Following hermeneutic phenomenological methods of empirical exploration and reflective analysis, a beginning design studio pedagogy was formed to build sensitivities for the processes and qualities of material experience as a context of abstract thinking. This paper explicates the philosophical and developmental theories that inform the pedagogical structure and sequence of material engagement projects. Drawing upon the learning structure inherent to hermeneutic phenomenological methods, the beginning design curriculum was constructed to engage in direct material explorations, then reflectively conceptualize ideational structures from this experience in discourse with others as a means of transforming earlier iterations. Multiple iterations form cyclical processes that enable development of creative decision-making processes as design students begin to recognize some modes within the cycle as more valid for their own design activites. Focusing on embodiment in the manner of this design studio developed relationships between experience and thought as an initial step toward self-direction of design thinking. In doing so, students achieved an increased awareness of possibilities for embodied engagement and self-initiation of criteria for decision-making by raising questions for themselves, enabling students to initiate their own self-development as designers.

Design Thinking for Energy Infrastructures

Amy Trick, Assistant Professor, School of Architecture, Clemson University, South Carolina, United States

As the world faces climate change and its repercussions, it is becoming increasingly important to consider not only the design of environmental sensitive architectures and places but also the sustainability of the systems that facilitate them. Energy infrastructures, integral to the functioning and operations of most architectural projects, are systems whose ramifications profoundly shape their surrounding contexts in terms of landscape, ecology, and architecture; however, despite the substantial ripple effects of differing energy systems, traditionally the design and implementation of energy infrastructures has fallen squarely within the domain of engineering. As society confronts a future that will necessitate increased power production, due to population growths and increasingly frequent severe weather events, there is an opportunity to rethink the way infrastructural systems are selected and designed for places in a manner that engages with designers or architects. In Fall 2022, a design studio at Clemson University sought to reconsider the power generation strategies of Upstate South Carolina. Students used design thinking to experiment with infrastructural development as a tool for placemaking, programmatic reimagining, or restructuring of policy and considered the impact of infrastructure on culture. This speculation on the future of energy infrastructure subsequently inspired master planning and architectural works that speak to the inescapable relation between energy and place. The varied projects developed in the studio showcase how the engagement of creative professions beyond engineering, such as architects or environmental designers, can serve to generate methodologies and ideas for dealing with energy needs of the future in novel ways.

Escape Room Pedagogy and Its Relevance to Education for Creative Professions

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Design education is a well-known challenge discussed within universities. There are a significant number of factors that lead to the need to re-defining design education. Increasing the complexity of the social systems and, in the aftermath, the complexity of design challenges that designers must face nowadays is only a short example. Problems emerging due to increasing complexity require a systemic and methodical approach. Based on the challenge described, the need to adequately design education arises. The current discussion about design education's future must also consider general and relevant attitudes: creative attitude, scientific attitude and social awareness. These will not be adequately taught by focusing on tools and design techniques. An exciting approach to teaching design is growing within the field of game pedagogy, which lets the users learn by doing and by fun at the same time. Game design might be a developmental approach not only for teaching design techniques but also for being aware of concepts like the relevance of design problems, the difference in audiences, characteristics of the design process etc. This proposal will examine whether game pedagogy, precisely the concept of an escape room, finds a suitable environment for teaching design thinking, which currently is the most representative design method. In teaching DT, it is essential to consider not only skills and knowledge but also awareness and sensitivity to the social and cultural conditions of the design process. The metaphor of an escape room might be an exciting way of developing knowledge and understanding of design thinking.

Tracking Visual Cues: Understanding Design Student's Perceptions of a Space

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The human eye is the primary receptor for all perceptions related to the design of a space. Using this information to the field's advantage, design professionals can identify the human's understanding of a space through the occupant's visual cues and perception. This research explores design students' ability to identify the environmental settings that contribute to the attribute of wellness using eye tracking. Prior eye-tracking research analyzing the effects of interior design on wellness has been performed by the University of Economics and Innovations in Lublin, Poland, led by Wioletta Tuszyńska-Bogucka. Based on Ulrich's theory of supportive design and Malin's healing environment, participants' reactions to interior scenes were measured. This pilot study analyzed design and non-design major students' visual perceptions of wellness through two-dimensional images of spaces. Twelve first-year students voluntarily participated, measuring every eye fixation and time allotted. After viewing each scene, participants were asked to rate the scene on a five-point Likert scale according to how well the scene promoted wellness and provide an explanation of the rating. The data was then visualized and studied with corresponding fixation and heat maps. Among the findings, design students tended to gauge the entirety of the scene rather than the non-design students that focused on the center horizons of the scene. Both groups spent a large amount of time in the center of the scene and then diverted to mainly people, foliage, windows, and signage in the scene. This study can lead to further research on design students' perceptions.

Attendance List

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Founded in 1984, Common Ground is committed to building new kinds of knowledge communities, innovative in their media, and forward-thinking in their messages. Heritage knowledge systems are characterized by vertical separations--of discipline, professional association, institution, and country. Common Ground Research Networks takes some of the pivotal challenges of our time and curates research networks that cut horizontally across legacy knowledge structures. Sustainability, diversity, learning, the future of humanities, the nature of interdisciplinarity, the place of the arts in society, technology's connections with knowledge--these are deeply important questions of our time that require interdisciplinary thinking, global conversations, and cross-institutional intellectual collaborations.

Common Ground Research Networks are meeting places for people, ideas, and dialogue. However, the strength of ideas does not come from finding common denominators. Rather, the power and resilience of these ideas is that they are presented and tested in a shared space where differences can meet and safely connect--differences of perspective, experience, knowledge base, methodology, geographical or cultural origins, and institutional affiliation. These are the kinds of vigorous and sympathetic academic milieus in which the most productive deliberations about the future can be held. We strive to create places of intellectual interaction and imagination that our future deserves.

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Common Ground **MEDIA LAB** @ **ILLINOIS** RESEARCH PARK

The Common Ground Media Lab is the research and technology arm of Common Ground Research Networks. Common Ground Research Networks has been researching knowledge ecologies and building scholarly communication technologies since 1984.

Since 2009, we have had the fortune of being based in the University of Illinois Research Park while building our latest platform – CGScholar. This is a suite of apps based on the theoretical work of world-renowned scholars from the College of Education and Department of Computer Science at the University of Illinois Urbana-Champaign. CGScholar has been built with the support of funding from the US Department of Education, Illinois Ventures, and the Bill and Melinda Gates Foundation.

The CGScholar platform is being used today by knowledge workers as diverse as: faculty in universities to deliver e-learning experiences; innovative schools wishing to challenge the ways learning and assessment have traditionally worked; and government and non-government organizations connecting local knowledge and experience to wider policy objectives and measurable outcomes. Each of these use cases illustrates the differing of knowledge that CGScholar serves while also opening spaces for new and emerging voices in the world of scholarly communication.

We aim to synthesize these use cases to build a platform that can become a trusted marketplace for knowledge work, one that rigorously democratizes the process of knowledge-making, rewards participants, and offers a secure basis for the sustainable creation and distribution of digital knowledge artifacts.

Our premise has been that media platforms—pre-digital and now also digital—have often not been designed to structure and facilitate a rigorous, democratic, and a sustainable knowledge economy. The Common Ground Media Lab seeks to leverage our own platform – CGScholar – to explore alternatives based on extended dialogue, reflexive feedback, and formal knowledge ontologies. We are developing AI-informed measures of knowledge artifacts, knowledge actors, and digital knowledge communities. We aim to build a trusted marketplace for knowledge work, that rewards participants and sustains knowledge production.

With 27,000 published works and 200,000 users, we have come a long way since our first web app twenty years ago. But we still only see this as the beginning.

As a not-for-profit, we are fundamentally guided by mission: to support the building of better societies and informed citizenries through rigorous and inclusive social knowledge practices, offering in-person and online scholarly communication spaces

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United Nations Climate Change

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Climate change is one of the most pressing problems facing our world today. It is in the interests of everyone that we engage in systemic change that averts climate catastrophe. At Common Ground Research Networks, we are committed to playing our part as an agent of transformation, promoting awareness, and making every attempt to lead by example. Our Climate Change: Impacts and Responses Research Network has been a forum for sharing critical findings and engaging scientific, theoretical, and practical issues that are raised by the realities of climate change. We've been a part of global policy debates as official observers at COP26 in Glasgow. And we are signatories of the United Nations Sustainability Publishers Compact and the United Nations Climate Neutral Now Initiative.

Measuring

In 2022 we start the process of tracking and measuring emissions for all aspects of what we do. The aim is to build a comprehensive picture of our baselines to identify areas where emissions can be reduced and construct a long-term plan of action based on the GHG Emissions Calculation Tool and standard established by the United Nations Climate Neutral Now Initiative.

Reducing

At the same time, we are not waiting to act. Here are some of the "low hanging fruit" initiatives we are moving on immediately: all conference programs from print to electronic-only; removing single-use cups and offering reusable bottles at all our conferences; working closely with all vendors, suppliers, and distributors on how we can work together to reduce waste; offering robust online options as a pathway to minimize travel. And this is only a small sample of what we'll be doing in the short term.

Contributing

As we work towards establishing and setting net-zero targets by 2050, as enshrined in the Paris Agreement and United Nations Climate Neutral Now Initiative, and to make further inroads in mitigating our impacts today, we are participating in the United Nations Carbon Offset program. As we see climate change as having broad social, economic, and political consequences, we are investing in the following projects.
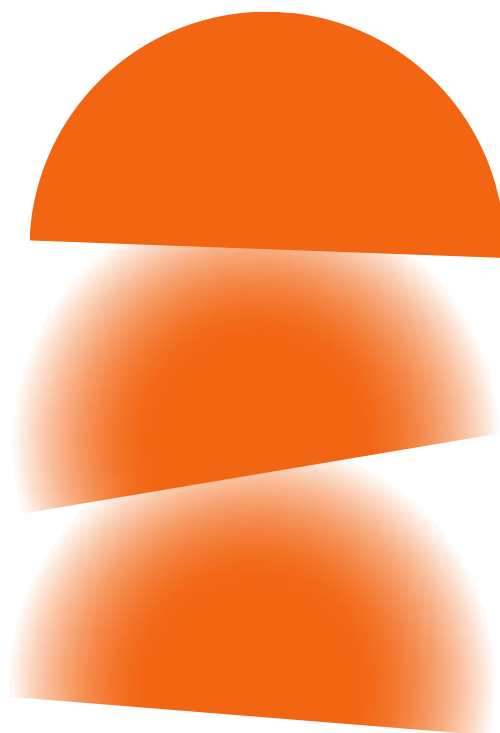
- Fiji Nadarivatu Hydropower Project
- DelAgua Public Health Program in Eastern Africa
- Jangi Wind Farm in Gujarat

Long Term Goals

We're committing to long-term science-based net-zero targets for our operations – and we believe we can do this much sooner than 2050. We'll be reporting annually via The Climate Neutral Now reporting mechanism to transparently communicate how we are meeting our commitments to climate action.

www.cgnetworks.org/about/climate-pledge

XVIII Congreso Internacional sobre
Principios y Prácticas del Diseño

Cultura del

Diseño

Transformador

11-13 DE MARZO, 2024

UNIVERSITAT POLITÈCNICA DE VALÈNCIA,
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Principios y Prácticas del Diseño   Escuela Técnica Superior de Ingeniería del Diseño   UNIVERSITAT POLITÈCNICA DE VALÈNCIA   Cumulus Association

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Estimadas, estimados congresistas, participantes y colaboradores:

La Universitat Politècnica de València (UPV) les da la bienvenida al XVIII Congreso Internacional sobre Principios y Prácticas del Diseño. Deseamos que sea un encuentro vibrante, que ponga en valor el tema destacado del congreso, que es la Cultura del Diseño Transformador, y que representa los valores de la Escuela Técnica Superior de Ingeniería Aeroespacial y Diseño Industrial (ETSIADI), que acoge la convocatoria de este año 2024.

Las sinergias generadas con Common Ground Research Networks han posibilitado esta edición, que tiene la esperanza de fortalecer las Redes de Investigación mediante el intercambio de conocimiento, experiencias y distintas sensibilidades. A su vez, aspira a multiplicar exponencialmente el efecto de nuestras investigaciones, reflexiones y buenas prácticas. Éste es el sentido de este encuentro, que entiende y desea evidenciar el poder del diseño como herramienta para transformar y adaptar nuestra sociedad, con una perspectiva más sostenible y naturalizada.

La Red de Investigación de Principios y Prácticas del Diseño facilita este foro esencial, para reflexionar de forma transdisciplinar y favorecer el encuentro de forma presencial, online y su reflejo escrito, mediante revistas indexadas y gestión editorial de libros.

Aspiramos a generar una transferencia de conocimiento, con un impacto positivo e integrador mediante los diversos enfoques planteados, que son: la Formación en Diseño, el Diseño en la Sociedad, el Diseño de Objetos, el Diseño Visual, la Gestión y Práctica Profesional del Diseño y el Diseño Arquitectónico, Espacial y Ambiental.

València tuvo el honor de ostentar la Capitalidad Mundial del Diseño en 2022, a lo que le ha seguido la Capital Verde Europea en 2024. Es una gran oportunidad contextualizar este congreso dentro del marco de reconocimiento por todos los esfuerzos realizados en mirar hacia el futuro, con la corresponsabilidad necesaria para un desarrollo más humano, integrador y sostenible.

Agradecemos sinceramente su participación y contribución a este congreso. Les deseamos la mejor de las estancias posibles, y esperamos multiplicar el efecto de esta valiosa red de conocimiento y transferencia.

Dra. Begoña Sáiz Mauleón
Presidenta del XVIII Congreso Internacional sobre Principios y Prácticas del Diseño

CULTURA DEL DISEÑO TRANSFORMADOR VALENCIA 2024

El Diseño puede aportar funcionalidad. El Diseño puede hacer la vida más fácil. El Diseño puede llegar a mejorar la vida de las personas. Investigar en Diseño es por tanto una enorme responsabilidad pues implica en parte estudiar los modos en los que el ser humano se relaciona con el mundo y configura cómo desea vivir en él.

Este Congreso es especialmente interesante porque vamos a hablar de cómo el Diseño mejora, de cómo el Diseño configura y, sobre todo, de cómo el Diseño TRANSFORMA.

Investigadores e investigadoras de todos los rincones del mundo, compañeros y compañeras con una visión amplísima del Diseño, nos mostrarán estudios, análisis, investigaciones, relacionadas con esa transformación. Os pido estar muy atentos y atentas principalmente a esos ejemplos de transformación. En numerosas ocasiones, si estamos muy cerca de algo, si trabajamos mucho con ello, perdemos la perspectiva y no somos conscientes de sus cualidades, y sí, quizás la mejor cualidad del Diseño es su poder transformador.

El propio Diseño -arquitectónico, urbanístico…- ha transformado a una ciudad preciosa de por sí, como es Valencia, en todo un icono de la modernidad. Su skyline y su identidad se han dibujado en torno a proyectos tan poderosos como la Ciudad de las Artes y las Ciencias, en los que el Diseño tiene un peso fundamental. Vamos a disfrutar mucho de ella. Por todas estas razones: el apasionante tema del Congreso, el perfil polifacético de nuestras investigadoras e investigadores y la maravillosa ciudad que nos acoge, creo que nos esperan unos magníficos días de compartir y aprender juntos.

Bienvenidos y bienvenidas a nuestro Congreso,

Dr. Pablo Díaz Morilla
Presidente de la Red de Investigación de Principios y Prácticas del Diseño

Estimados participantes del Congreso:

Es un gran placer darles la bienvenida al **XX Congreso Internacional de Tecnología, Conocimiento y Sociedad**. Les agradezco a todos el compartir sus trabajos con el resto de nuestra Comunidad.

Durante más de 30 años, Common Ground Research Networks ha invertido en el desarrollo de tecnologías que buscan romper las barreras de acceso en la comunicación académica. En cada fase, hemos construido espacios para apoyar el diálogo interdisciplinario, antes de que estos enfoques se pusieran tan de moda; fuimos capaces de conectar voces internacionales cuando las disciplinas a menudo estaban aisladas en silos nacionales; y apoyamos siempre una agenda de acceso e igualdad, al ofrecer vías y oportunidades para voces diversas.

Ahora proponemos otro tipo de intervención: construir una infraestructura de comunicación académica para un futuro mejor. Nuestro modelo mixto busca trascender los límites físicos al ofrecer un espacio para extender el contenido del Congreso en persona a pasarlo a un formato virtual, lo que garantiza que los delegados online tengan los mismos espacios participativos y experiencias dentro de la plataforma CGScholar. Al mismo tiempo, el modelo ofrece a los participantes un recurso con acceso a un espacio social donde los demás participantes pueden mantenerse conectados mucho después de que finalice el Congreso.
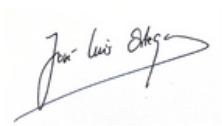
Para nosotros, el modelo mixto es más que un acercamiento a la tecnología. Estamos utilizando este filtro conceptual para mejorar nuestro objetivo:

- Disciplinas mixtas como un enfoque para las prácticas de investigación interdisciplinarias.
- Afinidades mixtas como una forma de abordar una política compartida para paradigmas de reconocimiento y redistribución.
- Voces mixtas como una forma de considerar dónde ocurre la investigación dentro y fuera de la academia.
- Ideas mixtas como terreno común para un nuevo sentido cívico.

También estamos comprometidos a ser líderes en la industria. Desde 2021 formamos parte del Pacto de editores para el logro de los objetivos de desarrollo sostenible de Naciones Unidas. Lanzado en colaboración con la Asociación Internacional de Editores, el pacto "presenta 10 puntos de acción que los editores, las asociaciones editoriales y otros pueden comprometerse a emprender para acelerar el progreso hacia el logro de los Objetivos de Desarrollo Sostenible (ODS) para 2030. Los signatarios aspiran a desarrollar prácticas sostenibles y actuar como defensores de los ODS, publicando libros y revistas que ayudarán a informar, desarrollar e inspirar acciones en esa dirección".

Permítanme agradecerles de nuevo por su participación, por confiar su trabajo a Common Ground Research Networks. Agradezco igualmente a nuestros socios y colegas por la organización de este evento que no acaba nunca y que tiene una extensión continua en nuestra plataforma CGScholar.

Reciban un cordial saludo y quedo a su disposición para cualquier asunto que pueda ser de su interés.

Dr. José Luis Ortega Martín
Director Científico de CGRN en español

Red de Investigación
de Principios y
Prácticas del Diseño

Fundada en 2007, la **Red de Investigación de Principios y Prácticas del Diseño** pone a su disposición un foro donde se exploran los significados y objetivos connaturales al diseño. Partiendo desde planteamientos tanto profesionales como disciplinares, la red aborda una gran variedad de cuestiones; en aras de construir un diálogo, de naturaleza transdisciplinar, que abarque la amplia gama de paradigmas y prácticas inherentes al diseño. Buscamos construir una comunidad epistémica donde se puedan establecer relaciones transdisciplinares, geográficas y culturas. Como Red de Investigación, nos definimos por nuestro enfoque temático y la motivación para construir estrategias de acción determinadas por los temas comunes.

Prácticas del diseño

El diseñador ya no es el experto técnico, el esteta heroico o el individuo inspirado de nuestro pasado reciente, el diseñador contemporáneo aprovecha las fuentes dispersas de creatividad e innovación. La clave hoy es la colaboración. Para quienes practican el diseño, una paradoja central de nuestros tiempos es, por una parte, la creciente especialización, pero por la otra, la necesidad de una integración holística de un rango más amplio de tareas de diseño, funcionando entre y a través de las disciplinas de diseño. El diseño se está transformando en un proceso cada vez más social, en efecto sociable.

El imperativo de colaborar se extiende además, más allá del dominio de una interacción profesional y de trabajar en equipos de diseño. También se extiende a la relación entre los usuarios, clientes y consumidores del diseño. Hoy, los diseñadores necesitan desarrollar profundas relaciones colaborativas con su "público". El diseño participativo y los diseños centrados en el usuario son solo dos frases clave que capturan el espíritu de este imperativo.
En términos generales, el equilibrio de poder en el proceso de diseño está cambiando desde el diseñador que todo lo sabe y crea cosas que son buenas para consumidores pasivamente agradecidos, a un diálogo que involucra procesos más cuidadosos y sistemáticos de consulta con el usuario, investigación, diseño colaborativo, prueba, evaluación y rediseño continuo. La democracia emergente del diseño convierte al diseñador en un conversador, facilitador, mentor y pedagogo. Como consecuencia se pone en duda el legado de autocomprensión del diseñador como un artista, tecnócrata y experto. Las nuevas políticas del diseño juegan a través de tensiones entre roles históricos y expectativas contemporáneas En el trayecto, ¿qué se gana y qué se pierde? ¿Qué es inherentemente difícil, en lo que respecta a las nuevas relaciones entre el diseñador y el usuario, y qué es intrínsecamente liberador?

Tan pronto como cambia el equilibrio de poder, un mundo polimorfo y polivalente social se presenta así mismo. "Cualquier color que le guste, siempre y cuando sea negro", dijo el heroico Henry Ford, quien cómodamente asumió que cada cliente, de los millones que conformaban su mercado masivo, tenía necesidades e intereses idénticos. Pero tan pronto como usted comienza a hablar de los nichos de mercado, el uso y la personalización, descubre la diversidad en un rango aún más sorprendente de matices y tintes –locales y globales– de diferentes capacidades e incapacidades de edades, culturas, géneros y afinidades. La paradoja de la democracia del diseño de hoy es que diseñar para todos significa diseñar para muchos intereses y usos diversos.

Por lo tanto, hay algunas nuevas líneas enfocadas en lo social, que los diseñadores desarrollan para objetivos de sostenibilidad, acceso, seguridad y bien social. Estos son asuntos de normas y cumplimiento cada vez más intrincados. O, si usted interioriza estas instancias, se transforman en asuntos de ética profesional autorregulados.
Estas son algunas de las cosas que, sencillamente, están cambiando el trabajo de ser un arquitecto, planificador urbano, diseñador industrial, ingeniero, diseñador visual, diseñador de web, gestor de conocimiento, diseñador de medios o comunicaciones, diseñador de modas, investigador de usos o diseñador educacional –por mencionar tan solo unas cuantas de las vocaciones aplicables al diseño–.

https://el-diseno.com/acerca-de/enfoque-e-intereses

Modalidades de diseño

La digitalización de texto, sonido y la imagen fija o en movimiento, es una importante transición. Esto ha engendrado nuevas prácticas de modelado y simulación, de prefigurar lo real en lo virtual. También ha presentado lo virtual como un resultado del diseño en sí mismo.

El resultado es una nueva multimodalidad y sinestesia. La conceptualización del diseño requiere que los diseñadores se muevan entre las modalidades del lenguaje, la imagen, el sonido, el espacio, el tacto y el gesto. El significado de su diseño puede ser articulado de una manera, luego de otra, o de todas maneras al mismo tiempo en un proceso profundamente integrado de sinestesia.

Los diseñadores necesitan ser capaces de "hacer" un discurso de diseño profesional multimodal. Deben hablar y escribir a su manera a través de colaboraciones complejas con codiseñadores e interacciones con los usuarios. Necesitan ser capaces de "crear" visualizaciones mientras que exploran las alternativas de diseño mediante imágenes mentales y retratar sus visiones dentro de la realidad Necesitan ser capaces de representar realidades espaciales, prefigurando las tres dimensiones mediante dos dimensiones y cambiando los planos en artefactos táctiles, objetos manipulables, espacios arquitectónicos y paisajes navegables. El nuevo medio digital proporciona herramientas nuevas, flexibles y accesibles para el pensamiento sinestético y multimodal. Hoy las invenciones de los medios se han transformado en las madres de la necesidad del diseño.

Tal innovación no es simplemente una innovación solo por sí misma. También es por las razones más prácticas. Hay una necesidad en aumento para la documentación a efectos de la planificación y la gestión de proyectos, la regulación y el cumplimiento, la evaluación del riesgo y la gestión del mismo y la especificación de proyectos y la claridad contractual.

Principios del diseño

La palabra "diseño" tiene un doble significado fortuito que describe simultáneamente una estructura intrínseca y el acto voluntario de crear. El diseño es a la vez morfología y construcción.

Morfología: el diseño es inherente, mientras que sus orígenes pueden ser orgánicos, inconscientes, de sentido común, o el producto cuidadosamente premeditado del trabajo profesional del diseñador. El diseño en este sentido es estructura, forma y función.

Construcción: el diseño es también un acto, una manifestación de voluntad, un proceso de transformación. La narrativa del diseño es más o menos así: toma los diseños disponibles en el mundo, inherente a los objetos encontrados, arquitecturas, paisajes, procesos, relaciones humanas, culturas. Luego se involucra en el acto de diseñar o reelaborar y reimaginar estos diseños. Esto no es nunca solo un negocio de reproducción y replicación. Siempre envuelve una inyección de los intereses sociales y experiencias culturales del diseñador; su subjetividad e identidad, no menos. El residuo, como la narrativa llega a un fin momentáneo, es el mundo transformado sin que importe lo poco que sea. Pero el mundo nunca vuelve a ser el mismo, y el rediseño se devuelve al mundo. La acción del diseño sigue las transformaciones que se unen al repertorio de diseños disponibles; nuevos inicios para nuevas narrativas de diseño.

Tal vista contrasta con comprensiones más antiguas del diseño, en las cuales los diseñadores eran receptores pasivos de rutinas expertas. Su formación dentro de la práctica profesional los ha conducido a aprender a reproducir formas de diseño recibidas, sancionadas y autoritarias. Esto pudo haber sido apropiado para un mundo que concedía importancia a la estabilidad y uniformidad. Pero el mundo de hoy es un lugar de cambio y diversidad. Diseñar, en un sentido dinámico, transformable, puede ser propicio e incluso emancipador. Es un proceso de cambiar al mundo. Con este espíritu, el Congreso del diseño, las revistas del diseño, la editorial del diseño y el blog de noticias de diseño se mueven entre una reflexión teórica sobre la naturaleza del diseño y los casos de estudio de la práctica del diseño, y desde las perspectivas basadas en la investigación a las basadas en la experiencia de los entendidos en diseño.

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Tema 1: Educación del diseño

Aprender a ser un diseñador.

Cuestiones actuales:

- Pensamiento del diseño, modelos cognitivos y estilos de aprendizaje.
- Resolución de problemas, procesos de reconocimiento, desarrollo de hipótesis, procesos de razonamiento, soluciones.
- Residuos. Aprendiendo de nuestras experiencias históricas y contemporáneas del diseño.
- Innovación y creatividad. Significado en teoría y práctica.
- Casos, estudios empíricos sobre prácticas del diseño.
- Aproximaciones profesionales. Adquirir las competencias del diseñador, sus capacidades y actitudes.
- Métodos de observación, marcos de interpretación y criterios para el diseño.
- Teoría macro y micro. Lo cotidiano y la teorización de lo empírico.
- Diseño concebido, complejidad, heterogeneidad y holismo.
- Pedagogías del diseño. Enseñar y aprender en las profesiones del diseño.
- Diseños educativos. El profesor como diseñador de instrucción.
- Puntos de comparación. Precedentes, analogías y metáforas en el proceso de diseño.

Tema 2: Diseño en la sociedad

Sobre las fuentes sociales del diseño y sus efectos.

Cuestiones actuales:

- Diseño en políticas sociales. Política y planificación.
- Salud y Seguridad. Bienestar público en la práctica del diseño.
- Diseño y negocios. Mercados para el diseño y diseño de mercados.
- Sistemas humanos y procesos culturales. Globalización y profesiones del diseño.
- Diseño sin diseñadores. Diseños amateur, cotidianos, orgánicos y vivos.
- Diseño para la diversidad. Cultura, género y orientación sexual.
- Políticas de diseño. Creación de tecnologías, espacios e instituciones más comprometidas con las necesidades humanas.
- Finalidades del diseño: pragmática, estética y emancipatoria.
- Tecnología y humanidades. Tensiones y sinergias.
- Valores, cultura y sistemas de conocimiento. El papel de la perspectiva, la subjetividad y la identidad.
- Encuentros interculturales. Trabajar en equipos de diseño diverso y global.
- Nichos de mercado. Trabajar con diversos clientes y usuarios.

Tema 3: Objetos diseñados

Sobre la naturaleza y forma de los objetos de diseño.

Cuestiones actuales:

- Personas y artefactos. Explorando usos y utilidades.
- Narrativas del diseño. Historias y creación de sentido en el proceso de diseño.
- Estudios culturales. Diferencia, diversidad y multiculturalismo en el diseño.
- Incorporado y desincorporado. Etnografías del diseño.
- Material e inmaterial. Ideas y materiales.
- Forma y función. Las políticas del diseño industrial.
- Sociología del diseño. Artes decorativas, movimientos populares y comunidades de prácticas.
- Ciencia y tecnología en el diseño. Análisis crítico del tecnodeterminismo.
- Ecologías de medios y orientación del objeto. Artefactos diseñados y procesos como experiencias de aprendizaje.
- Procesos y objetos codiseñados. Diseño con usuarios y comunidades.
- Cercanía a los consumidores. El diseño como diálogo.
- Diseño universal y acceso. Midiendo la participación en los sistemas de diseño.

Tema 4: Diseño visual

Sobre la representación utilizando medios de comunicación visual.

Cuestiones actuales:

- Medios y mediación. Gramática visual singular y universal.
- Perspectiva, interés. El diseñador como agente o intermediador.
- Negociar la autenticidad y la autoridad. El poder de la continuidad y el cambio.
- Formas de comunicar el diseño: la vanguardia en desarrollo.
- Modelo y representación gráfica, simbólica, lógica y matemática.
- Sinestesia o modos de representación cruzada: lenguaje, imagen, espacio y medio.
- Bellas artes: ilustración, fotografía, film y vídeo.
- Economías visuales: publicidad, marketing y logos.
- Sistemas de información y arquitecturas: diseño de interfaz, diseño digital, software y diseño de redes sociales.
- Acercamientos públicos y profesionales. El papel del diseñador como comunicador.
- Patentes, copyright y propiedad intelectual. Los propietarios y lo público, lo comercial en el dominio público.

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Tema 5: Gestión del diseño y práctica profesional

Sobre la organización del diseño, diseñar el trabajo y el diseño como práctica profesional.

Cuestiones actuales:
- Diseñar el diseño: de la conceptualización a la especificación.
- Conocimientos comunes. Compartiendo perspectivas, teorías y diseños en comunidades de prácticas.
- Multidisciplinariedad y cruces profesionales. Aproximaciones al diseño.
- Profesionalismo y sus trayectorias. Reducir la especialización y/o la multihabilidad.
- Trabajar con la investigación. Los practicantes del diseño como investigadores o usuarios de la investigación.
- Negocio de rapidez. La economía y el pragmatismo de la entrega rápida y diseño junto a construcción.
- Lógicas de la colaboración. Interactividad, sensibilidad y reflexividad en las comunidades de prácticas.
- Democratización del diseño y responsabilidad pública. Construyendo consulta y consenso.
- Diseño evolutivo. Colaboraciones en el tiempo.
- Experiencia como facilidad. Diseñadores que saben lo que podrían no saber.
- Diseño de proyectos. Planeamiento, gestión y posteriores.
- Gestión de proyectos centrados en el cliente o en el usuario. El papel cambiante del diseñador como mediador.

Tema 6: Diseño arquitectónico, espacial y ambiental

Construir espacios, entornos y prácticas de diseño sostenible.

Cuestiones actuales:
- Espacios comunes: huellas ecológicas, atmósferas, biosferas y ecosferas.
- Ciclos vitales. Diseñar productos y servicios a largo plazo.
- Relación entre valores humanos y ecológicos, estáticos o dinámicos.
- Estándares y regulaciones implícitas, explícitas y certificaciones sociales.
- Planear lo urbano: perspectivas interdisciplinares sobre las ciudades del futuro.
- Naturaleza diseñada: parques, espacios naturales y ecologías elementales.
- Comprendiendo los impactos humanos. Recursos naturales y huella ambiental.
- Sobre la sostenibilidad y el ecodiseño. El diseño en un marco ambiental, económico, social y cultural.
- Planear escenarios: diseño de futuros alternativos.
- Creando y destruyendo códigos. La regulación en la industria del diseño.
- Documentar los procesos de diseño sostenible: metodologías, heurísticas y rutinas.

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Pablo Diaz Morilla

EADE; University of Wales in Málaga; EEAASS Diseño León XIII; Universidad de Málaga, España

Director de las Enseñanzas Artísticas Superiores en Diseño (Diseño Gráfico, Diseño de Interiores y Diseño de Producto) de la Junta de Andalucía en EADE-Institución Docente Malagueña León XIII Málaga desde 2014. Director de los BA Hons (Grados Británicos) en Publicidad y Diseño de Marca en el mismo centro. Doctor en Comunicación (calificación sobresaliente cum laude) con mención internacional por estancia en la Université Sorbonne de París. Su tesis obtuvo la Ayuda Fundación SGAE de investigación en materia cultural 2018. Licenciado en Comunicación audiovisual. Máster en Formación del profesorado. Investigador en distintos campos, destacando la Comunicación, la Publicidad y el teatro. Es además guionista audiovisual y dramaturgo premiado con, entre otros, el Premio Buero Vallejo de Teatro, el Premio de la Asociación de Autores y Autoras de Teatro de España o el Premio Jesús Domínguez de la Diputación de Huelva. Selector de proyectos para Factoría Echegaray desde 2019.

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Loredana Di Lucchio

Architect; Researcher; Professor, Sapienza University of Rome, Rome, Italy

Dr. Loredana Di Lucchio is an Architect and Strategic Designer. She earned her PhD while studying the relationship between design and production as phenomena involved within semantic, technological, and consumption aspects. She currently directs research activities for the Arts, Design and New Technologies section of the I.T.A.C.A. Department at Sapienza Università di Roma. She has lectured on strategic and advanced design topics at several national and international conferences. In her work she examines the relationships between design, technologies, production, and consumption. Currently, her research focuses on the collaborative possibilities between the Italian and Chinese Design and Productive System for developing a new network to overcome the idea of delocalization and, at the same time, the idea of globalization towards a glocal dynamic of consumption.

She is the author of Il Design delle Strategie. Un modello interpretativo della relazione tra design e impresa [Design of Strategies. An interpretative model of the relationship between design and business], Gangemi Editore, 2005. She is co-editor of the "Factory" section of DIID – Disegno Industriale Industrial Design, which focuses on on innovative company "case histories."

Lorenzo Imbesi

Architect; Professor, Sapienza University of Rome, Rome, Italy

Dr. Lorenzo Imbesi is an architect, with a PhD in Environmental Design, and a Professor at Sapienza University of Rome in Rome, Italy. Previous to his position at Sapienza, he was Associate Professor at Carleton University, School of Industrial Design (Ottawa, Canada). He is a critic and essayist for many reviews, and is currently Co-Director of the magazine DIID – Disegno Industriale. He has also served as a keynote speaker and coordinator for several international conferences and curated design exhibitions and events. His interests include the impact of new technologies and artifacts on design culture--especially its critical expressions and theoretical inter/trans/post-disciplinary implications with regard to our contemporary knowledge society and the social, cultural, and ethical.

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La Red de Investigación de Principios y Prácticas del Diseño agradece las contribuciones para su fundación, el apoyo constante y la asistencia continua de los siguientes expertos y académicos de renombre mundial.

- **Pablo Diaz Morilla,** EADE; University of Wales in Málaga; EEAASS Diseño León XIII; Universidad de Málaga, España (editor)
- **Loredana Di Lucchio,** Sapienza Universita di Roma, Italia
- **Lorenzo Imbesi,** Sapienza Universita di Roma, Italia
- **Karine Berthelot-Guiet,** Sorbonne Université Celsa, Francia
- **Melina Amao Ceniceros,** Universidad Autónoma de Baja California, México
- **Alma Elisa Delgado Coellar,** Universidad Nacional Autónoma de México, México
- **Paloma Gómez Marín,** IADE Escuela de Diseño, España

XVIII Congreso Internacional
sobre Principios y Prácticas del Diseño

Fundada in 2007, la **Red de Investigación de Principios y Prácticas del Diseño** ofrece un foro interdisciplinar para explorar el propósito y el significado del diseño. En términos profesionales y disciplinares, la red cubre un amplio espectro para constituir un diálogo transdisciplinar, que engloba multitud de paradigmas y prácticas del diseño. Nos movemos entre la reflexión teórica sobre la naturaleza del diseño y los estudios de caso del diseño práctico, entre las perspectivas basadas en la investigación y los enfoques basados en la experiencia de los profesionales del diseño. Nuestro cometido es construir una comunidad epistémica donde se establezcan correlaciones entre delimitaciones disciplinares, geográficas y culturales.

Congresos anteriores

- 2007 – Imperial College, Londres, Reino Unido
- 2008 – Universidad de Miami, Miami, Estados Unidos
- 2009 – Universidad Técnica de Berlín, Berlín, Alemania
- 2010 – Universidad de Illinois en Chicago, Chicago, Estados Unidos
- 2011 – Universidad de Roma La Sapienza, Roma, Italia
- 2012 – Universidad de California, Los Ángeles, Estados Unidos
- 2013 – Universidad de Chiba, Chiba, Japón
- 2014 – Universidad de Columbia Británica – Robson Square, Vancouver, Canadá
- 2015 – University Center Chicago, Chicago, EEUU
- 2016 – Pontificia Universidad Católica de Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brasil
- 2017 – Institute without Boundaries en George Brown College, Toronto, Canadá
- 2018 – Elisava Escuela Universitaria de Diseño e Ingeniería de Barcelona, Barcelona, España
- 2019 – Universidad de San Petersburgo, San Petersburgo, Rusia
- 2020 – Pratt Institute, Brooklyn, Nueva York, Estados Unidos (congreso virtual)
- 2021 – Universidad de Monterrey, Monterrey, México (congreso virtual)
- 2022 – University of Newcastle, Australia (congreso virtual)
- 2023 – Instituto Politécnico de Lisboa, Lisboa, Portugal

La **Red de Principios y Prácticas del Diseño** agradece la contribución y el apoyo que le brindan las siguientes instituciones.

Escuela Técnica Superior de Ingeniería del Diseño

Cumulus Association

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

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https://el-diseno.com/acerca-de/colaboradores

XVIII Congreso Internacional sobre
Principios y Prácticas del Diseño

11-13 DE MARZO DE 2024

Cultura del Diseño Transformador

UNIVERSITAT POLITÈCNICA DE VALÈNCIA, VALENCIA, ESPAÑA

Cultura del Diseño Transformador

Participar en la construcción de la sociedad a través del diseño transformador precisa de una paciente y constante reflexión, estudio y capacidad de adaptación para la supervivencia a una sociedad que construye y destruye a la misma velocidad, excesivamente manipulada, seriamente polarizada y con deseos e intereses tan contradictorios que engullen la esencial naturaleza social del ser humano.

Nuestra parcela de responsabilidad, para aspirar a recuperar un entorno más naturalizado, nos invita, a veces obliga, a pensar y repensar en soluciones de transformación que cohabiten con sistemas, ya demostrados, nocivos para la propia supervivencia.

Con plena consciencia del poder del diseño, su potente efecto emocional y su capacidad de transformación positiva, se propone un discurso valiente, en donde desde la humildad y coherencia se analicen propuestas transformadoras, realistas, sociales, ecológicas y sostenibles, viables en el momento que nos toca vivir y, sobre todo, humanizadoras de amplio espectro.
Se propone analizar cuáles serían las culturas actuales del diseño que transforman el mundo, o que lo quieren transformar. Resulta aburrido, incluso desmoralizador, escuchar discursos y propuestas transformadoras con fracaso de implementación positiva para una sociedad formada por personas con distintas capacidades. Se hace necesaria una crítica constructiva, seguramente dolorosa, que asiente los cimientos de un futuro sostenible, socialmente integrador y normalizado.

El diseño transformador pudiera no ser perfecto, no ser homogéneo, ser mínimo, reciclado o reutilizado y eso, a veces, no se contempla en los parámetros de estandarización a los que se nos ha acostumbrado, hasta tal punto que no contemplamos en entornos más formales una ruptura con ciertos esquemas que, a priori no gustan o tienen otros intereses, pero que formarían parte del cambio necesario al que nuestra forma de estar en el mundo, de crear, producir y adquirir nos ha arrastrado.

Poner en valor la herramienta estratégica de la cultura del diseño como generador de sinergias transformadoras, inclusivas, humanas y sostenibles es la huella a la que aspira el decimoctavo Congreso de Principios y Prácticas del Diseño.

Begoña Sáiz Mauleón

Directora Académica, Universitat Politècnica de València (UPV), Valencia, España

Begoña Sáiz Mauleón es Doctora en Bellas Artes por la Universitat Politècnica de València (UPV), Máster en Artes Gráficas por la UPV y Máster en Física por la Universidade de Vigo. Es investigadora en el Instituto de Tecnologías de la Información y las Comunicaciones (ITACA) de la UPV y profesora de Diseño y Cooperación Universitaria al Desarrollo en el Grado en Ingeniería en Diseño Industrial y Desarrollo de Productos y en el Máster en Ingeniería del Diseño, ambos impartidos en la Escuela Técnica Superior de Ingeniería del Diseño (ETSID) de la UPV. Es mentora del grupo Generación Espontánea de la UPV Youth University Design (YUDesign), que trabaja para promover la cultura del diseño, la innovación y la creatividad a través de proyectos multidisciplinares. Su trabajo en Cooperación Universitaria al Desarrollo ha sido premiado en 2019 por la Comisión de Evaluación y Seguimiento de Proyectos de Innovación y Mejora Educativa (CESPIME) de la UPV. Su trabajo en docencia e investigación aplicando la realidad virtual inmersiva como herramienta para el desarrollo de proyectos y difusión de resultados ha sido premiado en 2020 por la CESPIME de la UPV. Recientemente ha recibido el Premio a la Actividad Innovadora en Comunicación y Divulgación Científica de la UPV, galardones que forman parte de la estrategia de excelencia en Recursos Humanos para la investigación (HRS4R), reconocida con el "Sello de Excelencia en Recursos Humanos en Investigación.

Ximo Roca
Diseñador, Fundador del estudio XIMO ROCA DISEÑO, España

Ximo Roca es el referente de una generación de diseñadores que inició su andadura profesional en los años 80. En 1989 creó su propio estudio, Ximo Roca Diseño. La trayectoria de éste se caracteriza por un diseño real y funcional. Un estilo único y multidisciplinar que se proyecta a España, Italia y más recientemente a Latinoamérica y Australia. En sus proyectos, todos ellos adaptados a cada cliente, se comprometen desde el concepto inicial hasta el final dando como resultado productos de vanguardia temporales que han sido galardonados con numerosos premios.

TECNICO SUPERIOR EN DISEÑO INDUSTRIAL.
- Graduado en Artes Aplicadas, especialidad DISEÑO INDUSTRIAL, en 1980.
- Componente de la ADCV (Asociación de Diseñadores de la Comunidad Valenciana) Miembro del BEDA (The Bureau of European Design Associations)
- Miembro de ADP (Associació de Disenyadors Professionals)
- Imparte docencia en la ESDICEU (Escuela Superior de Diseño Industrial CEU desde 1.990. Participación en la Comisión Consultiva de Ingeniería Técnica Diseño Industrial con la función de asesorar a los Órganos de Gobierno de la Universidad CEU Cardenal Herrera.
- Departamento de Diseño de FOLQUES S.A. durante los años 1981 y 1982.
- Jefe del departamento de Diseño y Producto de la empresa ANDREU WORLD 1983 – 1988.
- Marzo de 1989 crea su propio estudio XIMO ROCA DISEÑO.
- Coordinador del departamento de diseño de la empresa BONESTIL 1989 – 2010 Coordinador del departamento de diseño de la empresa FEDERICO GINER 1990 – 1997 Coordinador del departamento de diseño de la empresa CHUECA HNOS. 1992 – 2000 Coordinador del departamento de diseño de la empresa PORVASAL 2001 hasta la actualida

Jorge Pensi

Diseñador, Fundador de "Pensi Design Studio", España

Buenos Aires, 1946. Studied Architecture at the University of Buenos Aires. In 1975 decided on a change of life by moving to Barcelona and obtaining Spanish nationality.

He worked together with Alberto Lievore between 1977 and 1984. In 1984, he set up his own studio in the Gothic Quarter of Barcelona.
Jorge Pensi maintains close personal and professional relations with his team of collaborators, thus ensuring that his projects are run to perfection.
Pensi Design Studio has been internationally consolidated as a benchmark for contemporary design. Its minimalist designs have received a large number of awards.

Bay Backner

Artista Web3, Productora, Fundadora de MESH, Cofundadora de Vueltta, Valencia, España

Bay is an artist and producer of collective digital experience. She is founder of MESH, the art fair for 3D, metaverse and VR creators, and co-founder of Vueltta, an international art collective producing immersive installations in the Decentraland metaverse. Bay was the curator of Metaverse Art Week 2023, and is Assistant Professor of Emerging Technologies at Berklee Valencia. Her work has been seen in Vanity Fair, Dazed, Vogue and Architectural Digest, and was recently featured by CNN in their series The Next Frontier.

Mariví Calvo

Cofundadora de LZF, Valencia

LZF was co-founded in 1994 by Mariví Calvo, Graduate in Art History by the Literary University of Valencia (1982) and in Fine Arts, specialising in Engraving by the Polytechnic University of Valencia (1983). Also, she is specialised in "Collagraph" by the Pratt Institute in New York (1984-1987), and Sandro Tothill, an Australian musician. Together, they shared a passion for creativity and experimentation. On one auspicious occasion, while playing with wood veneers, Mariví and Sandro hit on a novel idea for enveloping light. LZF has since crafted an extensive collection of innovative lamps. Through developing Timberlite®, a patented process for treating natural wood veneer–making the veneer both pliable and non-breakable–a multi-talented roster of designers have worked with LZF to create a great number of handcrafted lamps.

LZF has been a creative hub from the outset. In its exciting journey to date, the company has embraced art, design, craftsmanship, innovation, technology, and sustainability. While wood veneer is the staple of LZF's craft, it is now working with novel materials, including hand-blown borosilicate glass. Never losing touch with its creative history or its roots, LZF's lamps are produced in its bustling factory in the village of Chiva, Valencia. Each lamp is handmade by skilled and diligent craftspeople, from FSC certified natural wood veneers. LZF is committed to the preservation of traditional skills and know-how. Its lamps have journeyed across the world and are part of a showcase of great Spanish design.

As artisans, it is always a privilege to have any work recognised, but LZF remains ever humble. The company has received more than thirty-five national and international awards. In October 2020, LZF was the proud recipient of Spain's Premios Nacionales de Innovación y de Diseño 2020 (a National Innovation and Design Award) in the 'Companies'category. In 2011, LZF won the Spanish National Craftsmanship Award (Premio Nacional de Artesanía), recognising the company's dedication to artisanship. It is the first time that a Spanish company has won both of these prestigious accolades.

Today, Mariví, Sandro, and the entire LZF family, continue to share a passion for creativity and experimentation. At its core, LZF remains devoted to, and fascinated by, the possibilities found in wood touched by light.

Sandro Tothill

Cofundador de LZF, Valencia

LZF was co-founded in 1994 by Mariví Calvo, Graduate in Art History by the Literary University of Valencia (1982) and in Fine Arts, specialising in Engraving by the Polytechnic University of Valencia (1983). Also, she is specialised in "Collagraph" by the Pratt Institute in New York (1984-1987), and Sandro Tothill, an Australian musician. Together, they shared a passion for creativity and experimentation. On one auspicious occasion, while playing with wood veneers, Mariví and Sandro hit on a novel idea for enveloping light. LZF has since crafted an extensive collection of innovative lamps. Through developing Timberlite®, a patented process for treating natural wood veneer–making the veneer both pliable and non-breakable–a multi-talented roster of designers have worked with LZF to create a great number of handcrafted lamps.

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Birgit Mager

Profesora, Universidad de Ciencias Aplicadas de Colonia, Alemania

Birgit Mager is Co-Founder and President of the International Service Design Network and editor-in-chief of Touchpoint, the International Journal of Service Design. Since 1995 Birgit Mager has held the first European professorship on "Service Design" at the CologneUniversity of Applied Sciences (Germany) and since then has developed the field of Service Design constantly in theory, methodology, and practice. Her numerous lectures, her publications, and her projects have strongly supported the implementation of a new understanding of the economical, ecological, and social function of design in the domain of services. She received the Sir Misha Black Award 2020 for distinguished services to design education.
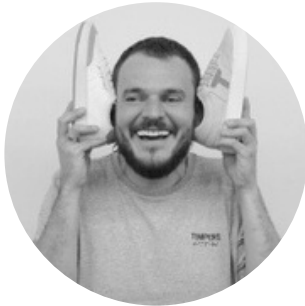
Alonso de Paco Sánchez

Psicólogo clínico, Proyecto de integración laboral "A la Lona de Valencia", España

Psicólogo clínico. Experto en rehabilitación psicosocial de personas con enfermedad mental. Responsable del proyecto de integración laboral A la Lona de Valencia.

Diego Soliveres Rodríguez

Socio Co-fundador de Timpers, Valencia, España

Nació el 24 de septiembre de 1980 en Sta. Cruz de Tenerife, con una discapacidad visual de nacimiento. A los 6 años, se trasladó con su familia a Alicante, para recibir su primera educación en uno de los colegios de la O.N.C.E. que había en España y porque allí contaban con su familia paterna, lo que siempre es un apoyo. Cursó el BUP y el COU en un Instituto de Alicante, en el que no tuvo ningún problema para integrarse y llevar una vida totalmente normal con el resto de compañeros y, tras finalizar los estudios, comenzó la Carrera de Derecho en la Universidad de alicante. Pero, entre que nunca llegó a gustarle del todo el Derecho y que surgió por otro lado su gran pasión: la música y, concretamente, la batería, fue apartando los estudios y decantándose por intentar poder ganarse la vida como músico, realizando varios proyectos importantes, entre los que destaca Born to be Queen, grupo tributo a la banda británica Queen, con la que realizaron importantes actuaciones por toda España, llegando a actuar en la Convención Anual de Fans de Queen España, en Madrid, o incluso, compartir escenario con bandas nacionales, de la talla de Danza Invisible. Por desgracia, por algunas diferencias entre los componentes de la banda, el proyecto tuvo que disolverse y Diego se vio en un impás en el que no tenía la carrera terminada, no tenía ganas de volver a montar proyectos musicales de cero y, aunque no era lo que había pensado para sí en el pasado, pidió la venta del cupón a la O.N.C.E., trabajo al que, como afiliado a la Organización, tenía derecho y comenzó a trabajar como vendedor. No obstante, al ser el cupón un trabajo tan esclavo y al ser Diego una persona activa, a la que le gusta aportar, trabajar en equipo, hacer piña, etc., decidió apuntarse al equipo de fútbol para ciegos de Alicante y eso fue lo que le cambió la vida: en el equipo técnico, estaban Aitor y Roberto, las personas que, a día de hoy, son sus socios, compañeros y prácticamente, su familia en Timpers. Tras constituir la empresa, a mediados de 2019, se trasladó a Valencia con sus socios para iniciar la andadura empresarial en Lanzadera, la aceleradora de Empresas de Juan Roig, Presidente de Mercadona, lugar en el que trabaja a diario, con el objetivo de hacer de Timpers una gran marca.

Cada año se otorga un mínimo de **Becas para Investigadores Emergentes** a estudiantes de posgrado e investigadores que tienen interés en los temas del congreso. Aquí les presentamos la lista de los ganadores de beca de este año.

Gabriel Hernández
Universidad Politécnica de Madrid,
España

Valentina Durango Gómez
Universidad Autónoma de Manizales,
Colombia

Jorge Alfonso Zaldívar Suárez
Universidad Nacional de Ingeniería,
Perú

Silvia Caracuel Ponce
Universidad de Vic,
España

Fabricio Quiñones Aguirre
Universidad Nacional de Colombia,
Colombia

Lucía Martínez d´Oliveira
Universidad de la República / Universidad del Trabajo de Uruguay,
Uruguay

Carlos Ríos Llamas
Universidad Autónoma de Baja
California,
México

Resúmenes de 2024

La IA y la transformación de las habilidades y competencias del diseñador: Como la IA redefine el rol del diseñador

Silvia Caracuel Ponce, Doctoranda, Universidad Central de Cataluña, España

La IA ha transformado múltiples sectores en la actualidad, incluido el del diseño, impactando la forma en que los diseñadores realizan su trabajo. El propósito de esta investigación radica en entender que si bien, la IA posee herramientas que pueden crear piezas gráficas asociadas al diseño como imágenes, logotipos y composiciones, esto no solo implica la liberación de ciertas tareas para los diseñadores, sino que también los desafía a mejorar constantemente, enfocándose en adquirir habilidades más estratégicas y creativas que le permitan co-crear con la IA generando nuevos y únicos resultados. Para esta investigación se realizó un análisis bibliográfico de 90 artículos para identificar patrones, temáticas y tendencias. Este estudio se dividió en dos instancias, la primera relacionada a indagar el ecosistema del diseñador y entender cuáles son sus habilidades más relevantes y la segunda, evaluando las mismas temáticas pero bajo el concepto y la convivencia con la IA. Las implicaciones prácticas de esta investigación identificaron habilidades y competencias como creatividad, innovación y liderazgo, que comparten la capacidad de impulsar el cambio y el progreso, permitiendo guiar, dirigir y aprovechar eficazmente las herramientas de IA en el diseño, generando la definición de un nuevo conjunto de habilidades que permitan a los diseñadores sacar el mejor partido a la IA. Esta nueva definición tiene implicancias en el rol del diseñador ya que generara nuevos procesos de transformación cada vez más acelerados que impactaran directamente en la forma en que define su expertise.

El diseño escenográfico para marcas comerciales en Es Devlin

Pablo Díaz Morilla, Investigador, Profesor, Sohrlin School; EADE-University of Wales in Málaga; EEAASS Diseño León XIII; Universidad de Málaga, España

El diseño escenográfico adquiere un gran peso en la comunicación de los últimos tiempos. En una sociedad en la que todo comunica, el entorno en el que se realizan las presentaciones y eventos adquiere una gran importancia y las marcas comerciales apuestan cada vez más por conseguir crear entornos de gran espectacularidad y capacidad inmersiva. A esta espectacularidad debe sumarse también un claro conocimiento de las intenciones comunicativas de la marca, convirtiéndose el diseño escenográfico en un vehículo para dar a conocer los valores de marca y el peso estético de la misma. El interés de las empresas por este diseño escenográfico ha hecho que cada vez sean más frecuentes inversiones de gran capital en esta partida presupuestaria para las presentaciones o eventos y la apuesta por este campo ha ocasionado además que grandes profesionales, con un elevado prestigio artístico, hayan empezado a trabajar con las marcas en este sentido. Este caso de estudio analizará el trabajo de la diseñadora escenográfica Es Devlin, una de las más reputadas profesionales de esta disciplina a nivel internacional, que incluso llegó a ser nombrada Oficial de la Orden del Imperio Británico y que ha obtenido entre otros galardones los premios Wall Street Journal a la Innovación en el Diseño y la London Design Medal. Devlin ha colaborado con algunas de las más prestigiosas marcas comerciales y ha acometido encargos de gran calado, como la ceremonia de apertura de los Juegos Olímpicos de Londres 2012.

El diseño algorítmico como herramienta de ideación gráfica y conceptualización flexible de productos

Amanda Martín-Mariscal, Profesora, Universidad de Sevilla, España
María Estela Peralta, Profesora, Universidad de Sevilla, España
Juan Francisco Fernández Rodríguez, Universidad de Sevilla, España
Alberto Picardo, Profesor, Universidad de Sevilla, España
María Teresa Aguilar, Ingeniera de diseño industrial, Universidad de Sevilla, España

El diseño paramétrico ha experimentado una evolución significativa especialmente en disciplinas como la arquitectura y la ingeniería. Actualmente, este enfoque de trabajo ha introducido nuevas herramientas basadas en diseño algorítmico e inteligencia artificial. Desde el proceso creativo, el modelado tridimensional algorítmico flexibiliza la toma de decisiones y permite generar diversas soluciones con baja inversión de tiempo y coste. Los modelos de productos diseñados con estas herramientas permiten multitud de configuraciones que pueden adaptarse a diseños funcionales diversos y diferentes necesidades de usuario. En este trabajo se presentan varios casos de estudio donde el diseño de los productos genera una gran variedad de soluciones a través de la configuración de un único modelo algorítmico. Los resultados obtenidos permiten proponer un modelo de diseño basado en retículas y módulos para la creación fluida y flexible de productos industriales. Asimismo, las características estéticas del producto pueden ser ajustables para el rediseño de un producto a la evolución de las tendencias de diseño. En este sentido, se ha comprobado que es viable generar una gran variabilidad de soluciones a partir de un mismo algoritmo y de un mismo diseño conceptual.

Desarrollo de un taller para la enseñanza del legado cultural empleando dinámicas lúdicas, deportivas y cultura maker

María Martha Margarita Silva González, Universidad del Valle de México/ CONAHCYT, México
Liliana Beatríz Sosa Compeán, Profesora, Universidad Autónoma de Nuevo León, México

El legado cultural de una región es un elemento muy importante para comprender la identidad de una sociedad, su historia, su presente y su futuro. Por ello, es importante generar espacios y fomentar actividades que ayuden en la enseñanza de este conocimiento y perpetuar su transmisión a través de las generaciones de una manera vivencial y creativa, que impulse al estudiante a adoptarlo y apreciarlo como parte integral de su realidad. Se define por medio del método de diseño didáctico interactivo generador de dinámicas narrativas, la propuesta de una serie de dinámicas lúdicas interconectadas que van desde la adopción de la llamada cultura maker, la ejecución de diversas actividades deportivas lúdicas basadas en el softcombat y la recreación histórica, hasta la representación de juego de roles por medio de LARP basados en el folklore y cultura de las civilizaciones mesoamericanas, para conseguir incentivar en los jóvenes mexicanos la adopción y valoración del legado cultural como parte de la identidad nacional.

Formación en diseño

Modelo Usuario, Producto, Actividad, Contexto (UPAC): Propuesto y desarrollado en la investigación y educación de la Escuela Universitaria Centro de Diseño

Lucía Martínez D´Oliveira, Docente, Escuela Universitaria Centro de Diseño/Facultad de Arquitectura, Diseño y Urbanismo/Universidad de la República, Uruguay

La ponencia tiene el propósito de establecer las categorías de análisis a través de la construcción del marco teórico de la investigación que se viene desarrollando para la Maestría en Metodologías de la Investigación Científica de la Universidad Nacional de Lanús. El tema que convoca esta construcción se sitúa en el marco de las discusiones teórico-metodológico sobre el "Pensamiento del Diseño" desarrolladas en el Área Teórico Metodológica de la Escuela Universitaria Centro de Diseño de la Universidad de la República. Las fuentes consultadas son de carácter primario y secundario, caracterizándose por ser tesis de doctorado, ponencias y artículos académicos digitales. Se accede a las mismas a través de la revisión bibliográfica en portales académicos nacionales e internacionales.

La inteligencia artificial y el diseño discursivo: Una nueva perspectiva

Juan Carlos Lobato Valdespino, Profesor, UMSNH Facultad de Arquitectura, México

El diseño discursivo es una práctica reflexiva que busca comunicar ideas y generar debate a través del diseño de objetos y sistemas. Esta investigación cualitativa explora cómo la inteligencia artificial (IA) puede actuar como catalizador para profundizar la reflexión y el aprendizaje en el diseño discursivo. Se analiza la propuesta de Nicholas Negroponte sobre la colaboración humano-máquina en el proceso creativo y se relaciona con el marco conceptual About-For-Through del diseño discursivo desarrollado por Bruce M. Tharp y Stephanie M. Tharp. Por medio de un enfoque empírico fenomenológico se exploran las oportunidades y desafíos de la IA como colaborador creativo en el diseño discursivo. Los resultados preliminares sugieren que la IA, en constante evolución junto a los humanos, puede estimular nuevas perspectivas y entendimientos para una práctica de diseño más experimental, innovadora y autorreflexiva. Así, la IA se presenta como una oportunidad para catalizar una práctica de diseño discursivo profundamente reflexiva, que aprende y se transforma a través de la interacción creativa humano-máquina. Esta investigación aporta nuevas comprensiones sobre el potencial de la IA para enriquecer prácticas de diseño centradas en el discurso y la comunicación. Se discuten implicaciones para la educación en diseño y la práctica profesional.

Plan de Renovación Urbana de Puntarenas: Alianza académica e institucional en la didáctica del diseño urbano

Tomás Martínez Baldares, Profesor, Escuela de Arquitectura y Urbanismo, Instituto Tecnológico de Costa Rica, Costa Rica

En la Administración Alvarado Quesada, cuyo período constitucional a la presidencia de la república abarca del 2018-2022, se identificó como prioridad cerrar los rezagos en desarrollo urbano y promover reactivación económica y turística en Puntarenas. Se solicitó al Instituto Nacional de Vivienda y Urbanismo INVU, implementar por primera vez en Puntarenas el nuevo reglamento de Renovación Urbana, publicado en el Diario Oficial La Gaceta en 2017. Para este objetivo, el INVU recibió el apoyo de la Escuela de Arquitectura y Urbanismo del Instituto Tecnológico de Costa Rica para que a través del trabajo de un equipo de estudiantes se pudiera realizar el Plan Proyecto de Renovación Urbana – Cantón de Puntarenas / Zona la Punta y la identificación de un portafolio de proyectos que fue finalmente presentado en Consejo de Gobierno el 30 de septiembre del 2019 en Puntarenas. El artículo busca documentar el proceso de esta experiencia de vinculación de la academia con la intervención territorial efectiva. Desde sus fases de levantamiento de datos y trabajo de sitio, pasando por los ejercicios de consulta y participación ciudadana hasta documentar algunas de las obras ya construidas. Se expone el desarrollo de las capacidades de los estudiantes a través de la participación de ejercicios de impacto nacional y el importante proceso de acompañamiento que pueden dar las instituciones públicas. Esta experiencia permite documentar su metodología técnica-científica desde la institucionalidad y la didáctica, formativa de la academia y determinar las lecciones aprendidas para afrontar ejercicios similares en la formación del arquitecto.

Disseny obert

Carmen Martinez Gregori, Profesora, Escola D'Art i Superior de Disseny de València, España

"Disseny Obert" se plantea como una muestra itinerante de fondos bibliográficos seleccionados de diseño. El proyecto ha desarrollado y construido un contenedor-biblioteca, y trabaja en la selección y difusión de dichos fondos a través de una página web creada expresamente para el proyecto. La propuesta del contenedor-biblioteca atiende a conceptos tan mediterráneos como el de "sentar-se a la fresca", o ver "qui va i qui torna", asomándose así al diseño. El contenedor-biblioteca, además, quiere hacer un guiño a la cerámica valenciana de hoy utilizando una "solid surface" que, además de ofrecer grandes posibilidades de diseño, permite la incorporación de imágenes y su retroiluminación haciendo alusión a la luz mediterránea. Por su parte, el contenido del proyecto pretende mostrar la riqueza de los fondos bibliográficos de l' Escola d'Art i Superior de Disseny de València que, además, es la depositaria de los fondos del Centre de Documentació IMPIVA Disseny. Sin embargo, lo que en principio iba a ser una muestra física ha pasado a convertirse en una web de consulta sobre bibliografía especializada en diseño, donde poder acceder a las sinopsis hechas por el alumnado tanto de la EASDV como de escuelas colaboradoras extranjeras, en varios idiomas: http://easdvalencia.com/disseny-obert/ Cada libro y revista, además, cuenta con un vídeo elaborado por este mismo alumnado, material audiovisual, de corta duración y de mensaje directo, como vía para difundir el diseño no solo a través de la web, sino también a través de redes sociales, una herramienta ampliamente utilizada por la sociedad en general.

Actividad lúdica dirigida a estudiantes de la licenciatura en diseño de artesanía de la universidad de Guadalajara en el proceso metodológico como parte de la formación integral: Adaptación del diseño de un juguete didáctico en madera de bambú para personas ciegas

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El papel del docente diseñador resume un conjunto de habilidades, conocimientos y destrezas adquiridas en lo profesional y académico. El propósito de esta propuesta es adentrarse a la práctica real con actividades lúdicas, donde los alumnos salgan de lo académico habitual divirtiéndose, logrando sensibilidad hacia el usuario. En la metodología del diseño se recaba información de expertos en varias disciplinas. En esta investigación se involucra al estudiante en un proceso de generación de conocimiento y cómo aplica éste a lo académico, de ahí pasa al proyecto creativo donde plasma sus ideas como bocetos hasta materializarla. En la enseñanza del diseño de productos se puede seguir trabajando de esa manera, pero si el diseño es innovador, la enseñanza también lo debería ser. Este método empírico experimental busca sensibilizar al estudiante, planeando que salga del papel del diseñador para entrar en el papel de usuario y así las soluciones al diseño serán más un diseño centrado en el usuario. Se parte de una propuesta de registro fotográfico, que muestra a los estudiantes jugar con ojos vendados para sentir y conocer los obstáculos que viven las personas ciegas al jugar con diseños universales; a partir de ahí se busca adaptar el diseño y no que las personas se adapten al él. Se recaba información de estudiantes en cuestionarios virtuales para conocer impactos positivos hacia el perfil de egreso y cómo aportan a la cultura de la paz como objetivo de instituciones de nivel superior.

Gestión estratégica de la transformación digital en el diseño

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Esta investigación pretende analizar a fondo cómo el campo del diseño aborda la transformación digital. Utilizando un enfoque estratégico, se examinan conceptos, iniciativas, desafíos y oportunidades relacionadas con la adopción de tecnologías digitales en entornos académicos en constante evolución. De tal manera que el estudio incluye una revisión exhaustiva de la literatura en bases de datos especializadas, revelando que las instituciones educativas emplean diversas estrategias, desde la digitalización de contenidos hasta la implementación de plataformas de aprendizaje en línea. Se identifican desafíos comunes, como la resistencia al cambio y la necesidad de inversión en infraestructura tecnológica. Asimismo, se destacan oportunidades emergentes, como la personalización del aprendizaje y la colaboración interinstitucional mediante la tecnología. Los hallazgos arrojan la necesidad de una planificación estratégica sólida y la adaptabilidad en el proceso de transformación digital en esta disciplina. De ahí que los programas de diseño deben abordar las necesidades cambiantes de los estudiantes y aprovechar eficazmente las tecnologías digitales para mejorar la calidad de la enseñanza y el aprendizaje. Por consiguiente, este estudio proporciona una base valiosa para futuras investigaciones y orienta las decisiones estratégicas de las instituciones de educación superior en su búsqueda por la transformación digital en el Diseño.

El uso de realidades extendidas en el proceso de diseño para el aprendizaje de alumnos universitarios: Impacto en el aprendizaje, habilidades cognitivas, espaciales y usabilidad de los alumnos

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Esta investigación propondrá un modelo del cual se hará un experimento en alumnos de licenciatura mediante las herramientas de la realidad virtual. Buscará medir el impacto en la usabilidad, las habilidades cognitivas y espaciales y en la motivación para el aprendizaje de materias de diseño. Se ha detectado que el uso de realidades extendidas –como virtual y aumentada– puede llegar a tener un impacto positivo en en aprendizaje, sobre todo en el diseño. Sin embargo, hoy en día siguen siendo poco accesibles a muchas universidades, especialmente en México. Se buscará en el contexto de la Universidad de Monterrey, implementar más herramientas emergentes cómo estas y proveer los beneficios que tienen en el aprendizaje.

Diseño en la sociedad

Codiseño y personas mayores con discapacidad intelectual: Una experiencia de cocreación para trabajar la autodeterminación

Izaskun Álvarez Aguado, Académico Investigador, Universidad de Las Américas, Chile

Las personas con discapacidad intelectual (PCDI) presentan procesos de envejecimiento prematuros que derivan en necesidades muy específicas que deben ser satisfechas desde un enfoque interdisciplinar. Entre los requerimientos más relevantes de esta población destaca el incremento en sus niveles de autodeterminación, que difieren enormemente de los de sus coetáneos sin discapacidad. Este desafío implica desarrollar insumos tecnológicos que promuevan el desarrollo de estas habilidades, sobre todo en el entorno residencial. Desde un paradigma de investigación inclusiva, se ha diseñado un proceso de cocreación de tecnologías orientadas, en concreto, al fomento de habilidades para la autonomía. En la investigación han participado 192 PCDI mayores de 45 años y varios profesionales de diversas disciplinas. Esta propuesta describe el proceso de creación colectiva de un concepto de diseño tecnológico, desde el levantamiento de la idea hasta la validación del prototipo correspondiente, con énfasis en la descripción de los roles de las PCDI durante su desarrollo.

Diseño conceptual de un sistema de riego automatizado para invernaderos

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El objetivo de este proyecto fue desarrollar un sistema automatizado de riego por goteo para un invernadero de sesenta metros cuadrados, utilizando el Arduino Mega 2560 como microcontrolador. La investigación se llevó a cabo para garantizar que el sistema desarrollado esté al alcance de los pequeños agricultores. El objetivo de esta investigación fue desarrollar un diseño conceptual de un sistema de riego automatizado de bajo coste capaz de medir el contenido de humedad del suelo y comparar estos datos con la humedad del suelo a capacidad de campo del cultivo y en función de esta comparación, realizar o no el riego. Se realizó una revisión bibliográfica y un análisis y comparación de los componentes para determinar cuáles eran los más adecuados para el proyecto. Además, se realizó una simulación del sistema utilizando el programa Proteus 8 Professional.

La orfebrería precolombina como fuente inspiradora en la moda colombiana contemporánea: El fortalecimiento de la identidad a través de la práctica creativa

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Este proyecto de investigación-creación tiene como propósito revitalizar la riqueza simbólica y estética de la orfebrería precolombina, fuente de inspiración para desafiar las nociones convencionales de identidad nacional dentro del ámbito de la moda colombiana contemporánea. Desde una perspectiva sociológica se exploran las definiciones de identidad cultural y la función social de la moda, examinando su contexto histórico en Colombia y su evolución en el mercado global. El principal método es la investigación basada en la práctica, en donde el proceso creativo adopta una metodología sistemática, que inicia con un análisis fenomenológico de tres piezas seleccionadas en el Museo del Oro de Bogotá. Estas piezas, escogidas por su riqueza formal y simbólica, sirven como pilares para un estudio profundo que incluye la comprensión histórica y la exploración de características intrínsecas, permitiendo la experimentación como metodología, la abstracción de elementos simbólicos y la conceptualización. Este análisis revela cómo la orfebrería precolombina puede ser un catalizador en el ámbito de la moda, desafiando convencionalismos y demostrando el potencial transformador de las creaciones culturales del pasado en el contexto creativo actual. Así, a través de la resimbolización de objetos prehispánicos, se busca crear un lenguaje visual único, ofreciendo nuevas posibilidades para integrar lo ancestral, en las prácticas creativas. Este trabajo interdisciplinario implica un dialogo entre artistas y la integración de perspectivas múltiples, esto no sólo fortalece la identidad cultural, sino que también acerca a nuevos públicos a la cultura prehispánica desde una visión renovada.

Metodología para el diseño de ayudas técnicas deportivas: Estudio de caso de kit modular para la práctica de Boccia

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Boccia es un deporte paralímpico apto para deportistas con diferentes grados de discapacidad y que involucra un jugador y un auxiliar. El surgimiento durante la última década de diferentes ligas deportivas a nivel mundial, ha promovido que las personas con discapacidad encuentren escenarios de práctica deportiva, favoreciendo su desarrollo humano e interacción social. De acuerdo con la revisión de literatura desde la perspectiva ergonómica, se ha encontrado que la mayoría de los elementos ofertados para la práctica de Boccia, que además cumplen con requerimientos para competencia de alto nivel, están enfocados directamente al desempeño del jugador, sin tomar en cuenta la interacción con el auxiliar. Desde la perspectiva comercial, las ayudas técnicas actualmente ofertadas son de alto costo, lo que dificulta el acceso a dichos implementos, implicando la necesidad de fabricarlos de forma artesanal, obviando características importantes. Los aspectos que se abordan en este proyecto mediante diseños de ayudas técnicas deportivas que consideran de manera integral son usabilidad, ergonomía, eficacia y costo. Se aplica diseño universal e inclusivo para mejorar la eficacia durante la práctica de Boccia, facilitar la adquisición y potenciar la interacción con las ayudas técnicas beneficiando al jugador y al auxiliar. Lo anterior se logra mediante una metodología de diseño que se desarrolla realizando una caracterización de los usuarios, un análisis biomecánico del gesto deportivo y un proceso de diseño contextualizado por un briefing que conlleva al desarrollo de un prototipo, para finalmente realizar una evaluación integral de las ayudas técnicas fabricadas en ambientes de juego.

La enseñanza del diseño en las universidades públicas latinoamericanas: Paradoja geométrica entre las proporciones y las órbitas

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La presente ponencia es una crónica que ofrece una perspectiva general de trabajo que recupera la experiencia vivida en tres congresos del DiSUR –Red de universidades públicas latinoamericanas que imparten diseño–. Teniendo por sedes la ciudad de Oberá en Misiones Argentina, la ciudad de México y la ciudad de Buenos Aires. En este escrito se exponen lo que a mí entender son los retos que debemos allanar para que la enseñanza del diseño en la región sea menos vulnerable, mas eficiente en la atención de los problemas sociales, económicos y de sustentabilidad que enfrentamos en común; y poder celebrar colaboraciones más fructíferas y eficientes dentro un escenario que favorezca a la innovación social. Sirviéndome de dos analogías, las órbitas planetarias, para explicar los contextos del campo profesional en contraste con el campo educativo de la disciplina del diseño y como el primero conduce las tendencias de actualización académica. Y de las dimensiones entre navíos como son los buques petroleros y las lanchas, para ilustrar los procesos de gestión, administración y actualización académica en el seno de las universidades, se plantean posibles soluciones y se declara un manifiesto que fundamenta una línea de investigación de mi interés: Diseño y carencia.

La resiliencia en la gestión del diseño de nuevos productos

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El concepto de resiliencia en el ámbito del diseño es un nuevo aspecto a tener en cuenta en el ámbito de la gestión del diseño de producto en las PYMES. La ponencia describe la importancia de los procesos de innovación en el diseño de nuevos productos y procesos de manera resiliente desde la conceptualización, gestión y fabricación teniendo en cuenta factores relacionados con situaciones disruptivas, inesperados o críticas en las que se pueden ver afectadas las empresas en la actualidad. El presente trabajo es parte de las investigaciones desarrolladas en una tesis doctoral para el desarrollo de un modelo de Innovación para la resiliencia en las empresas PYMES en Ecuador.

Bases para la implementación de un Modelo de Adaptabilidad que mejore la habitabilidad en comunidades de ladera en Lima Norte: Casos de estudio Villa del Carmen y Laderas del Chillón en Lima (Perú)

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La habitabilidad, en general, se refiere a satisfacer lo que el individuo o habitante necesita para tener calidad de vida en un determinado lugar; por lo tanto es el atributo de los espacios construidos por el hombre para satisfacer esas necesidades que son objetivas pero también subjetivas. Sin embargo esto no se cumple en las comunidades de ladera en Lima. Esta investigación es conveniente porque permite diseñar un modelo de habitabilidad que incorpora la adaptabilidad de la población para mejorar la calidad de vida y vivienda digna en comunidades de ladera de Lima Norte (Perú) portcovid. Desde el punto de vista social es relevante porque impacta en un importante sector de la población urbana cuyas condiciones de habitabilidad son inadecuadas y éticamente inaceptables y están reñidas con los objetivos de desarrollo sostenible de naciones unidas para el siglo XXI Finalmente se considera que los aportes que se esperan alcanzar a partir del desarrollo de la ponencia serán los siguientes: Elaboración de un modelo de adaptabilidad que mejore la habitabilidad en comunidades de ladera de Lima Norte Perú postcovid. Validar la definición conceptual de que la habitabilidad debe ser vista tanto desde la perspectiva de la vivienda como la del barrio y divulgar el contenido de la investigación de manera que se pueda aplicar en el corto, mediano y largo plazo.

La importancia de la fotografía documental: Equidad de género

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El presente trabajo se desarrolla en el sector minero, el cual ha sido asociado a lo masculino desde el inicio. En el imaginario social, el trabajo minero implica esfuerzos que van más allá de las capacidades femeninas: manejo de maquinaria pesada, riesgo en la ubicación de explosivos, excavación en profundidades con poco oxígeno y otras actividades más. La idea de que sólo el hombre puede lidiar con el trabajo pesado ha permeado tanto en las dinámicas colectivas que el papel de la mujer minera ha sido ignorado a través del tiempo. El objetivo de esta investigación es dar a conocer la contribución de las mujeres mineras, funciones, objetivos, adversidades, sueños, logros y vivencias de esas trabajadoras, utilizando la fotografía documental. La investigación se desarrolló con la metodología de caso, siendo descriptiva, exploratoria, de enfoque cualitativo, utilizando la entrevista como instrumento de recolección de datos y enriquecida la evidencia por medio de la fotografía documental; esta última derivada de la integración del diseño gráfico como medio transmisor de ideas y símbolos.

De la Investigación Inclusiva al Diseño Universal: Cerrando la brecha entre ideas y productos desde una perspectiva de accesibilidad

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La investigación inclusiva ha sido reconocida como un enfoque esencial para entender las diversas necesidades de las personas con discapacidades. El diseño universal busca desarrollar productos, ambientes y sistemas que sean utilizables por todas las personas, en la mayor medida posible, sin necesidad de adaptación o diseño especializado. Sin embargo, a menudo hay una desconexión entre los hallazgos de la investigación inclusiva y la aplicación de los principios del diseño universal en el desarrollo de productos. Este trabajo explora las barreras y facilitadores potenciales para cerrar la brecha entre las ideas y los productos desde una perspectiva de accesibilidad, con un enfoque en la investigación inclusiva, la colaboración y la participación de los interesados. En particular, este trabajo muestra la investigación realizada del proyecto PICTOS, que brinda apoyos para la accesibilidad cognitiva de los servicios. Este proyecto ilustra cómo, desde una investigación inclusiva, se transfiere a un servicio universal de accesibilidad, fortaleciendo la conexión entre la teoría y la práctica en el campo de la accesibilidad.

Diseño ubicuo, diseño que transforma: Otros horizontes del diseño

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La ponencia aborda la propuesta de un diseño universal, ubicuo, que pueda cruzar fronteras sin mediar más que la interacción de los individuos y con ello transformar la vida de las personas a distancia con una visión responsable desde la visión hermenéutica analógica en la que se logra a través del "diseñar investigando" y el "diseñar significando", un justo medio entre la univocidad del "diseñar pensando" que nos conduce a un único camino de colaboración y la equivocidad del "diseñar haciendo" que sigue la tradicional escuela de los oficios. Las subjetividades actuales son desmedidas, acríticas y convencidas de que la licuefacción de la cultura abre las puertas del universo cuando en realidad contribuye al aislamiento y la soledad. A pesar de ello, la oportunidad que brinda la ubicuidad en el marco de la virtualidad consciente para el diseño es un asunto que amerita reflexionar sobre las amplias posibilidades que implica. Desde el diseño, la interconexión global brinda oportunidades incalculables, y con ello no me refiero a las coyunturas empresariales o mercadológicas. El horizonte es responder a la pregunta ¿qué puede hacer esa oportunidad ubicua por el diseño y qué se lograría desde ese diseño ubicuo?

Diseño visual

Animación y diseño visual: Principios para preservar la usabilidad y la experiencia de usuario

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La animación se ha convertido en un elemento esencial del diseño visual en buena parte de las interfaces actuales, especialmente en dispositivos equipados con pantalla táctil. Sin embargo, a lo largo de la historia su uso ha sido objeto de intensas críticas que enfatizan la tendencia de los diseñadores a alejarse de los principios básicos de usabilidad y diseño de interacción, seducidos por la atractiva naturaleza de la animación. Diversos autores han tratado de elaborar unas directrices que puedan servir de guía a los diseñadores partiendo de los principios establecidos por los animadores de Disney, mientras que otros rechazan este planteamiento por considerarlo inapropiado para un medio interactivo y funcional. Por otra parte, las directrices de diseño de las dos plataformas que copan el mercado de telefonía móvil en la actualidad, Apple iOS y Android, ofrecen información relevante sobre cómo incorporar animación en el diseño de una interfaz, pero no siempre coincidente. Partiendo de un análisis de contenido de estas directrices y tras una profunda revisión de la literatura, tanto científica como divulgativa, se extrae un conjunto de principios de animación funcional que aspiran a proporcionar una base que guíe las decisiones de diseño y que, incorporados en la evaluación heurística, podrían ayudar a localizar problemas potenciales de usabilidad provocados por un planteamiento incorrecto de la animación.

¿Diseñador gráfico o comunicador visual?: Propuestas para integrar la comunicación en el diseño gráfico

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Aunque en la práctica profesional se usa comúnmente el término diseño gráfico, muchos son los teóricos y profesionales que abogan por utilizar la denominación de comunicación visual. Utilizar este término de comunicación visual en lugar de diseño gráfico, enfatiza y resalta el objetivo de establecer a través del diseño una relación entre un emisor y un receptor, entregando, finalmente, un mensaje de la manera más eficaz posible. Esta idea de diseñador-comunicador es muy evidente en el ámbito del diseño publicitario, pero menos en el resto de aplicaciones del diseño como diseño de marca, editorial, merchandising o señalética. La presente investigación analiza el proceso de trabajo de un diseñador gráfico, desde que recibe el encargo hasta que presenta una solución de diseño, a la luz de la consideración del diseñador como comunicador con el fin de determinar en qué momentos es más evidente el componente comunicativo. A partir de ahí, para cada uno de esos momentos se revisa la posibilidad de aplicar diferentes metodologías de trabajo asentadas en el ámbito de la comunicación como la redacción de un briefing de comunicación, la aplicación de técnicas de investigación cualitativas y cuantitativas, la redacción de estrategias creativas o la realización de pre-tests y post-tests. Esta perspectiva apuesta por la figura del diseñador-comunicador e, incluso, del diseñador-estratega frente a la tradicional del diseñador gráfico, insertando la labor de este en un escenario donde el peso del trabajo recae no solo en los elementos formales sino también en los elementos comunicativos y estratégicos.

La revolución del diseño de la comunicación visual en la actualidad: Efectos de los algoritmos y el machine learning

María Victoria Jiménez Sánchez, Académica, Universidad Nacional Autónoma de México, México

El diseño de la comunicación visual es una herramienta esencial para transmitir mensajes, emociones, valores, etcétera. Hoy en día, en la era digital y la Ciencia de Datos, la combinación de los algoritmos y el machine learning ha revolucionado este campo, ofreciendo nuevas oportunidades y desafíos a la comunicación visual. A través de esta crítica, exploraremos cómo estos avances tecnológicos han afectado la comunicación visual y su impacto en su desarrollo y diseño.

El proyecto visotecnopedagógico

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La presente ponencia busca compartir el trabajo realizado alrededor del curso "Pensamiento visual tecnopedagógico para el diseño en materiales didácticos digitales" que se imparte como materia optativa en el Diplomado de "Formación de profesores de Lenguas-Culturas" de la Escuela Nacional de Lenguas, Lingüística y Traducción de la UNAM y en el marco de la investigación de doctorado en pedagogía titulada "Diseño de escenarios visotecnopedagógicos". A lo largo de la presentación se dará una breve descripción de los antecedentes y contexto del proyecto visotecnopegagógico en el que se propone este curso, la planeación didáctica, la experiencia obtenida en la más reciente emisión, así como los resultados del cuestionario previo y de la evaluación de la misma.

Diseño algoritmo: ¿Cambio de paradigma?

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La disrupción de la inteligencia artificial (IA) como herramienta para generar contenido provocará un cambio de paradigma en la disciplina del diseño, fomentando el "Diseño algoritmo". La consolidación del algoritmo como ente "creativo" promovido por la sociedad oculocentrista de las redes sociales provocará que se tenga que analizar y estudiar su impacto en el proceso creativo del diseñador. El propósito de dicha investigación es la descripción y el análisis de las nuevas herramientas de IA para detectar si van a reprogramar el proceso creativo de los diseñadores. Esta investigación quiere continuar con los trabajos finalizados en la tesis doctoral, donde se estudiaba como las redes sociales han modificado la experiencia del comensal en los restaurantes a través del espacio.

Biomimética: Ingeniería inspirada por la naturaleza

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María Estela Peralta, Profesora, Universidad de Sevilla, España
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Los seres humanos están intrínsecamente vinculados a un extenso ecosistema, por tanto, es crucial evitar acciones que los aíslen del entorno circundante, con objeto de mitigar o eliminar posibles impactos negativos. La naturaleza es fuente de vida y creación, una fuente potencial inagotable de inspiración y conocimiento que es de vital importancia preservar. Con ello se introduce una tendencia en auge de perspectiva única sobre este asunto, la biomimética. El fundamento de este enfoque reside en la imitación de la naturaleza para crear soluciones innovadoras sostenibles, y que, además, garanticen un carácter regenerativo y restaurador. El objeto de esta investigación es estudiar y analizar las estrategias y herramientas metodológicas existentes que permitan una correcta y óptima aplicabilidad en cualquier ámbito o rama de conocimiento, indicando sus puntos potenciales, brechas y resaltando el especial interés por la integración de esta perspectiva en cualquier etapa del ciclo de vida de un producto contribuyendo, además, al cumplimiento de gran parte de los Objetivos de Desarrollo Sostenible establecidos. La integración de la biomimética en un proyecto es sinónimo de ofrecer una alternativa de diseño dotada de equilibrio y armonía óptima con el entorno, de valor añadido en cualquier aspecto.

De Rudolph a Foster: Genealogía y evolución de los espacios de presentación arquitectónica

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Esta investigación se centra en el estudio de cómo un proyecto pedagógico en arquitectura se puede convertir en metodología de trabajo a través de los espacios dónde se desarrollan, primero en el aula, y posteriormente, en la práctica profesional. Ambas premisas requieren de una fuerte carga de contenido gráfico y visual, que añadido a la componente performativa, condiciona la forma de comunicar una idea o espacio arquitectónico a un público, ya sean docentes, compañeros o clientes. Se propone utilizar el binomio de los arquitectos Paul Rudolph (1918-1997) y Norman Foster (1935-) como ejemplo ilustrativo. Durante el curso 1961-1962, Foster atiende como alumno a la universidad de Yale, dónde Rudolph ejerce como director del Departamento de Arquitectura. El gran hito del mandato de Rudolph es su proyecto de la nueva sede para albergar los departamentos de Arte y Arquitectura, considerando que "el propio edificio es su pedagogía". El nuevo edificio responde a la estrategia de generar grandes espacios centrales para las presentaciones de alumnos, consolidando la importancia que tiene la comunicación y visualización dentro de su proyecto docente. Aunque Foster no verá el edificio acabado durante su estancia en Yale, la pedagogía de las presentaciones y representaciones ad-hoc, poco habitual en el contexto americano, va a cambiar por completo la forma en la que Foster desarrolla sus dinámicas de trabajo, y por consecuencia, los espacios de sus primeras oficinas. Se propone un recorrido analítico por los espacios dónde Foster desarrolla sus primeros experimentos arquitectónicos, trazando semejanzas con su etapa de Yale.

Diseño y naturaleza: Un estudio preliminar de análisis bibliométrico

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El estudio del diseño vinculado a la naturaleza se interrelaciona de diversas maneras para crear soluciones innovadoras y sostenibles. Se encuentra, por ejemplo, el biodiseño, donde el diseño se inspira directamente en la biología y en cómo la naturaleza resuelve problemas, estudiando patrones y procesos naturales. La mímesis, donde se imitan formas o estructuras de la naturaleza para mejorar la funcionalidad y la estética de las creaciones. La sostenibilidad, donde la naturaleza es un modelo de eficiencia. La estética, a partir de la belleza de la naturaleza que es fuente constante de inspiración. Así, la conexión entre diseño y naturaleza resalta la importancia de crear soluciones que respeten y trabajen en armonía con el entorno natural, contribuyendo a la sostenibilidad y al bienestar general. Por tanto, en este artículo se pretende resaltar el escenario conceptual de la relación diseño-naturaleza, desde el desarrollo de un análisis de revisión bibliográfica apoyada en la técnica de la bibliometría de 14 artículos debidamente indexados. En la primera fase se seleccionaron los artículos en un periodo de cinco años, en el que se analizaron sus indexaciones, países y años de publicación influyentes. En la segunda fase se seleccionó la bibliografía de dichos artículos, relacionada con la temática y que correspondiera a un rango temporal de quince años. Aquí se desarrolla un análisis de datos representativos como año, país, autores y filiaciones.

Gestión de proyectos sostenibles: Avances en la evaluación del impacto social en ingeniería

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Una gestión efectiva en ingeniería, alineada con los Objetivos de Desarrollo Sostenible, requiere un análisis exhaustivo de los impactos socioeconómicos. En este contexto, el análisis de ciclo de vida social (ACV-S) emerge como una herramienta clave para evaluar el ciclo de vida de un proyecto. Aunque posee un proceso estructurado, su implementación implica el uso de indicadores que están principalmente basados en información conceptual y datos cualitativos, situación que presenta desafíos en entornos donde se demanda que los resultados sean medibles, precisos y comparables. Este estudio analiza la disponibilidad y pertinencia de los indicadores socioeconómicos para llevar a cabo un análisis de ciclo de vida social, evaluándolos en términos de su utilidad práctica y su relevancia para la toma de decisiones en proyectos específicos. Así mismo, se examina la relación entre los indicadores y los Objetivos de Desarrollo Sostenible, su correcta integración en un ACV-S para analizar la contribución de un proyecto a dichos objetivos, y el alcance de los indicadores para conocer la participación de las partes interesadas. Los resultados muestran la necesidad de desarrollar nuevos métodos y herramientas de evaluación de impactos sociales, así como un proceso de estandarización que facilite la aplicación de un análisis de ciclo de vida social en diferentes contextos haciendo que los resultados sean comparables entre proyectos.

Cruce entre diseño industrial y la biología marina para la generación de innovación en los procesos de restauración coralina: Dispositivo prensil para la limpieza de cuerdas

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La improvisación efectiva es un estado que poseen muchas disciplinas. Unir varios elementos que articulados entre sí operen como una "herramienta" es algo que ha sido latente en la necesidad de ser recursivos. Ésta es una característica que acompaña a muchos profesionales en los trabajos de campo y que provee de oportunidades de intervención a los diseñadores. Información idónea, capacidades como diseñador puntuales para operar un proyecto de diseño, saber identificar las oportunidades de diseño son piezas clave para la generación de innovación, pero como base a todos estos datos, formarnos en otras disciplinas es abrir una amplia ventana de oportunidades de intervención. En el presente desarrollo expondré a los espectadores mi experiencia personal como estudiante de diseño industrial que se adentra a los campos de la biología en la Organización Corales de Paz Buceo con Propósito de Colombia generando elementos innovadores para la jardinería de c orales desde la cocreación y selección de información clave.

Objetos diseñados

Esculturas melódicas: Una propuesta metodológica de diseño experimental del sonido a la forma

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Cuando escuchamos una canción, su melodía, sus letras, participamos de su creación. Muchos son los artistas y diseñadores que han incorporado referencias de la música en sus trabajos, tal como los músicos y los compositores que han contribuido en la creación visual, e.g. John Cage, Piet Mondrian o Le Corbusier. En estas relaciones surgen juegos que confunden la proveniencia del objeto artístico. La partitura se convierte en objeto plástico y el objeto plástico en partitura. Este trabajo presenta una metodología conducida con estudiantes del primer año del grado de diseño. La práctica se basa en dos momentos. Primero, se escuchan diferentes canciones que son dibujadas a ciegas, dando forma a los sentimientos despertados por sus melodías y ritmos, como intensidad, tensión, fuerza, suavidad, libertad, aleatoriedad y relajación con el gesto de la mano y el carbón. El segundo momento trata de una lectura contemporánea de la teoría "truth to materials" de Josef Albers. Los estudiantes son invitados a traducir las formas emergentes dibujadas a volúmenes u a objetos hechos a mano utilizando una sola hoja de papel, explorando diferentes propiedades del material, evitando el desperdicio, y manteniendo la referencia de la forma original. Al todo, las propuestas contribuyen con el pensamiento constructivo del 2D al 3D, la experimentación, la resolución de problemas y la gestión de material. Los trabajos resultan, sobre todo, en nuevas posibilidades inventivas y sostenibles del uso de la música, del dibujo y de la materia para expresar cualidades creativas y sensibles en el diseño de productos.

El objeto de la novedad: Superaciones materiales del objeto diseñado

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La propuesta propone una visión que entienda el auge de las nuevas formas de representación del objeto diseñado. La realidad aumentada y los medios expandidos ha derivado en un cambio metodológico en el proceso de diseño. ¿Por qué este cambio de modelo basado en el plano material –realidad– a una dimensión inmaterial –irrealidad–? Existe una relación simbiótica entre los mundos imaginados y físicos. De modo histórico, en diseño, son los elementos técnicos simples los que generaban nuevas propuestas en base a la tecnología. Actualmente, el objeto diseñado se libera de su dependencia tecnológica para la configuración de nuevas formas. Asimismo, la sociedad contemporánea está ávida de consumir nuevas expresiones. El objeto se libera del estigma útil –material– y busca un espacio más reflexivo –inmaterial–. Esta "liberación" material se manifiesta incompleta. El usuario se sirve de sus sentidos para el entendimiento del objeto. Esta vinculación fallida se debe a que las relaciones humanas requieren de objetos materiales para su sustento y profundización. La emoción sentida por los humanos encuentra anclaje en las cosas físicas. Esto suscita que, para su supervivencia –trascendencia– los objetos inmateriales necesiten avanzar hacia el plano material. Se pretende realizar una aproximación a las superaciones materiales del diseño y su necesidad de entendimiento por el sujeto, fuera de un plano no matérico. Analizando casos donde objetos diseñados –limitados– trascienden para ofrecer una experiencia completa.

Diseño arquitectónico, espacial y ambiental

Arquitectura Digital: Diseñando el futuro de la enseñanza con innovación tecnológica en el Departamento de Arquitectura de la Universidad de Guanajuato

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La enseñanza y el aprendizaje de la arquitectura se han transformado a partir de la revolución digital, convirtiendo a la tecnología emergente en una poderosa herramienta para potenciar la creatividad, la colaboración y la eficiencia en la formación de arquitectos. Pensando en el futuro cercano, es posible explorar la intersección entre la arquitectura y las tecnologías digitales en el entorno educativo, específicamente dentro del Departamento de Arquitectura de la Universidad de Guanajuato. Elementos como el uso de la realidad virtual y el aprendizaje inmersivo, el diseño colaborativo en plataformas digitales, la simulación y el análisis digital, así como la evaluación innovadora y los portafolios digitales, abonan a las nuevas formas de trabajo, expresión y presentación digital. Esta propuesta busca, por tanto, estimular una reflexión profunda sobre cómo la tecnología puede transformar la enseñanza y aprendizaje de la arquitectura. Al explorar casos de éxito, desafíos y oportunidades dentro del aula, se busca inspirar a la comunidad académica a abrazar y liderar el cambio hacia el futuro digital de la formación arquitectónica.

Diseño sostenible en entorno construido: Análisis de los estándares de referencia

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La crisis energética que afecta a la industria de la construcción demanda la definición de modelos de diseño y producción que promuevan la mejora de las condiciones de confort ambiental, disminuyendo el consumo energético requerido para conseguirlo. Por ello, cada vez son más las políticas de desarrollo sostenible abogan por disminuir el impacto ambiental causado por la actividad humana, mediante la definición de estándares que reduzcan la huella ecológica de la edificación. El objetivo de esta comunicación es analizar distintos sistemas de evaluación y certificación ambiental de alcance internacional para extraer estándares de construcción sostenible que puedan integrarse en el proceso de diseño de un edificio para reducir su impacto ambiental. El análisis se centra en dos aspectos: (1) regulaciones de obligado cumplimiento dirigidas al control del comportamiento energético de los edificios para la reducción de la demanda energética y disminución de emisiones de CO_2 de un edificio; (2) criterios definidos por sellos verdes internacionales, como BREEAM o LEED, que no solo abordan aspectos energéticos, sino también la mejora del impacto ambiental a lo largo de la vida útil del edificio. Los resultados de este estudio permiten definir estándares que, además de centrarse en aspectos energéticos, promueven el uso eficiente del agua, los materiales, la calidad del aire interior, el confort térmico y acústico o el transporte sostenible, y que en su conjunto pueden contribuir a completar el marco de referencia para iniciar cualquier proceso de diseño sostenible en entorno construido.

Diseñando entornos abiertos accesibles: El caso de los Jardines del Turia de Valencia

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El Jardín del Turia es para la ciudad de Valencia un núcleo vital. A lo largo de su recorrido, este cauce, convertido actualmente en un eje vertebrador de actividades recreativas, deportivas, de socialización ciudadana, integra una extensa vegetación que lo convierte en un oasis para la ciudad. Su trazado queda delimitado por los pretiles, bordes físicos que lo flanquean añadiendo consistencia y continuidad al paisaje, marcando los límites reales con el contexto inmediato, pero a su vez se convierten en barreras físicas que deben superarse para potenciar la conectividad entre ciudad y parque y fomentar el disfrute de este. En la actualidad, el número de accesos que se extienden a lo largo del recorrido, aunque ofrecen una comunicación adecuada entre parque y ciudad, en algunos tramos son escasos y en la mayoría de los casos son susceptibles de incorporar mejoras que ayudarían a conseguir un grado de conectividad entre ciudad y parque mucho más apropiado y seguro. El diseño de estos accesos debe abordarse como una experiencia de conexión armoniosa entre el entorno urbano y el paisaje natural del parque. Aumentar el número de accesos, ajustar el trazado e iluminarlo de forma adecuada, dotarlos de elementos de seguridad, incluir elementos señaléticos, evidenciarlos en el contexto urbano para convertirlos en umbrales reconocibles, son opciones de diseño que proporcionarán una conexión efectiva entre ciudad y jardín potenciando su disfrute tanto para residentes como para visitantes.

Edificios del miedo: La experiencia de la memoria colectiva de las edificaciones adaptadas per Covid 19

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Esta investigación tiene como objetivo evaluar el cambio en la percepción humana ante un cambio de uso en una infraestructura durante los eventos de la pandemia en edificaciones adaptadas para un uso no planificado en Lima (Perú). Primeramente, se realizó una revisión de los conceptos de aproximación a respuestas emocionales y perceptivas definidas por los espacios arquitectónicos cuyos instrumentos de medición se aplicaron en personas que pasaron por el aislamiento obligatorio en la Villa Panamericana de Lima, una cuestionada pieza urbana y caso emblemático al ser una adaptación arquitectónica pandémica a nivel mundial. Seguidamente, se realizaron mediciones de las emociones generadas por el encierro en espacios de aislamiento en edificios adaptados como CAT (Centros de Aislamiento Temporal) en Lima a consecuencia de la COVID 19, mediante la herramienta de foto-elicitación. Por último, el estudio explora las fuentes de datos y los métodos analíticos adoptados para detectar e identificar cómo las intervenciones arquitectónicas debido al COVID-19 afectaron la imagen urbano arquitectónica de los espacios adaptados durante el evento pandémico. En general, esta investigación es importante para comprender el impacto de COVID-19 en la proyección de edificaciones que puedan ser adaptables y resilientes desde su infraestructura hasta su impacto en la percepción de sus usuarios, y proporciona una referencia científica que hace énfasis en el cambio de paradigma que este evento pandémico de escala mundial generó en el diseño arquitectónico.

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COMMON GROUND

Climate change is one of the most pressing problems facing our world today. It is in the interests of everyone that we engage in systemic change that averts climate catastrophe. At Common Ground Research Networks, we are committed to playing our part as an agent of transformation, promoting awareness, and making every attempt to lead by example. Our Climate Change: Impacts and Responses Research Network has been a forum for sharing critical findings and engaging scientific, theoretical, and practical issues that are raised by the realities of climate change. We've been a part of global policy debates as official observers at COP26 in Glasgow. And we are signatories of the United Nations Sustainability Publishers Compact and the United Nations Climate Neutral Now Initiative.

Measuring

In 2022 we start the process of tracking and measuring emissions for all aspects of what we do. The aim is to build a comprehensive picture of our baselines to identify areas where emissions can be reduced and construct a long-term plan of action based on the GHG Emissions Calculation Tool and standard established by the United Nations Climate Neutral Now Initiative.

Reducing

At the same time, we are not waiting to act. Here are some of the "low hanging fruit" initiatives we are moving on immediately: all conference programs from print to electronic-only; removing single-use cups and offering reusable bottles at all our conferences; working closely with all vendors, suppliers, and distributors on how we can work together to reduce waste; offering robust online options as a pathway to minimize travel. And this is only a small sample of what we'll be doing in the short term.

Contributing

As we work towards establishing and setting net-zero targets by 2050, as enshrined in the Paris Agreement and United Nations Climate Neutral Now Initiative, and to make further inroads in mitigating our impacts today, we are participating in the United Nations Carbon Offset program. As we see climate change as having broad social, economic, and political consequences, we are investing in the following projects.

- Fiji Nadarivatu Hydropower Project
- DelAgua Public Health Program in Eastern Africa
- Jangi Wind Farm in Gujarat

Long Term Goals

We're committing to long-term science-based net-zero targets for our operations – and we believe we can do this much sooner than 2050. We'll be reporting annually via The Climate Neutral Now reporting mechanism to transparently communicate how we are meeting our commitments to climate action.

www.cgnetworks.org/about/climate-pledge

Proceedings of the Eighteenth International Conference on Design Principles & Practices, hosted by the Universitat Politècnica de València, Spain , 11-13 March 2024. The conference featured research addressing the following special focus: "Cultures of Transformative Design" and annual themes:

- Theme 1: Design Education
- Theme 2: Design in Society
- Theme 3: Designed Objects
- Theme 4: Visual Design
- Theme 5: Design Management and Professional Practice
- Theme 6: Architectonic, Spatial, and Environmental Design