NINETEENTH INTERNATIONAL CONFERENCE ON DESIGN PRINCIPLES & PRACTICES
XIX CONGRESO INTERNACIONAL SOBRE PRINCIPIOS Y PRÁCTICAS DEL DISEÑO

THINKING, LEARNING, DOING: PLURAL WAYS OF DESIGN

PENSAR, APRENDER, HACER: FORMAS PLURALES DEL DISEÑO

LASALLE College of the Arts, Singapore **25-27, February 2025**

LASALLE College of the Arts | UAS University of the Arts Singapore | Cumulus Association | Design Principles & Practices

Nineteenth International Conference on Design Principles & Practices Conference Proceedings

https://designprinciplesandpractices.com/about/history/2025-conference
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Welcome Letters

Dear Conference Participants,

On behalf of Common Ground Research Networks, I welcome you to the Nineteenth International Conference on Design Principles & Practices.

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.

This truly international conference brings together a diverse group of scholars, practitioners, and thought leaders from around the world. We are proud to provide a platform for exchanging ideas, and presenting research, addressing some of the pressing issues of our time.

Our conference theme, "Thinking, Learning, Doing: Plural Ways of Design," reflects our commitment to exploring new frontiers in research and practice. Over the next few days, In-Person or Online, you will have the opportunity to attend keynotes, panel discussions, and other session types led by our Emerging Scholars. We encourage you to take full advantage of these sessions to gain new insights, expand your professional network, and find inspiration for your own work.

We want to thank our keynote speakers Dawn Lim, Jeanette Kwek, Wendy Chua, Lilian Chee, Cátia Rijo, conference chairs Nur Hidayah Bte Abu Bakar and Lidya Chrisfens, presenters, and volunteers whose dedication and hard work have made this conference possible. We also thank our host partner LASALLE College of the Arts, for their generous support.

We hope you find this conference to be an intellectually stimulating and rewarding experience. Your active participation is crucial to the success of this event, and we look forward to the lively discussions and valuable connections that will emerge over the next few days.

Warm regards,

Dr. Phillip Kalantzis Cope
Chief Social Scientist
Common Ground Research Networks

Dear Delegates,

Welcome to LASALLE College of the Arts in Singapore and the Nineteenth International Conference on Design Principles & Practices. Along with colleagues from the Design Principles & Practices Research Network, we are delighted to have you join us.

This year's conference is hosted by LASALLE College of the Arts, an institution renowned for its commitment to nurturing creativity and innovation in design education. Our mission aligns seamlessly with the conference's goals of exploring diverse design paradigms and practices. We are dedicated to fostering an environment that encourages interdisciplinary dialogue and collaboration among design professionals, educators, and researchers.

The Special Focus of this conference, "Thinking, Learning, Doing: Plural Ways of Design," invites us to move beyond human-centred design and consider the interconnectedness between design, society, environments, and ecological systems. It challenges us to explore models of transdisciplinary collaboration, question existing paradigms, and identify new possibilities for a better future for all species.

During the conference, we hope to engage in stimulating discussions and share insights that will broaden our understanding of design's role in addressing complex social and ecological challenges. We encourage you to engage, participate and collaborate with fellow delegates to uncover new perspectives and solutions.

We are grateful for your presence here in Singapore to present and discuss your work. The diverse range of interdisciplinary interests represented across the program promises enriching debates and dialogues. We extend our sincere thanks to our plenary speakers, including Ms Dawn Lim, Ms Jeanette Kwek, Ms Wendy Chua, and Dr Lilian Chee for embracing the conference theme and contributing topics central to the future of design practices.

We also wish to acknowledge the efforts of the Design Principles & Practices Research Network and the Common Ground team for organizing this conference and providing unwavering support throughout the process.

We hope you have an engaging and rewarding experience here in Singapore, and we look forward to co-creating plural ways of thinking, learning and doing design.

Yours sincerely,

N**ur Hidayah Abu Bakar**
Dean, Faculty of Design, ,LASALLE College of the Arts

On behalf of the local host committee: Ms Nur Hidayah Bte Abu Bakar, Ms. Lidya Chrisfens, Ms Joselyn Sim

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Design Principles & Practices
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.

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

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

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

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.

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.

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
- **Christian Guellerin,** École de design Nantes Atlantique, France
- **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
- **Johann Sagan,** University of Bergen, Norway
- **María Begoña Saiz Mauleón,** Universitat Politècnica de València, Spain

Nineteenth International Conference
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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
- 2024 - Universitat Politècnica de València, Spain

www.designprinciplesandpractices.com/about/history

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

LASALLE COLLEGE OF THE ARTS | UAS University of the Arts Singapore

Cumulus Association

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

The European Academy of Design

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SAPIENZA UNIVERSITÀ DI ROMA

Escuela Técnica Superior de Ingeniería del Diseño

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Nur Hidayah Bte Abu Bakar

Decana, Facultad de diseño, LASALLE College of the Arts, Singapur

- MA (Design for Communication), University of Central England, UK
- BA (Design), Curtin University of Technology, Australia
- Diploma (Graphic Design), Nanyang Academy of Fine Arts, Singapore
-

Nur Hidayah is a design-educator engaged in furthering design thinking and education in Singapore and Southeast Asia. Her expertise lies in design curriculum branding and identity, design for communication strategies and advertising communication.

Prior to joining LASALLE, Nur Hidayah worked in a full portfolio of design communication systems ranging from copywriting, design and art direction projects across major industry segments. This coupled with her extensive teaching experience of more than 15 years, Nur Hidayah has been instrumental to the transformation of the Faculty of Design into a leading faculty for Southeast Asia.

A deep believer of the interconnectedness of design aesthetics, education and industry, Nur Hidayah has initiated several collaborative partnerships with various design institutions. She presented a research paper at the Ubuntu International Design Symposium 2011 in Seoul, which covered The Role of Design Education. With faculty staff members, she is currently developing design capability programmes with communities in Asia and investigating issues around social enterprise for a more inclusive design culture. She has led the research and study of design cultures in contemporary Asian cities between Singapore, Seoul and Shanghai and undertaken the Global Design Initiative involving five international universities looking at design as a research tool.

Over the years, her excellent interpersonal and management skills have enabled her to inspire many students. Her vision and foresight has helped nurture these students into leaders that have contributed to Singapore's creative landscape. Under her leadership, the design programmes have achieved great success at regional and international design competitions and showcases, including D&AD Student Awards, The Crowbar Awards, Furniture Design Awards and Graduate Fashion Week in London.

Today, Nur Hidayah continues to serve as an expert on various boards in Singapore. Her current appointments include the National Gallery Singapore, Singapore Note and Coin Advisory Committee (Monetary Authority of Singapore), and member of the Design Education Review Committee Workgroup, DesignSingapore Council (Ministry of Communications and Information). Her past appointments include the Malay Heritage Foundation (National Heritage Board, 2011), Malay Heritage Centre (National Heritage Board, 2012) and advisory member for MDA's Malay Programmes Advisory Committee (InfoCommMedia Development Authority of Singapore (2016–2018).

Lidya Chrisfens

Lecturer-in-Charge, School of Fashion, Faculty of Design, LASALLE College of the Arts, Singapore

- MA Arts Pedagogy and Practice, Goldsmiths University of London, UK
- Bachelor in Fashion Design & Textiles, Open University, UK
- Diploma in Apparel & Merchandising, Temasek Polytechnic, Singapore

Lidya is a dedicated fashion lecturer with over 15 years of experience in the industry. She has been working in various roles since 2005, gaining a wealth of knowledge and expertise. In 2012, Lidya began her career as a fashion lecturer and has been teaching ever since. She specialises in creative pattern cutting and digital skills for fashion, and her classes are designed to provide students with the skills and knowledge they need to succeed in the fast-paced world of fashion.

Attaining a Masters in Art Pedagogy and Practice drives her to explore interdisciplinary approaches in the various art fields. In 2020, she developed a novel fashion technique, blind-draping. Lidya's passion for fashion is evident in everything she does, and she is committed to helping others pursue their dreams in this exciting field.

Lidya actively participates in conferences and has presented her research papers at several prestigious conferences. One of her most significant achievements is developing the blind-draping fashion technique. Lidya's innovative approach to fashion design challenges traditional notions of visual aesthetics and can potentially revolutionise the way designers think about their craft.

The blind-draping fashion technique earned Lidya an Emerging Scholar award in 2023. In 2022, she was also awarded the Best Poster Presentation at a significant fashion conference. Her research has been well-received in the fashion community and has generated considerable interest from scholars and practitioners alike.

The blind-draping technique is set to be published in a book on radical fashion practice methods. This publication will be a valuable resource for fashion designers and scholars seeking to explore new and innovative approaches to fashion design. Lidya's contribution to this book will cement her position as a thought leader in the fashion industry and a driving force behind the evolution of contemporary fashion practice.

Dawn Lim

Executive Director, DesignSingapore Council (Dsg), Singapore

As Executive Director of DesignSingapore Council (Dsg), Dawn sets the vision and strategy for Singapore's national agency for design. Since taking over the reins in 2022, she has positioned Singapore Design for the future – focusing on design's role in shaping emerging technology, sustainability and systems of care. She also oversaw the relaunch of Singapore Design Week held every September and the debut of Dsg's global showcase, Future Impact, at Milan Design Week 2023 and again in 2024. She is also the Co-Commissioner of the Singapore Pavilion at the Venice Biennale Architecture and leads Singapore's highest design accolade – the President*s Design Award.

She has two decades of experience in public and private sector trade agreements, policymaking, partnership development and industrial strategy in Asia and Europe. She honed her business and commercial acumen in the shipping industry at PSA Corporation, and put that to good use subsequently at the Singapore Economic Development Board attracting the world's top companies to invest in the country to drive economic growth.

She holds a Bachelor of Science in International Relations from Georgetown University and a Master of Science from the Stanford Graduate School of Business. Dawn has presented on the power of design across international platforms such as the UNESCO Creative Cities Network, SXSW, ChangeNow Summit, Intercorp Festival of Innovation, Singapore Design Week, as well as with partners like JLL, Stagwell, Deloitte Centre for the Edge, WGSN. She is a UK Design Ambassador, advisory member to the Seoul Design Award and has been invited as a jury member on a wide range of design platforms.

Jeanette Kwek

Head, Centre for Strategic Futures and Director, Singapore

Jeanette Kwek is the Head of the Centre for Strategic Futures.

Jeanette joined the civil service in 2005, starting her career at the Ministry of Defence, where she worked on Singapore's defence relations with international partners. In 2009, she became one of the founding members of the Centre for Strategic Futures (CSF). Since then, she has worked in roles connecting foresight with geostrategic issues. In her current role, she oversees the Centre's research agenda, its extensive international networking efforts, and work in growing foresight capabilities across the Singapore Public Service.

Jeanette is a political scientist and economist by training, having graduated with honours from the University of Chicago in 2005. She continues to stay current in the field as an alumna of the Munich Young Leaders, International Institute of Strategic Studies' Southeast Asian Young Leaders Program and the Young Strategists Forum. She is married with two young children. In whatever spare time the children leave her with, she nurses a dangerous addiction to caffeine and the written word.

Lilian Chee

Associate Professor, Department of Architecture, National University of Singapore, Singapore

Lilian CHEE is Associate Professor of Architectural Theory and Design at the Department of Architecture in the National University of Singapore, where she co-leads the Research by Design Cluster. She also serves as Academic Director at the NUS Museum, and Assistant Dean at the College of Design and Engineering and holds a joint appointment at the Department of Communications and New Media, NUS Faculty of Arts and Social Sciences. Her work includes Architecture and Affect (2023), Art in Public Space (2022), Remote Practices (2022), Objects for Thriving (2022), and the award-winning essay film 03-FLATS (2014). She leads the Social Sciences Research Council-funded Foundations for Home-based Work (2021-24) and is conducting a limited study on Dementia, care, and public housing (2023-24). She writes on affect, architectural representation, domesticity, and works creatively across the intersections of architecture and visual cultures.

Nur Hidayah Bte Abu Bakar

Dean, Faculty of Design, LASALLE College of the Arts, Singapore

- MA (Design for Communication), University of Central England, UK
- BA (Design), Curtin University of Technology, Australia
- Diploma (Graphic Design), Nanyang Academy of Fine Arts, Singapore
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Wendy Chua

Interdisciplinary Designer and Educator, Singapore

- MA Open Design and Interdisciplinary Practices (magna cum laude), Humboldt University of Berlin, Germany
- BA (Hons) Industrial Design, National University of Singapore, Singapore

Wendy Chua is an interdisciplinary design researcher, curator and educator. As a design anthropologist, her research centres on mediating across disciplines and sectors to negotiate new forms of design and art-science practices in response to social issues and climate-related precarities.

Through her practice Forest & Whale, Wendy has lived and worked in Singapore, Buenos Aires, London and Berlin where she envisages design as an agent of change to create an impact in social and planetary care. She has designed products, services and museum experiences that redefine the way we live, from homeware objects and furniture systems to new models of care in ageing societies.

With accolades like the prestigious P*DA award (Singapore) and the Good Design Award (Japan), her work has been exhibited in the Milan Triennale Museum and the Museum of Craft and Design of San Francisco, among others. Selected as one of Prestige Singapore's 40 Under 40 in 2024, Wendy is recognised for her work in driving game-changing transformation within the arts and social care sector.

Swimming between the fields of the marine sciences, environmental humanities and design, Wendy has been selected for the 2024 EU STARTS artist residency (ReSilence) to envision the future sounds of coastal cities. Her current work with marine microbiologists on marine heatwaves and harmful algal blooms will be exhibited in Berlin and other cities in 2025.

Cátia Rijo

Vice President of Higher School of Education of Lisbon, Lisbon Polytechnic, Portugal Coordinator of the Visual Arts and Technologies DegreeDesignLab4U Founder

"Pluralidad en el Diseño: Una Invitación a la Cocreación y a un futuro Colectivo"

Cátia Rijo has a Ph.D. in Design from the Faculty of Architecture of Lisbon, a Master's in Graphic Design, and a Degree in Visual Design, both from IADE.

In 2016 she founded DESIGNLAB4U, a professional laboratory that immerses students in pedagogical work, offering the opportunity to collaborate with real projects within community settings to develop culturally and socially enrichment activities.

She is currently Vice President of Higher School of Education of Lisbon, where she coordinates and teaches curricular units related to Design. In addition, she is a Coordinator of the Arts and Technologies Degree at the Interdisciplinary Center for Educational Studies of Education and a research member at CIAUD.

Each year a small number of **Emerging Scholar Awards** are given to outstanding early-career scholars or graduate students. Here are our 2025 Emerging Scholar Award Winners.

Siriporn Peters
Morehead State University, USA

Aprille Chua
Lasalle College of the Arts, University of Arts Singapore, Singapore

Xinxi Liu
Gianfranco Ferré Research Center, Italy

Ganna Borzenkova
Manchester Metropolitan University, UK

Eunmi Moon
University of Illinois Urbana-Champaign, USA

Gigi Polo
The New School University, USA

Anjali Saini
LASALLE College of the Arts, Singapore

Byungsoo Kim
North Carolina State University, USA

Rakshitha Raghunandan
LASALLE College of the Arts, Singapore

Simrita Dass
LASALLE College of the Arts, Singapore

Kathy Anne Lim
LASALLE College of the Arts, Singapore

Ang Sheng Jin
LASALLE College of the Arts, Singapore

Saradevi Ng Shi Hui
LASALLE College of the Arts, Singapore

Felix Sng Chiow Meng
LASALLE College of the Arts, Singapore

Darius Ou
LASALLE College of the Arts, Singapore

Arundhathi Madanan
LASALLE College of the Arts, Singapore

Shwetha Raja
LASALLE College of the Arts, Singapore

Sukriti Singh
LASALLE College of the Arts, Singapore

Ashley Stewart
University of Port Harcourt, Nigeria

Ayşe Dalyanoğlu
Gebze Technical University, Turkey

Sita Syal
University of Michigan, USA

Terry Londy
Florida State University, USA

Sara Saghafi Moghaddam

Muhammad Al-Hmoud
Frederick University, Cyprus

Presentations, Presenters, Participants

Understanding Neurodivergence: Literature Review Intersecting Adults with ADHD and Everyday Practices

Akansha Aggarwal, Student, Doctoral Degree, Hochschule Anhalt, Berlin, Germany

Attention Deficit Hyperactivity Disorder (ADHD) has recently become a popular research topic in a variety of research fields due to the impact that it has on both children and adults. However, a common misconception that ADHD does not persist in adulthood hinders potential research in this area. Furthermore, the stigmatization of neurodivergent thinking styles and practices has been overlooked in various fields of study including design research. Consequently, there are several gaps in our understanding of design practices and interventions specifically tailored for adults with ADHD. Most design research focuses on children, adolescents, or digital solutions for adults, but there are no comprehensive studies specifically on adults with ADHD. Additionally, there are gaps in understanding how multi-sensory design can help adults with ADHD. More qualitative research is needed to explore how holistic design approaches can help adults with ADHD understand their sensory experiences and reflection. The paper employs an interdisciplinary thematic analysis of relevant literature that intersects sociology, psychology, and design research. The goal of the analysis is to provide a strength- based comprehensive knowledge framework that focuses on adults with ADHD. The thematic analysis offers valuable insights by identifying and synthesizing key themes across diverse fields, enhancing our understanding of the unique challenges and strengths of adults with ADHD.

Life-centred Design: Compassion in Action

Vatsal Agrawal, Director, International Affairs, The Design Village Foundation, Uttar Pradesh, India
Melanie Flory, Associate Director Research, The Helen Hamlyn Centre for Design, Royal College of Art, United Kingdom

Compassion is fundamental to human and planetary survival, continuity and flourishing. Advances in psychology and neuroscience have significantly increased our understanding of compassion as a core human trait with substrates of cooperation, caregiving, altruism, morality and inclusion. Neuroimaging studies investigating physiological characteristics and chemical activity of the brain reveal that neural-correlates of compassion-based thinking and behaviours are specific. traceable and distinct from lab-controlled cruelty trait expression. In simple terms, the brain is wired for compassion and cruelty. This evidence coupled with the growing global worldview of compassion as a core value, attitude and motive in designing for change, inclusion, security, accessibility and dignity, directly calls designers to incorporate compassionate thinking and behaviours in their design endeavours. This in turn, inherently necessitates designers to reach beyond a human-centered approach to a life-centered design approach whereby consideration of the needs, wellbeing, pain-points and systemic place and belonging of all life forms and the planet's welfare and sustainability are all core considerations of the design process. In this exploratory paper, we treat compassion as the foundation for life-centred design in which diverse perspectives, futures imagination and anticipatory betterment are central to the inclusive design paradigm. We draw on evidence-based neuroscience and psychology underpinning emotive, cognitive and behavioural correlates of compassion, and the human capacity for development and deliberate activation of compassion-based traits in the professional practice of designers. We conclude with a discussion on what this approach could mean and entail for designers, design thinking and design research.

Resonance in Dissonance: Noise and the Aesthetics of Auditory Abstraction

Mariam Basowad, Student, Master of Fine Arts, Pratt Institute, New York, United States

"Dissonance," "discordance," and "cacophony" are among the countless negative connotations associated with noise in the fields of communication, musicology, and sound studies. In these contexts, noise is often perceived as an "interference" that needs to be mitigated and controlled. Similar biases exist in communications design, influenced partly by a historical preference for clarity, order, and coherence, coupled with the belief that noise diverges from conventional design principles. However, this research reframes noise as an event, a flux, a multisensory entity, and, most importantly, a means of emancipation from established artistic norms. The study explores the vital role of abstract sonic noise in communication, considering how to craft more resonant and immersive experiences and unlock new possibilities for creativity and expression. Moreover, it examines how the attributes of noise can be integrated into design methodologies. To achieve this objective, the research surveys sound, philosophy, and communication studies, drawing upon the insights of esteemed philosophers and composers, including Jacques Attali, Salomé Voegelin, and Luigi Russolo. Additionally, it investigates historical and contemporary practices of incorporating noise in creative fields, such as music and audiovisual art. Through a synthesis of theoretical and practical experimentation, this study demonstrates the effectiveness of noise as a communicative and resonant medium.

Modern Mythos - Heritage Meets Hypertech AI: Exploring Batak Ritual Masks

Jaygo Bloom, Program Leader, Diploma in Design for Communication and Experiences, School of Design Communication, LASALLE. University of the Arts, Singapore, Central Singapore, Singapore

Modern Mythos explores how artificial intelligence (AI) can be integrated with traditional craft practices to foster innovation while preserving heritage techniques. The project investigates AI's role as a tool for cultural preservation and examine the symbiotic relationship between modern technology and traditional craftsmanship. The research presentation and combined AI workshop promote the sustainability of craft practice and the innovative use of AI within design education. Building on insights gained from the first phase - an enquiry into Ves Muhunu Ritual Masks and AI, with workshops held for the SLDF festival 2025, Sri Lanka. Research presented for this conference will broaden its scope to evidence additional craft forms with deep cultural and historical significance to this area, and include collaborations alongside traditional Batak ritual mask makers from Sumatra. This expansion will open up new opportunities to examine how AI can be tailored to preserve and reinterpret a variety of craft practices across different cultural contexts. The presentation will provide fresh perspectives on the role of AI in safeguarding heritage while fostering innovation, further enriching contributions in the field.

Designing Child-friendly Data Collection Tools

Ganna Borzenkova, Research Fellow, Design, Manchester Metropolitan University, United Kingdom

This paper reports on the development of a child-friendly data collection tool in the context of the Peer2Peer research project (http://peer-2-peer.co.uk/) which aims to investigate how design-based relational play can be used to encourage children with cerebral palsy, aged 7 to 10 years, to engage pro-actively in peer social interactions to support their social-emotional wellbeing. To collect relevant data about the determinants and difficulties of children's participation in peer social interactions and making friends, we developed a child-friendly data collection tools: face-to-face questionnaire 'Dino' and 'All about me' profile pages. Both tools were developed to support and complement observations of the children, and semi-structured interviews with their parents and practitioners. Data collection took place at two special schools in the United Kingdom. 'Dino' questionnaire uses a narrative story about gamified virtual character – a little blue dinosaur Bella which guides children in completing the questionnaire. All the questions are connected through the storyline and prompts the children to share their own story, making children feel that they are playing with and helping the virtual character in the story rather than completing classroom tasks. For researchers, using fictional characters and storylines as a medium can help to shift roles and see issues more closely from the perspective of children with cerebral palsy, rather than imposing their own academic views and stereotypes on them. The tools contribute to the area of design for health and wellbeing and can be adopted and used by other researchers working with children with disabilities.

Design as Abolition: A Strategy for Transformational Change

Courtney Brown, Interior Designer, Higher Education Market, Shive-Hattery, Illinois, United States
Taneshia W. Albert, Associate Professor, Consumer and Design Sciences, Auburn University, Alabama, United States

This paper explores the innovative potential of design as a catalyst for abolition by dismantling inequitable systems in the built environment and fostering empowerment through community-led transformation. Drawing from empowerment theory, abolitionist frameworks, and co-design methodologies, this work reimagines design as a mechanism for systemic change and social equity. Empowerment theory provides the foundation for understanding the transformative power of design, emphasizing agency, self-determination, and control for marginalized communities. Abolitionist frameworks inspire the rethinking and dismantling of oppressive systems, while co-design methodologies introduce creative, inclusive practices that prioritize historically excluded voices and challenge traditional power dynamics within the design process. Grounded in historical analysis and theoretical perspectives, this paper proposes a forward-thinking framework for design practitioners. It envisions designers as agents of change, capable of creating community-driven systems that provide equitable access to critical resources such as healthcare, education, and housing. These innovations aim to establish environments of safety, inclusion, and empowerment, even in the absence of supportive policy. This work calls upon designers to embrace abolitionist and co-design principles as tools for innovation, reshaping the built environment into a landscape of justice and equity. By bridging theory and practice, this work highlights how creativity in design can serve as both advocacy and strategy for transformation change.

Design Thinking in Creative Cutting to Reduce Waste and Increase Usability

Simrita Dass, Founder and Designer, Design, ONE.O, Delhi, India

This research explores current practices within the fashion industry that are contributing to changes in the relationship between consumers and their clothing. Although there have been significant efforts towards establishing more sustainable practices, there is more that can be accomplished. Through an exploration of theoretical and practical methods of making, I argue that more informed fashion practises and habits of construction are required to initiate a shift in the way we produce and consume fashion. I propose and practice integration of design thinking at the early conceptualisation stages of garment making. I aim to provoke new ways of careful creative pattern cutting to produce outcomes that offer suitable alternatives to wasteful production, taking into consideration emotional fit, adaptability and multifunctionality. In this way, I hope to encourage more conscious garment consumption with reduced waste and increased usability.

Consumer Design and Computer Mediated Communication: Post Pandemic Preferences

Isaiah DeMarco, Assistant Professor, Communication Studies, Taylor University, Indiana, United States

This study explores the convergence of consumer facing design principles in computer mediated communication (CMC) as compared to face-to-face (FtF) relational marketing designs. Specifically, the usefulness of CMC design during the aftereffects of a health pandemic in the United States. Attention is directed to the limited amount of prior research and the need for newly generated quantitative scholarship. Hypotheses were developed after a review of existing literature, and identification of research gaps. The foremost research focus of this study was on demographical variable intrusion in consumer design practices. Results indicated significance among demographic variables, with one hypothesis showing significance among levels of self-reported consumer innovativeness and attraction to CMC design. Limitations and implications for the results and timeliness of the study are discussed before a conclusion is offered.

Women Making: Negotiating Embodiments Through Craft and Fashion in Contemporary Mexico

Jeannine Diego, Assistant Professor of Fashion Design, School of the Arts, Department of Fashion Design and Merchandising, Virginia Commonwealth University, Virginia, United States

Style-fashion-dress has recently revealed itself as a complex nodule through which young Mexican women from different backgrounds are actively negotiating their individual and collective identities, in a thrust toward autonomy and agency. In post-pandemic times -and as a direct result of Covid's impact on the livelihood of Mexican women- groups of young urban feminists who engage in craftivism in public spaces have sprouted throughout the metropolitan area's public squares. Activities are organized around the sale of recycled or upcycled garments as well as around empowerment, solidarity and the reclaiming of a collective body, vis-à-vis societal and governmental negligence toward the safety, integrity and economic dignity of women. Generally speaking, these highly politicized young women adopt strident modes of dressing (piercings, tattoos, bold hair colors and hairstyles) that stand in deliberate opposition to conservative middle-class codifications around modesty and "good" behavior. Meanwhile, for young women in traditional indigenous communities where the collective body and ancestral textile-making are still organized around deep-seated patriarchal systems in which property, labor, financial independence, and political engagement remain the exclusive privilege of men, style-fashion-dress is also a space where individual expression, creation and livelihood are negotiated vis-à-vis an imposed collective identity linked, in-turn, to notions of Mexicanness oftentimes sustained by the idealization of traditional indigenous values. Case studies afford an opportunity to examine style-fashion-dress as the signifying space where the two apparently opposing directions cross paths, where the one becomes -albeit momentarily- the other, where they meet halfway.

Rethinking Cultural Heritage through the Design Creativity Lens: Understanding the Dimension of the Ancient and the Knowledge of New Technological Realities

Carla Farina, Researcher, DEIM, Università degli Studi della Tuscia, Roma, Italy

The increasing use of new technologies has transformed everyday places into "different contexts", because no longer identifiable in the only physical dominion. The new dimension, Hybrid and Connected, has developed potentials that need different design methods and tools to be expressed. Among these, cultural places, such as museums and historical sites, become usable and perceivable in a completely new way. Cultural heritage is no more just to be preserved and conserved but becomes a place for the community to be shared in a participatory way. This research evaluates a design process, in the design and cultural heritage binomial, to manage this diversity, in order to propose a respectful and critical reinterpretation of the spaces.

The Good, the Ugly and the Sublime: Good Designing is Good Ethics

Paolo Grazioli, Faculty, Industrial Design, Savannah College of Arts and Design, Georgia, United States

Designers make ideas become tangible artifacts through the process of creation that transforms them into a tangible creation, through the use of artistic, technical and cultural skills. It is the moment when the idea is Platonic Real of Forms and brought on, as imperfect object, to the world. It is the act of creation of the visible from the invisible, which represents the artistic endeavor of the designer that, for the first time, creates forms that are combined with a meaning. Plato introduced the phrase "καλ κα γαθ" (kalós kaí agathós) to describe an ideal level of "goodness" that is represented by the noun "Kalokagathia", a crasis between the words beautiful (καλ, kalós), and good (γαθ, agathós), which is translated as "beautiful and good". The "Agathos" (good) of Kalokagathia is much more than functionality (how comfortable a chair is for sitting, or a knife for cutting, or a pen for writing): it rather refers to an ethical excellence that ensures the good of all citizens. Superior products possess this special ethical excellence through the combination of Kalos and Agathos.

Research on Reminiscence Therapy Game Design

Wen Huei Chou, Professor, Digital Media Design, National Yunlin University of Science and Technology, Yunlin, Taiwan
Shih Ping Chiu, Student, Bachelor, National Yunlin University of Science and Technology, Yunlin, Taiwan Yichun Li, Lecturer, National Yunlin University of Science and Technology
Ya ling Ko, Student, Graduate School of Design, National Yunlin University of Science & Technology, Yunlin, Taiwan

Dementia prevalence is projected to rise to 78 million by 2030 and 139 million by 2050, with Alzheimer's accounting for 60–70% of cases. Addressing this issue is vital for affected individuals and their caregivers. To alleviate dementia symptoms, both pharmaceutical and non-pharmacological treatments are used. Non-pharmacological interventions show potential benefits in treating depression, cognitive function, and social activities. Butler's reminiscence therapy uses "life review" to help the elderly recall past events, improving their quality of life and reducing depression. Despite its advantages, reminiscence therapy lacks rigorous experimental evaluation. This study aims to develop clear design specifications for reminiscence therapy through physiological sensing experiments. Collaborating with Yunlin University of Science and Technology in Taiwan and Chiba University in Japan, the study uses traditional rice dishes as nostalgic content for life review activities. Over 36 months, the study involves game design based on historical data from Taiwan and Japan, with experimental environments planned by the Japanese team. Data from Electrodermal Activity (EDA) and Blood Volume Pulse (BVP) experiments will be analyzed to assess the therapy's effectiveness. The first 24 months have completed pre-study and design work, and the project is now in the acceptance stage.

"The Forest of Branching Futures: Visualising Pluriversal Futures with Woodland Metaphors from Speculative Fantasy"

Craig Jeffcott, Student, PhD, IADE, Lisboa, Portugal

Speculative and futuring practices in design and elsewhere can draw on visual metaphors to explore and compare possible futures. The nature of those metaphors shape the sorts of futures that are possible, and how they are understood to exist within time. A very common visual metaphor used is the Future or Voros Cone, in which the future timeline opens out in concentric cones representing the likelyhood of a possible future, but this visualisation of the future has been criticised as technocratic and singular, drawing on a generic grammar from hard science fiction that frames futures around Time's Arrow and considers how far they diverge from a continution of the now (Coulton et al., 2016; Tonkinwise, 2014); research has been done to explore alternatives to this model (Carey et al., 2021) This study explores how more pluriversal, less linear versions of possible pasts, presents and futures can be drawn from speculative narratives in the fantasy genre. In particular, it considers the structural metaphors of The Tree, drawing on the Norse myth of Yggdrasil, the world tree; The Wood, drawing on the idea of the wood as an interstice between different realities, and The Path, as a safe route through such interstitial forests and places. The study discusses how these ideas are encountered in mythological and fantasy texts, while the workshop activity explores these ideas–through structural and emotional metaphorical projection–to co-create new frameworks for visualising pluriversal futures.

Traceability by Design: Designing Transparency for Biofuels' Regenerative and Net Positive Impact on Southeast Asia's Market

Sheng Jin Ang, Student, MA Design, University of the Arts Singapore, LASALLE College of the Arts, Central Singapore, Singapore

Used cooking oil (UCO) can be our carbon handprint, helping to reduce our carbon footprint. Transitioning to low-emission biofuels is crucial for achieving Net Zero 2050 objectives. However, gaps in traceability, ineffective UCO collection systems, and outdated sustainability practices impede genuine reductions in carbon footprints. This study examines how regenerative and traceable systems can validate biofuels while advancing sustainability across environmental, economic, and social dimensions. This research addresses critical challenges through extensive ethnographic fieldwork across the lifecycle of used cooking oil (UCO) to biofuels, gathering valuable insights from industry stakeholders, street food vendors, and UCO collectors. By integrating systems, service, and strategic design with approaches from the digital and circular economy, the study establishes a framework that optimises UCO collection, enhances transparency and traceability through innovative solutions, and encourages public participation in sustainable recycling initiatives. Applying various design frameworks reframes sustainability principles, enabling more efficient and scalable implementation. The outcome proposes a structured, transparent, and accountable UCO collection and validation system that fosters behavioural and cultural change while aligning with policy incentives, business viability, and community-driven action. By bridging technology, behavioural shifts, and industry regulations, this research illustrates how UCO can transition from waste to a regenerative energy resource, actively reducing emissions and restoring ecosystems. Ultimately, this research redefines UCO biofuels as a low-emission catalyst for net-positive environmental and social transformation, driving the shift toward a regenerative future.

Immersive Technologies, Immersive Experiences, and Their Components for Contemporary Designers

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Celal Murat Kandemir, Assistant Professor, Instructional Technologies, Eskisehir Osmangazi University, Turkey
Gokhan Ulusoy, Research Assistant, Interior Architecture, Eskisehir Technical University, Eskisehir, Turkey

During the transition to Industry 4.0, technological and societal developments are influencing design domains, therefore designers must learn new skills and competencies in a digitalized world. In a world where digital skills are crucial, creativity and innovation must be harnessed. This study examines immersive technologies and their effects on design. This requires first recognizing the essential properties of these technologies, which are linked to designer activities and approaches (processes, tools, and techniques) and transforming them. VR, AR, MR, and ER technologies revolutionize design activities and offer different contexts for knowledge development and sharing. Immersive technologies usually improve user experiences, encourage collaboration, and boost creativity and engagement, helping the global workforce grow. A comparative analysis of these technologies is needed to understand their potential contributions to design domains. This data was acquired using the PRISMA method, a systematic literature review method. The data has revealed the common traits of immersive technologies, which enable computer-based simulations that combine the real and virtual worlds, as well as their distinct qualities. The literature review defined immersiveness, immersive experiences, and their components, allowing the examination of inputs that enable technology-based immersive experiences. The top-down study analyzed immersive technologies and their types to determine their practicality in design and their effects on creative processes. The findings offer fresh theory-to-practice insights that help designers adapt to the digital age.

Design for Social and Public Sector Innovation

Kunica Khosla, Professor, Interior Design, Atlas Skill Tech University - ISDI, Maharashtra, India

Indian society is pluralistic, characterised by a complex social structure with numerous ethnic, linguistic, religious, and caste divisions. It encompasses people living in rural, urban, and tribal areas, all reflecting the essence of Indianness. The recreation and customisation initiatives transform lives through education and livelihood programs. The study employs a mixed-methods approach, combining qualitative and quantitative research. It explores how innovations in social and public transformation impact communities and stakeholders, identifying trends and patterns in these impacts. Effective application of design thinking principles leads to more user-centric innovation. Customization further enhances innovations by incorporating learning and implementing the final outcomes. The study aims to understand the diverse impacts of social and public transformation initiatives on communities and stakeholders. It examines how these initiatives address the needs and challenges faced by different segments of society, contributing to inclusive development and empowerment. By analyzing trends and patterns, the study identifies best practices and strategies for driving impactful and sustainable transformations in Indian society.

Exploring Empathy and Emotional Response to Historical Studies through Virtual Reality: A Perspective-Taking Process

SIU Kiu San John, Lecturer, Department of Creative Arts, School of Arts & Social Sciences, Hong Kong

Metropolitan University, Hong Kong This research examines the potential of using Virtual Reality (VR) to foster empathy and emotional engagement with a historical event through a perspective-taking approach. It focuses on the 1953 Shek Kip Mei Estate fire in Hong Kong, a pivotal event that led to societal transformation and the introduction of public housing. Participants are immersed in a 3D environment, assuming the role of a victim during the fire and its aftermath. Through interactive elements such as dialogue, soundscapes, and visual stimuli, the study enhances emotional immersion and presence. It draws on the theoretical frameworks of perspective-taking and emotional connection by Lucifora (2023) and Timothy (2022), and is inspired by Bailenson's (2018) concept of 'walking in another's shoes' to evoke feelings of loss, isolation, and empathy. This research contributes to discussions on VR as a transformative tool for historical education, with a focus on fostering empathy. The study emphasizes the role of VR in preserving and promoting historical events through innovative educational practices. By bridging the gap between technology and historical preservation, this study provides new insights into the use of immersive media to generate emotional and empathetic responses within the domain of historical studies.

Pathways to Green Personalisation: Thinking, Learning, and Doing

Iryna Kuksa, Senior Research Fellow; Director of Design Research Centre, School of Art and Design, Nottingham Trent University, United Kingdom

Personalisation is essentially concerned with individual rather than community life. It is an emancipatory response to the standardisation imposed by the industrial revolution and, particularly in western culture, is understood to be the central route to a good life. Nowadays, digital personalisation is purposefully designed to influence consumer choices and is a key contributor to driving consumption to the point of destroying our environment and creating extreme inequalities across society. Even as many citizens are beginning to recognise the collective damage caused by overconsumption, as individuals, consumers find it difficult to resist the lure of personalisation and, as a result, consume more. In this paper, I discuss what transformations in education, design practice and economic management would be helpful to move away from current pervasive throwaway culture. This culture is facilitated by digital personalisation, therefore we urgently need to dissect this phenomenon to understand the technological and social structures behind its success in influencing unsustainable consumer behaviour. Designers need to think about reversing the machine of personalisation, so it serves the society and not only individual businesses.

Multisensory Experience (MSX) Canvas: A New Tool for Autoethnography Research in Experience Design

Fitorio Leksono, Lecturer, Design and The Built Environment, Curtin University, Western Australia, Australia

Autoethnography is one of the research methods that share some similarities with design practice, due to its nature that is closely related to anthropology. In the context of experience design, designers might find difficulties to materialize the concept of experience during their research. This happens because experience is full of sensorial sensations, while at the same time it is influenced by previous experience, and personal intention. This paper investigates all the elements that designers could document during their autoethnography research in experience design. This paper introduces a canvas, namely Multisensory Experience (MSX) Canvas to help designers to mapped out various elements that shaping an experience during their autoethnography research. The aim of MSX Canvas is to help designer to documenting their experience through texts and visual based on multisensory interaction, and how it can shape the perception for future interaction. This will enable designer to identify the room to improving the experience. This paper discusses the process of creation of the MSX Canvas, from the supporting theories to the evolution of the tool itself. Followed with the explanation of the structure of the tool and how to use the tool.

Artificial Intelligence Generated Content Integrated Platforms and Interior Design Workflow Research

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Ziyuan Yang, Student, PhD Candidate, Tsinghua University, Beijing, China

The integration of Artificial Intelligence Generated Content (AIGC) is transforming processes and collaboration models within the design industry, opening new opportunities for innovation and efficiency. This research examines how to build AIGC-integrated platforms and how it will reshape interior design workflows and redefine the role of designers, while also addressing the opportunities and challenges introduced by these technological advancements. Theoretical contributions include a deeper understanding of the broad impact of AIGC-driven systems on creative industries, while practical insights help design professionals adapt to rapidly evolving technologies. The study is positioned at the intersection of interior design, artificial intelligence, and design management, focusing on the application of AIGC in design practices. Through a literature review and comparative analysis, it traces the development of AIGC in design, contrasting traditional hand-drawn and CAD-based workflows with those influenced by AIGC. Additionally, it examines the organizational structure of future AIGC-integrated platforms and their specific effects on different stages of design services. The results demonstrate that AIGC-integrated platforms will enhance efficiency and reshape traditional workflows, though challenges persist regarding data transparency, fairness, and the evolving role of designers. Ultimately, AIGC-integrated platforms will revolutionize interior design workflows, redefine the designer's role, and propel the industry towards a more intelligent, automated, and accessible future.

Exploring the Impact of Localized Exhibitions on Visitor Experience and Knowledge Dissemination: A Case Study of "Searching for the Sustainable Forest"

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Wen Huei Chou, Professor, Digital Media Design, National Yunlin University of Science and Technology, Yunlin, Taiwan

Amid the global challenges of sustainable development, integrating cultural exhibitions with modern technologies has become a crucial approach to enhancing public awareness of local ecology and sustainability issues. This study investigates how localized exhibition formats can improve visitor experiences and promote knowledge dissemination while examining whether the fusion of traditional culture and technology fosters ecological education and emotional connections. Using the puppet show "Searching for the Sustainable Forest," showcased by National Yunlin University of Science and Technology at the 2024 Asia-Pacific Sustainability Expo, the research incorporates Yunlin's unique ecological features (e.g., purple crow butterflies, fairy pittas, and golden bats) and RFID interactive technology to create an innovative cultural, technological, and educational experience. Guided by Sitzia's (2022) sensory education framework, the study developed four dimensions–macro perspective, resonance, guidance, and content-related significance–and used questionnaires to assess visitor outcomes. Results demonstrate the puppet show's effectiveness in eliciting emotional resonance, deepening cultural recognition, and enhancing sustainability knowledge. This research provides insights for future cross-disciplinary collaborations and interactive design enhancements, showcasing the potential of local culture in sustainability education.

A Common Flower Garden: Reclamation of Diverse Voices through Print Design

Sumi Limbu, Assistant Professor, Graphic Design, East Carolina University, North Carolina, United States
Riva Nayaju, Student, MFA, Oklahoma State University, Iowa, United States

"Sajha Fulbari" translates to A Common Flower Garden, a metaphor often used in Nepal to represent the country's multiethnic and multilingual communities. Since its invention, printing has been a tool for both propaganda and liberation. Who tells a story, where, and how shapes its narrative. The creation and use of zine has been significant in covering marginalized voices that were excluded in mainstream publications. It offers a democratic and accessible medium for storytelling, enabling plural ways of knowing and making. The project uses zines as a lens to explore the intersection of social and cultural themes, focusing on lived experiences and community narratives. The project investigates the interplay between identity, belonging, and resistance through visual storytelling. The project challenges conventional approaches to knowledge production and dissemination by employing experimental design practices. It highlights the importance of shared authorship, community engagement, and the power of visual communication in creating inclusive narratives. The aim was to reflect the complexities of Nepal's pluralistic society and its ways of learning and making.

A Study on the Challenges and Opportunities of Generative AI in the Creation of Chinese Freehand Animation: Taking "Poems of the Thousand Years" as an Example

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Hae Yoon Kim, Korea Economic Institute of America

With the rapid development of artificial intelligence technology, the field of animation creation is undergoing profound technological changes. This paper discusses the application status, advantages and limitations of generative AI technology in the creation of Chinese freehand animation with the example of Qianqiu Poem Ode. This study analyzes the changes to promote the traditional freehand animation, and provides a reference for the future production of freehand animation. The research results show that AI technology can significantly improve the efficiency of animation production, but there are still limitations in the expression of artistic conception and artistic details.

Re-defining Belonging: Sensory-friendly Furniture Design For Neurodiverse Inclusion Aid

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This research focuses on understanding and addressing sensory overload, a condition that affects up to 20% of the world's population and is common in individuals with autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), and other sensory deficit disorders. Temple Grandin, an autism advocate, describes autism as "Seeing the world through a kaleidoscope and trying to listen to a radio station that is jammed with static at the same time. Add to that a broken volume control, which causes the volume to jump erratically from a loud boom to inaudible." This metaphor captures the daily experience of sensory overload, which can hinder one's independence and quality of life. In design, form and structure aren't just about aesthetics and functionality–they reflect the relationship between the user and the product. The research aims to experience, empathize, and engage with the world of sensory overload as a furniture designer, designing a product that helps individuals navigate it safely and healthily. Adopting the SPELL (Structure, Positive, Empathy, Low Arousal, Links) framework with a design thinking approach, the research develops an experience that helps neurotypical audiences empathize with the neurodivergent community. It includes insights into autism in Singapore, the current state of inclusive spaces, sensory preferences, and conceptual prototypes through working closely with the autism community. It is about helping individuals gain control in a society that mislabels sensory disorders as defects and seeks to raise global awareness and promote inclusive design as the standard in all disciplines of design.

Exploring Spaces for Further (Re)connecting Tacit and Codified Knowledge in Product Design: Challenging Knowledge Hierarchy in Academia

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Codified knowledge has traditionally been prioritized in universities over tacit knowledge or know-how. While the former is formal, systematic and can be easily disseminated through words and numbers, the latter refers to informal, experiential knowledge and skills that are more difficult to express and transfer through writing and theories. Recognizing that "we know more than what we can tell", one could argue that codified knowledge alone presents limits in encompassing and expressing the diversity of knowledges. The purpose of this paper is to: 1) reflect on the origins of this hierarchy in academia where universities were founded on scholasticism and on the principle that manual skills, linked to tacit knowledge, were distinct from the higher intellectual knowledge the universities sought to pursue and preserve; 2) emphasize that the dominant system of knowledge in universities is a construction rooted in a specific heritage and that alternatives in indigenous cultures and societies suggest to us that this could be otherwise; and 3) highlight key authors who have challenged this dichotomy in product design, specifically with regard to craft skills. The paper explores the enriching potential and implications of further recognizing the value of "knowing and disseminating otherwise", as well as the holders of precious know-how, for design research and education.

Designed BY not Designed for: (dis)Ability Design Studio

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Focusing on the members within our communities who are often overlooked and underserved (e.g., aging and disability), can lead to a higher level of innovation for the designer. This paper discusses the newly established (dis)Ability Studio based in a traditional scientific and engineering institute, which provides a unique environment that supports individuals as contributors to knowledge rather than only research subjects. This studio supports diverse abilities and is underpinned by the goal that products, environments, services, and policies, need to be designed by rather than designed for if we acknowledge that the more typical abled-bodied designers can often miss the opportunity to integrate the 'voice' of the user. This discussion highlights an emerging design and disability community that enriches design education and design research projects. Two research projects are discussed (1) an omnidirectional hands-free self-balancing ballot chair and (2) an 'aging in place' housing system for life-long living. As a community let us go beyond the convenient sample to ensure we enable user-inspired innovation.

Rotoscoping in Motion Design: Exploring the Applications, Methods, and Benefits

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Rotoscoping is an animation technique that involves tracing over live-action footage frame by frame, dating back to the early days of animation. This paper explores its historical applications in animation and its growing presence in contemporary motion design. Through my own experimentation, I compare various methods of execution across multiple projects, including AI-generated techniques, Procreate, and analog approaches. Additionally, I discuss the benefits of rotoscoping in motion design and its potential as a teaching tool in introductory motion design courses. As rotoscoping gains popularity in the industry, it also serves as an accessible entry point for students learning 2D animation principles in motion design.

Charting Pathways for More-than-Human Futures: A Creative Framework for Designer Inner Transformation

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Contemporary technological and environmental disruptions are destabilizing Western ways of being. The Cartesian conception of reality, which separates us from nature, must be reconsidered to challenge the dualistic oppositions - embedded in Western culture - that define the human by negation, counterposing it with what is not human (i.e., other life forms). This anthropocentric worldview fostered a sense of detachment from the more-than-human, which led to the exteriorization of socio-ecological problems. Indeed, the modern promise of linear progress, supported by techno-optimism, frame contemporary issues as external to us and, therefore, technically fixable. However, climate change and other sustainability challenges should be understood as unwitting consequences of the way we live, thus deeply connected to our internal dimensions. Culture shapes how we think and interpret reality. It is, therefore, impelling to acknowledge and deconstruct cultural categories that prevent us from telling different stories and making design enabler of futures that are radically different from the present. For this to occur, a new design mindset to reframe creative action with a planetary futures-driven perspective needs to be cultivated. The research contributes to ongoing debates about the role of design education in addressing these issues proposing a Post-anthropocentric Creative (PaC) Framework developed to support design students in challenging assumptions and imagining futures of multispecies coexistence. The PaC Framework can be metaphorically interpreted as a cartographic tool for designers to navigate the process of inner transformation, guiding them towards a post-anthropocentric creative mindset that fosters worldviews of care for the more-than-human.

Designing Eco-print Products to Implement Socio-Creativepreneurship: A Case Study in a Community of Blitar District, East-Java

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This research employs a case study in Blitar District to consider opportunities for community development through eco-print products, namely by utilizing available natural materials such as leaves and flowers. This applied research lasted for more than three years, with the goal of encouraging people to become socio-creativepreneurs through eco-print products. The study uses two main methods, which are Service-Learning (S-L) and Participatory Rural Appraisal (PRA), involving the participation of students and the community. By using these two methods, this research in addition to provide services to the community also education to students and the community. In the first year, we produced eco-print motifs, while in the second year we focused more on making eco-print products. In the third and last year, we provided a platform in the form of video tutorials to replace live training that can be used by the community without limitations of place and time. The media website was created to facilitate and promote eco-print activities and products' Instagram. Training to upload product photos to Instagram and the marketplace for promotion and selling of products was also carried out. The hope for all these activities is that the community can be more independent in managing this newly built business and the spirit of socio-creativepreneurship can be developed.

The Role of Bio-based Materials in Education: Hands on Investigation with DIY Non-petroleum Based Materials

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The challenges of sustainable design demand an interdisciplinary approach combining technical knowledge, user insights, and environmental responsibility. This paper showcases how hands-on projects with bio-based materials can integrate industrial design education with fields like materials science, biotechnology, and sustainable manufacturing. Case studies highlight students applying STEM principles while prototyping with bio-composites, demonstrating the interdisciplinary learning potential of this pedagogical approach. Companies already leveraging bio-based materials in design illustrate the industry relevance of such experiences. By interweaving bio-based materials into design curricula, educators can foster cross-functional collaboration, technical literacy, and sustainable mindsets, preparing graduates to drive user-centered innovation in response to evolving societal needs and environmental challenges.

Volumisation as a Methodology: Towards Innovation in 3D-printing and Graphic Design

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3D printing has revolutionised various design disciplines such as product, fashion, and industrial design. However, its impact on graphic design remains largely unexplored. Despite the component word "print" in 3D-printing and graphic design's pedigree in print, both fields have seemingly no direct involvement or overlap in development. This presents a unique opportunity to explore innovations in both fields, whether by reimagining the 3D printer as a printing press or integrating graphic design's print-craft sensibilities into additive manufacturing. This paper investigates methods that reveal parallels between object-making and mark-making workflows, while also exploring how these seemingly orthogonal approaches can converge within a unified framework. It presents various experimental methods and strategies that interrogate the dimensional-biases associated with various design disciplines and expand the notion of "print" in relation to additive manufacturing.

Beyond Human Knowledge Exchange

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A new design area bond with new aims and principles is emerging, and multiple design terms come to identify it: social design, codesign, ecodesign, biodesign, biomimicry. They are committed to answering humanity's more urgent needs. This paper expands their concept and actions to all aspects of life, rejecting practices that limit the design scope to creating consumer goods and artifacts. At the end of the Anthropocene era, we need to create an expanded vision of design theory and practice, which channels its capacity for creating worlds into ways of being and doing intensely in tune with justice and the Earth. Therefore, we propose to broaden this approach, aiming to understand non-human expertise better. It is a reaction to the established paradigm while acknowledging the design and education responsibility in compromising the planet's future. We present the analyses of various practices (intra/interspecies interaction, holobionte, and holo(non)bionte examples) bond with new intrinsic aims: change, transformation, or innovation. They path new unconventional territories where humans understand and learn from and with Nature. We started with Freire's cultural circles but amplified it based on the context of the natural world and the demands of those involved – Humanity and other Living Systems. In our conclusion, Nature became a partner, an educator that encoded and decoded the existential situations.

Emotional Design Applied to Learning Scenarios: A Systematic Review

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In the context of the new active methodologies and in view of the need to update current learning scenarios, this paper presents a systematic review of the state of the art of emotional design applied to learning scenarios, with the aim to know the influence that the physical environment has on learning and to know how to use the different learning scenarios to maximise the students' experience. We have chosen the emotional design approach because in active methodologies the students, who are accompanied by the teachers as guides, are at the centre of the teaching-learning process, being even more relevant for the design of learning scenarios to take as a reference the users, their experience, and their emotions. To achieve these objectives, and following the PRISMA methodology, a bibliographic search was carried out using the following databases: Scopus, Web of Science, IEEE Xplore and Science Direct. This study includes 24 articles and discusses these in three-category taxonomy: theoretical aspects, measurement methods and design applications. This review presents the state of the art and identify the key points and new lines of research, as even though the topics are broadly researched, they are not being researched as a whole. 2

Assistive Kitchen Tool for Women Aged 20-45 with Partial Hand Amputation: Designing Ergonomic and Customizable Kitchen Tools to Enhance Independence

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Partial hand amputation poses unique obstacles while performing regular duties, especially in the kitchen where fundamental tools are not built for people with limited dexterity. This thesis is on creating adaptable kitchen equipment for women aged 20 to 45 who have had a partial hand amputation, intending to meet ergonomic demands and increase independence. Using user-centered design concepts, the study identifies gaps in existing tools and investigates alternatives using interviews, tests, and secondary research. The study included a lengthy interview with Anita, a 42-year-old housewife with partial hand amputation, observational trials with people with similar physical characteristics, and an experiment replicating impaired dexterity by limiting the movement of certain fingers on my hand by binding it with a cloth. Insights from these methodologies were used to design a wrist cuff with modular attachments for knives, spoons, and peelers. The design is on flexibility, ergonomic placement, and material safety, including medical-grade silicone for comfort and high-density polymers for durability. The degrees of freedom of the wrist have been studied to optimize tool positioning, assuring natural motions and reducing strain. For example, the knife attachment on the wrist's side uses radial-ulnar deviation to cut well, whilst removable palm-based accessories such as spoons increase adaptability. Challenges such as limited access to multiple users and material restrictions affected prototypes, resulting in the employment of 3D Printing, air-dry clay, and CAD modeling for idea validation. This thesis emphasizes the importance of inclusive design in increasing the quality of life for people with partial hand amputations.

Using EEG to Assess Cognitive Load in Infinite Interfaces: A Case Study

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In the realm of Human-Computer Interaction, cognitive load plays a crucial role in determining user satisfaction, product acquisition, and user retention. We are introducing a new type of interface - Infinite Interfaces, that dynamically adapts to user inputs and, therefore, offers personalized and efficient user experiences. However, the novelty of such interfaces may lead to increased cognitive effort, as most users are accustomed to traditional predetermined interfaces. This study evaluates the cognitive load associated with Infinite Interfaces using two approaches: subjective user ratings, which are simple and accessible, and EEG technology, providing an objective measure. The research compares cognitive load in Infinite Interfaces versus traditional interfaces, using both methods to identify any similarities or differences in the results. Results indicate that while novel interfaces like Infinite Interfaces initially induce higher cognitive load, they offer long-term potential for improving user efficiency in complex tasks.

Towards a Measurement Instrument for Transdisciplinary Thinking in Singapore Tertiary Students

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As the world and its problems become increasingly complex, there is a growing need for more holistic and integrative ways of thinking to address these issues. Transdisciplinary Thinking is increasingly recognised as an important ability or mindset for integration across disciplines and more innovative solutions (OECD, 2020, SSG, n.d.). Despite the increasing recognition of Transdisciplinary Thinking, there is no consensus on its conceptual definition, nor is there a validated instrument to measure this construct. This is a critical gap in the context of teaching, evaluating and assessing educational initiatives aimed at developing this ability in students. This paper builds on a literature review and analyses retrospective data (using Rasch Analysis and Exploratory Factor Analysis) from a 9-item self-report student survey conducted in 2021 (n = 84) to understand what Transdisciplinary Thinking entails and how it can be measured. Our findings suggest that Transdisciplinary Thinking is a multidimensional construct consisting of three dimensions: Perceiving (i.e., understanding and evaluating an issue from the perspective of different disciplines), Synthesizing (i.e., integrating efforts to synthesize knowledge from other disciplines to gain new knowledge), and Solutioning (i.e., proposing innovative solutions that go beyond the scope of any single discipline). A more robust 17-item survey instrument developed after this analysis is shared in this paper. We also review classroom activities that help nurture students in these dimensions. Our work on measuring Transdisciplinary Thinking and teaching it in a classroom setting will be beneficial to other educators seeking ways to foster holistic development in their students.

Towards Hybridity: Innovative Design Approaches In Hybrid Realities

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In an era of rapidly evolving digital ecosystems, this research explores emerging design opportunities at the intersection of mixed reality, blockchain, and decentralisation. Through a speculative design lens, it examines how these convergent technologies reshape our interactions with objects and environments by extending physical-digital affordances. Practice-based experiments and prototypes reveal new ways of blending tangible and virtual realms, challenging existing notions of ownership, materiality, and creative engagement. By integrating immersive media, blockchain systems, and hybrid objects, the work demonstrates how designers might build multi-dimensional experiences for digitally native communities. In exploring these synergies, the research also considers how ephemeral digital content can inform lasting, tangible experiences, emphasising new modes of user engagement while contextualising these technological advancements within broader speculative design frameworks.

Arm Prosthetics in Medical and Social Models: A Semiotic, Phenomenological, and Hermeneutic Approach

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Arm prosthetics have evolved from a functional tool to help physical impairment to a cultural artefact that holds broader social meaning. This paper reviews existing research on prosthetics especially arm prosthetics to explore their role within the medical and social models of disability. The medical model emphasises prosthetics as tools to restore physical function, while the social model highlights societal inclusion and the reduction of barriers. This work seeks to understand better the relationship between functionality and social meaning in prosthetic design, offering practical insights. This study employs semiotics, phenomenology, and hermeneutics as approaches for analysis. Employing semiotics, we examine how prosthetics function as both physical aid tools (denotative) and cultural symbols (connotative). Using phenomenology we address the user's experience with prosthetics, particularly how these devices integrate into their daily lives. With hermeneutics, we explore the sociological and cultural stories around prostheses and their impact on how they are seen. This study shows that research often focuses on either functional or societal aspects, with limited efforts to combine these perspectives. Through semiotics, phenomenology, and hermeneutics, we investigate how prostheses operate as physical assistance as well as symbols influenced by cultural narratives and user experiences. Furthermore, the application of semiotics, phenomenology, and hermeneutics integration in the context of arm prosthesis development appears to be limited. We feel that considering both the medical and social model viewpoints is critical for appropriate prosthesis development.

Targeting Clothing Emissions for Sustainable Living: An App to Sensitise Citizens about the Emissions that Clothes Carry

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Greenhouse gases are a major contributor to climate change. The textile industry, with significant emissions, contributes almost one tonne to every 19.8 tonnes of carbon emissions in the atmosphere (comprising almost 5% of the total emissions). Mission LiFE, launched by the Government, seeks to encourage thoughtful consumption and an environmentally conscious lifestyle. With clothing being an essential part of the lifestyle, making the right choice based on carbon emissions is critical. We adopted the double diamond design process by exploring different possibilities to address this problem and narrowed them down to an intervention. Journal papers and newspaper articles were sourced for the literature review. Data on the carbon emissions of various fabrics such as cotton, polyester, silk, rayon, linen, and fabric blends were collected. Emissions from harvesting and apparel production processes were included in the data. Following a stakeholder mapping exercise, we decided that the best way to communicate this data with the target audience is through an application. The Carbon Meter app was created to estimate the carbon emissions of a person's clothing. To drive home the point to the user, the emissions are compared with the carbon emissions of petrol cars. For instance, a person wearing a cotton shirt and pant carries 7.43 kg of CO2e emissions, whereas a person wearing linen has 4.25 kg of CO2e emissions. This is equivalent to driving a petrol car for 76.53 km and 43.78 km, respectively. This app was pilot-tested at an event in Bengaluru.

Comparative Study of Futures Thinking and Design Thinking Processes: Analysis of Approaches and Application Cases

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The Future's Thinking process, through repeated convergence and open-ended thinking, forms different future scenarios. From this perspective, it shares similarities and differences with the Design Thinking process. This study explores the similarities and differences between Futures Thinking and Design Thinking methodologies and analyze their characteristics in application cases. In the design field, in addition to the human-centered design objectives of the present, there is also a need for thinking and vision towards the future. This study combines literature review and case analysis to examine relevant literature, summarizing and identifying the key concepts in the processes of Futures Thinking and Design Thinking. An analytical framework that aligns with the characteristics of each methodology is derived, and the main differences and commonalities in practical application cases are analyzed. Although this research is still in its preliminary stages, it hopes that the discussion, based on literature and case analysis, can provide insights for the interdisciplinary application and practice of Futures Thinking and Design Thinking, expanding the future vision in the design field.

Music Videos: Design beyond Print and User Interfaces

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To help students expand their knowledge beyond a traditional graphic design programs focus on print and user interfaces, I taught a three-week January term course focusing on music videos. The course began with a visual history of music videos, using YouTube playlists as a reference. Students were assigned out-of-class projects that each focused on different themes of music video production, such as choreography, lighting, lip-syncing, and visual style. They created storyboards, selected shooting locations to enhance their concepts, captured video, and edited the final product using Adobe Premiere Pro. In-class exercises like group choreography (the "Stairwell Shuffle") and lighting experiments (set to Justin Bieber's Beauty and a Beat) helped them learn the principles and also loosened them up. This help bolster their confidence to perform on screen in front of their peers. For many students, this was their first experience using body movement and physical expression to convey a concept. They were immersed in a creative world of narration, storytelling, costumes, storylines, glamour, and choreography, building on and moving beyond traditional design basics like image, text, color, and pattern to develop a fuller expression of their ideas. This paper reviews the initial course planning, pedagogy, successes and challenges, learning outcomes, student feedback, and showcase a selection of music videos produced by the students.

Curating Cityscapes: Ways for Thinking and Performing Spaces of Becoming

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As a Chinese artist and architect living between China and Aotearoa New Zealand, the researcher has encountered many native landscapes hidden within urban environments. In partnership with indigenous women from Aotearoa and China, this creative practice-based research project asks: What unfolds when dynamic realms of native landscapes, hidden within urban environments, are encountered, narrated, and performed? How can design and art contribute to thinking and performing spaces of becoming? By 'becoming,' we refer to the constantly changing and intra-acting dynamics of urban space and processes of knowing postcolonial urban spaces. These inquiries form the basis of this paper, which references a micro-curating and performance project titled 'Native Land and Other Stories.' The project is not just performance by the researcher but also a performative exploration of collective experiences reimagining everyday cityscapes with other female collaborators. These experiences are viewed as acts of 'curating,' rooted in its Latin concepts of 'caring' (curitas, cura), and intertwined with Ewengki/Evenki, Māori and Chinese traditions of 'shamanic healing'. These acts are situated within the 'native lands'–waterways, forests, settlements–hidden within modern landscapes in urban environments. The outcomes demonstrate how performative moments within native and urban landscapes, and spaces of becoming, can influence architecture and art practices, and design-thinking in relation to the collective 'others' of the urban: women, multi-species, native, material, and immaterial beings. This project is detailed and reflected upon through autoethnographic writing and recording and provides other creative practitioners with alternative ways of knowing and creating in response to urban spaces in posthuman era.

Intuitive Insights or Acquired Training: Understanding Design Students' Perception of Community-Oriented Spaces

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The human eye is the primary receptor for all perceptions related to the design of a space. Design professionals can identify the human's understanding of a space through the occupant's visual cues and perception. This research explores design and non-design students' ability to identify environmental settings that promote community-oriented spaces using eye tracking. Prior research at the University of Oregon, led by Megan Knight, analyzed first-year students' experiences in freshman dormitories regarding community and sense of belonging from an interior perspective. This study was conducted under McMillan and Chavis' sense of community theory, which includes four elements: membership, influence, integration and fulfillment of needs, and shared emotional connection. This pilot study analyzed higher education students' visual perceptions of community-oriented design through two-dimensional images of spaces. Twelve first-year students from design and non-design majors 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 community and provide an explanation of the rating. The data was then visualized and studied with corresponding fixation and heat maps. Findings indicated that design students had a more fluid visual comprehension of scenes and architectural elements, while non-design students showed trivial fixation clusters in active areas. Both groups focused heavily on the center of scenes, following perspective lines before diverting attention to individuals within the scenes. This study contributes to understanding how design students perceive community through design and suggests avenues for further research.

New Materials for Design: A Sensory and Perceptual Analysis of Transparent Wood

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This research presents an analysis of Transparent Wood (TW), a material currently under development, focusing on its perceptual and sensory aspects–specifically through sight, hearing, and touch. The objective of this study is to examine the current perception of TW to enhance its adoption and acceptance before its market introduction. Advances in material innovation contribute to sustainability, performance, and the meaningfulness of new artifacts, yielding benefits not only in academia but also in the real-world context of businesses and end-users. In this context, the research falls within the domain of Design for Material, which intersects the fields of Design and Material Science. The study employs a protocol drawn from the scientific literature for evaluating perceived quality through a sensory test administered to 80 participants, referred to as "material tasters". The data were collected during a two-hour workshop in which participants, provided with TW samples, performed three distinct actions for each selected sense, and selected four adjectives from a predefined list that they deemed most appropriate. The collected data were subsequently analyzed for each sense and cross-sensory, identifying guidelines to improve the future communication strategies related to the perceived quality of TW. Concerning limitations, results may be influenced by the geographic homogeneity of participants and preconceived notions of traditional wood and other transparent materials (aspects currently under further investigation). The proposed guidelines will undergo validation in upcoming focus groups involving designers and architects, ensuring a broader and more diverse perspective on the material's potential applications.

The Role of Technology in the Construction of Social Reality in Everyday Life: Robot Vacuum Cleaner Transforms Daily Life of House Cleaning

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In everyday life, individuals meaning their experiences and interactions within a social activity and organise their social lives. Language plays an important role as a tool in the process of objectifying individuals' experiences and constructing reality. Individuals begin the process of interpreting symbols and meanings are generated through subject-object interaction. User comments on online shopping platforms, which are frequently preferred these days, reflect the interactions and experiences of individuals with products and contain traces of everyday life. This study investigates the position of robot vacuum cleaner technology in everyday life and its effect on the construction of social reality. The role of the robot vacuum cleaner in changing the perception, way of thinking and doing housework habits on house cleaning is investigated. Based on the experiences of users, user comments about robot vacuum cleaners on the Trendyol platform are used as a data source. The data is analysed by content analysis. The method discusses the social reality reflected by robot vacuum cleaners in everyday life in a theoretical framework. As a result of the research, the experiences made meaningful by society through robot vacuum cleaners have gone through an intersubjective journey and the reality that society constructs for house cleaning in everyday life has been discovered as an objective representation. The interactions of society with each other and with technology affect the process of interpreting and meaning the product, as well as user behaviours, social norms, routines and mundanity.

Learning Tools for Non-Speakers: Co-creating a Picture Book and Resources for Speech Therapists Working with Non-speaking Children

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Non-speaking children often face challenges in fully engaging with traditional learning environments, creating barriers to participation and inclusion. Hello at the Farm was developed as an inclusive read-aloud picture book that emphasizes farm animal actions rather than sounds, enabling children with diverse communication needs to actively participate. This project evolved into a comprehensive framework addressing the needs of children with disabilities by promoting accessible and meaningful engagement. Through collaboration with speech and behavioral therapists, an adapted version of the book featuring repetitive text was created to support material retention. Additional supplemental activities were designed to deepen learning in therapy sessions and educational settings. Input from caregivers, teachers, and therapists ensured the development of user-friendly and engaging resources. This co-creation process resulted in tools that enhance speech therapy outcomes, foster inclusive learning, and provide enriching experiences for all involved.

Exploring Dynamic Morphologies: Structural Transitions of Bamboo Weaving in 3D Forms

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Bamboo baskets in the Northeastern states of India hold cultural significance, reflecting regional lifestyles and traditional craftsmanship. The grass itself is known for its versatility and sustainable characteristics making it a relevant material for innovation. However, the dynamic behaviour of bamboo weaves used in these baskets is a less studied aspect of the craft. The transformation of one 3-dimensional form to another form, garnered by a continuous strip of bamboo, is a less-explored realm and therefore is attempted in this study. The study employs a multidisciplinary approach, combining design research methods and the nuances of traditional craftsmanship. It explores the characteristics of bamboo weaves by challenging it to transition between three-dimensional forms derived from the forms of traditional baskets. The baskets that have been studied are chosen based on the complexity of their form and the transition of weaves throughout the form. The subsequent process of making unveils the principles governing weave behaviour during morphological transitions. The framework developed using these principles could ensure the survival of the traditional weaving technique and its potential modern applications. The insights gained from this study contribute to the knowledge base of bamboo as a material, and also have practical implications that will allow versatile design and artistic creations.

Designing Phygital Twin Artifacts in Healthcare

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Phygital Twins, integrating physical and digital elements into cohesive systems, have significant transformative potential across many application areas, including healthcare. Positioned at the intersection of healthcare design and medical education, this study focuses on designing and implementing phygital twin artifacts as advanced training tools for surgical and anatomical education, specifically in spinal procedures. The objective is to develop an integrated device that replicates a portion of the spinal column, offering medical students and young neurosurgeons a realistic platform for learning surgical anatomy and practicing techniques. The research employs a mixed-methods approach, including design prototyping, stakeholder consultations, and iterative testing. The development process involved creating a modular architecture for interchangeable components and integrating physical and digital systems to enhance the realism and adaptability of the training experience. Preliminary evaluations of the physical device were conducted through user feedback and performance assessments in simulated surgical scenarios. Initial findings indicate the device's effectiveness in supporting anatomical learning and skill acquisition. However, challenges remain in refining the fidelity of certain biological feedback mechanisms. Future developments will prioritize establishing usability protocols for both the physical and digital twins. These protocols will assess the physical twin's realism and user-friendliness, with particular attention to its assembly and disassembly. Similarly, they will evaluate the digital twin's seamless integration with its physical counterpart. Usability testing will play a pivotal role in understanding user interactions, providing valuable insights to refine the design and ensure the device's effectiveness in real-world training environments.

Questions on Redesigning the Plastic Condition

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Synthetic polymers, otherwise known as plastic is often regarded as cheap, fake and toxic. Since its commercialisation in the 20th century, plastic has not only become more indispensable for human activity, but is associated with irreversible pollution and ecotoxicity. Yet, accepting the use and consequent waste of plastic as simply an intrusion of human contrivance is to externalise a toxicity that proves to be more peculiar in its origins and culture. To espouse plastic's sheer artificiality is to overlook its foundations in organic matter, and the proposition that its 'life' is – to draw from the narrative in Mary Shelley's Frankenstein – a reanimation at the expense of the remains of the non-living. It is through this transformation that the operation of plastic's cultural significance and semantic intersection with cancer becomes evident, insofar as the latter is a deviant cell synthesised by the body's own mutations and stressors, and in time acquires a plasticity that grows and resides as a toxic entity within the organs. Exploring the parallels between cancer and plastic open the space for oncology to question the plastic condition, and show the production and consumption of the material intrinsically entwined with our humanity. To completely forgo plastic would therefore involve a radical redesigning or even undoing of the human condition, as plastic's raison d'être lies not in the objects derived from it, but in the quality and potentials of plasticity.

The Design Process of a Mobile Game and Its Heuristic Evaluation: Newly Designed Game and User Testing

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The popularity of the relationship between human-computer interaction (HCI) and computer/mobile games is increasing with new technologies. The design and testing processes of these games are a matter of curiosity. This research addresses two fundamental processes: describing a new mobile game design process and testing game elements regarding usability and playability using Heuristic Evaluation for Playability (HEP). The first part of this study presents the design elements of a recently designed real-time strategy puzzle game called The Gardiyan. The game's primary objectives, characters, storyboard, graphical user interface, rules, and winning conditions are presented through a game treatment document. Game components such as physics, sound, artificial intelligence, narration, and storytelling are explained, as well as gameplay decisions such as difficulty adjustments, balancing, and level design. Different methods are recommended for debugging game design and running tests. The second part of the study covers HEP evaluations and usability tests against miscellaneous game features of 7 players. In the light of these records, HEP categories such as gameplay, story, mechanics, and usability are analyzed, and the usability-gameplay relationship is interpreted to improve the game design.

Enhancing Final Design Drawings: Leveraging Storytelling, Depth, and Materials for a Deeper Connection

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Designs begin by an idea, a curiosity, possibly seeking the answer to a complex problem though entrepreneurial direction or a client. Through the design process, creatives will develop several iterations through sketching, modeling, and prototyping to get closer to the proposed solution. As designers progress to the construction drawing phase, the solution is finalized and ready for fabrication. Early design phases, concept, and schematic specifically, are saturated with creativity and innovation by way of storytelling, renderings, and the use of tactile materials further building and expressing the need for the final design solution. Design drawings seem to lose many of the creative impactful elements when they are in the final phase for production. While earlier phases are rich in storytelling, selling or defining the innovative idea, the construction drawings are used as a tool to accurately inform the fabrication method and details of an object or structure. These drawings historically called blueprints, are monochromatic, lacking depth, and creativity. The drawings are used as a communication tool to create something beautiful while they themselves lack that quality. The study is framed around the question: "In what ways can final design drawings use storytelling, depth, and materials to illustrate a deeper connection to the final product? The study seeks to uncover the impact that a fabricated "dimensional design drawing" that is rich in color, story, and materials can bring a better connection to the final product. Designed Objects

Co-design is Key to Understanding People in Holistic, Human-centred Design Settings

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Prominent design thinking and service design authors promote a collaborative and inclusive design setting called co-design. Co-designing is a creative process where organisations work with the general public on projects. Co-designing activates a broad range of perspectives, experiences and skills within a project so that designers can better understand how people from different backgrounds feel about a product or service problem. This research explores how graphic design has not engaged deeply with its audience as co-design suggests in Perth, Western Australia. Typically, graphic designers have substantial insight into human behaviour because they are constantly examining and creating communications to adjust it. However, this does not mean that graphic designers have intrinsic knowledge around the drivers and aspirations of every project stakeholder. Designing without 'intrinsic knowledge' of the people that are affected by our designs is built around assumption. In contrast, co-designing, a common human-centred method of service design, opens a channel for 'authentic knowledge about people' as it provides a pathway for intimate, individualised storytelling. Historically graphic design has actively engaged in storytelling using illustrative storytelling methods such as storyboards or comics. Research findings from this study have indicated sequenced visual communications are also effective mediums for storytelling and making sense of complex problems within co-design settings. However, Perth design experts have explained that they are yet to determine an effective co-design methodology for projects of varying sizes particularly smaller projects which usually commence with a call for a single artefact.

Materials Design: Between Materials Engineering and Product Design

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This study examines the emerging phenomenon of designer-created materials. In recent decades, an increasing number of designers have been shifting their focus towards materials. This shift involves a gradual transition from passive applications of existing materials, through their modifications to active creations of new materials. Thus, the role of materials in the design process has evolved from being a means to an end into becoming an end in themselves. The study explores the phenomenon of material design, wherein materials are created in accordance with the principles of the design process and with the use of design methods. It offers a new definition of material design, along with its key distinguishing factors, which are derived from the overlapping characteristics of engineering and design disciplines. This definition places a specific emphasis on materials engineering and product design. The presented theses are based on analytical studies of existing definitions supported with in-depth interviews with designers engaged in the creation of materials. The study aims to broaden and enhance the understanding of the relationship between designers and materials, which has so far been attempted to be delineated through two terms: material-driven design and material-based design, neither of which involves the act of creation of materials.

Accessibility and Equality: Developing Accessible Solutions in Finland

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ESSI – Accessible and Intelligent Living Solutions project has been studying accessibility focusing on three different target groups: persons with reduced mobility, persons with visual impairments and persons with hypersensitivity. The project aims to create new concept ideas for the local manufacturing industry to help create new business opportunities. There have been huge breakthroughs in the development of accessibility solutions, but a significant stigma is attached to using disability aids. With co-design we can create affordable and desirable disability aids. The main problem for disabled persons is non-inclusive design which marginalizes a vast amount of people, creating disabling environments. The project has conducted interviews, inclusive workshops for companies and end-users as well as concept tests in collaboration with students and experts. Data received from the actions has been analyzed, for example, using affinity diagrams to understand the needs of the end-users. The main results of accessibility challenges have been transformed into concepts and prototypes. The ESSI project has developed four concepts including a smart creature that works as a door phone, "a lightsaber" that leads a person to a door with light and sound, a smart door that has a reminder function and can adjust the home environment, and grab rails with new exciting features. The project has had an opportunity to conduct a few testing situations. More testing is needed to ensure the best possible results to make sure that numerous end-users' voices are heard.

Material Manipulation and Illusion in Interior Design

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This paper explores the intersection of materiality, illusion, and interior design through the lens of my practice as a custom textile and surface designer. By focusing on large-scale works that incorporate innovative techniques, the study delves into how materials can be manipulated to create visual and tactile illusions, blurring the boundaries between reality and perception. Drawing on historical examples from art, technology, and design–such as trompe l'oeil in Renaissance painting, the illusionary effects of Rococo interiors, and the use of synthetic materials in mid-20th-century design–this study demonstrates how these age-old methods continue to influence contemporary practices. Specifically, I showcase projects where surface treatments, textiles, and layering techniques are used to create dynamic, multi-sensory environments. These works not only challenge the viewer's expectations but also engage them in a deeper conversation about the relationship between texture, light, and space. By examining the broader historical context, we can better understand the role of illusion in interior finishes, from early examples of optical deception in decorative arts to modern-day digital and material manipulations. Ultimately, the paper seeks to highlight how today's interior designers can leverage material trickery to create immersive, compelling environments that invite new ways of seeing and experiencing space. The discussion concludes with insights on how material innovation continues to redefine the possibilities of interior design in a rapidly changing world.

Upgrading the Thong Som Jackfruit Model Community Enterprise to be a Model of Learning Resoures

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The research aims to develop a learning resource for the comprehensive Thong Som Jackfruit by Design Thinking Process and to suggest potential products using agricultural waste such as branches, stems, leaves, and seeds, especially the Jackfruit tree. The research was analyzed and summarized using focus group discussions with esteemed scholars, experts, and community members to inform the research process. The Thong Som Jackfruit variety was the project's concentration, proving a comprehensive learning center for Thong Som Jackfruit is remarkable in the research. An organizational identity and manual have created for use in Thong Som Jackfruit products. As a result, it has been developed a practical prototype database for products made from jackfruit wood dye, the dyed material and waste could be suggested for fashion items, various lifestyle products. In addition, jackfruit seeds were also capable of baking ingredient to make various bakery products. Moreover, the pruned jackfruit branches could be decorated with smokeless charcoal from jackfruit branches. Through these prototypes and processes, the research team has developed innovative products and organized knowledge transfer activities within the community. The researcher has led to significant knowledge exchange and the promotion of sustainable self-reliance, establishing the broader benefits.

Fostering Curiosity Through Elaborate Visual Narrative for Children

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This paper considers the implications of using elaborate visual narratives in context of primary school students. The word "elaborate" focuses on complexity of various elements of narratives arousal of emotions, developing interest, engagement, inculcating curiosity, increasing comprehension, empathy. This research paper focuses on visual narratives built to interest children in a few selected aspects of scientific process that arouse wonder among children. The paper provides an analysis focussing the comparison between minimalistic and elaborate approach while creating visual narratives for children. The efficacy of elaborate visual narratives for children for effective learning, communication, development of visual dictionary, by increasing curiosity or inquisitiveness among children. In this paper, after a statistical analysis of data driven by observing a set of 50 students 8-10 years old. Data of their responses is based on their interaction with the Static and Interactive Visual Narratives. To define the increase in curiosity: analysed through three attributes: Engagement, Emotional Response and Comprehension by means of three Elements of Design: Form, Space and Colour. Creating case studies to evaluate these aspects, Book (Static Visual Narrative) and an App (Interactive Visual Narrative).

Design Principles in Learning Designs for Technology-Enhanced Learning: Using a Topic Modeling Approach

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Despite the growing presence of design principles and practices within educational contexts, a comprehensive understanding of learning designs (LD) or designs for learning (DfL) in technology-enhanced learning remains underexplored. This study addresses this gap by applying topic modeling to a broad collection of journals on LD and DfL, utilizing both the research team's topic modeling app (referred to as TRANSMITTAL) and scientometric analysis. Through the PRISMA methodology, 138 peer-reviewed, English-language journal articles published between 2008 and September 2024 were selected using the search terms ("learning design" OR "designs for learning" AND "design principle*"). The analysis identified six key topics, including (1) multimodal and embodied learning, (2) data-driven educational decision-making, (3) technology integration for innovative teaching and learning, (4) collaborative learning and teamwork, (5) visual representation and learning, and (6) culturally responsive design. These findings highlight emerging trends in the design principles of LD or DfL, as well as the increasingly complex relationships among them, particularly the growing emphasis on inclusivity, personalized approaches, and the use of multiple semiotic tools. Such shifts point toward a more holistic and context-specific framework in educational design principles and practices. The insights from this study provide valuable direction for both future research and practice, advocating for adaptable, innovative approaches to technology-enhanced learning.

An Intricate Study of the Cultural Artefacts and Associated Intangible Cultural Heritage of the Raj Gonds of Telangana

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This research concerns the material culture and associated intangible cultural heritage of India's earliest and second-largest indigenous group: the Raj Gonds. Traditional artefacts made for ceremonial and utilitarian purposes play a vital role in their socio-cultural life. The Raj Gonds of Telangana are the successors of the Chanda Rulers. They continue to celebrate their cultural festivals and rituals around the year. The artefacts are an integrated part of the Indigenous cultural heritage and living traditions. Cultural artefacts include tools, artworks, clothing, and ritual objects, which often carry deep meanings tied to ancestral knowledge, spiritual beliefs, and social structures. The study reports the interplay between tangible and intangible cultural heritage by analysing these objects' materiality, symbolism, and functionality and tries to understand the significance of cultural artefacts in the living traditions of the Raj Gonds. The data was collected using ethnographic methods, including semi-structured interviews, participatory observation, and Audio-visual documentation to reveal how these artefacts are not merely physical items but powerful symbols that reinforce kinship, maintain intergenerational continuity, and foster communal solidarity within the Gond society. The findings underscore the need for preservation efforts that respect indigenous values and support sustainable practices, as these artefacts are increasingly at risk due to globalization, modernization, and commodification pressures. This study contributes to the broader understanding of cultural heritage and identity in Indigenous contexts, emphasizing the importance of protecting the living heritage associated with the artefacts to safeguard the cultural values they represent for future generations.

Comparison and Analysis of Multidisciplinary Modular Characteristics for Enhanced Product Development

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A modular product architecture plays a critical role in managing complex systems by enabling the use of customizable, standardized, upgradeable, or interchangeable components. Existing approaches to designing modular architectures tend to emphasize technical or strategic considerations within engineering. However, the development of modular products is inherently interdisciplinary and benefits from methods that integrate diverse disciplines. Exploring modularity across various scientific fields, including Design, Biology and Architecture, have the potential to provide new multidisciplinary insights that enhance the methodologies used to design modular products. Through a literature review of these diverse approaches to modularity, this research identifies unique characteristics such as human-centered design, aesthetics, theories of biological evolution and prefabrication techniques, and evaluates their capability to complement the design of modular products. This research promotes enhanced interdisciplinary collaboration among product development teams, enabling increased innovation in modular product development.

Analysis of the Advantages of 3D Printing Technology in the Production of Garage Kits

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The application of 3D printing technology in the anime industry has enormous development space, whether it is in the role and scene production of 3D printing in freeze frame animation creation, or the development and creation of 3D printing technology in anime derivatives. Compared with traditional technologies, 3D printing technology has great advantages. This study uses advanced 3D digital modeling technology to design and produce 3D models of garage kits, combined with 3D printing technology, to study and practice new digital methods for garage kits design and production. Compared with traditional figurine prototype production methods, it summarizes the advantages of digital design and promotes the innovation of garage kits production methods and the improvement of design level.

A Combination of Chinese and Western Book Design: A Case Study of Chengshu - China's First Textbook

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This paper conducts a case study on the book design of Chengshu. It analyzes the reasons and development context of the reform of Chinese book design in the late Qing Dynasty and the early Republic of China. It summarizes the book design methods combining Western and Chinese, enriching the book design research in the late Qing Dynasty and the early Republic of China. It offers provides ideas for current book design.

Photographs, Home, and Space: "Objects" Evolution in Residential Interior Design

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Interior design is not only transcended the portrayal by professional designers to delineate a home's layout, but encompasses the influence of human interaction with space. The historical study of spatial design serves as a mirror reflecting the transformation of individuals and nations. This paper adopts a bottom-up perspective to examine the evolution of residential interior space design in China. Through the documentation of interior spaces via familial photography, the analysis delineates the morphological characteristics of domestic objects and the dynamics of their spatial relationships, thereby elucidating the paradigmatic shifts in interior design practices. Grounded in lifestyle and material culture theory, the investigation engages in interviews with 30 participants in the northern China, performing image analysis on the family photos, to discern the factors underpinning the evolution of domestic spaces. Since the 1980s, the lifestyle of the Chinese populace has been influenced by a confluence of political, economic, and cultural determinants. These transformative influences are manifest in the alteration of objects populating in the domestic spaces, manifesting as distinct area characteristics. This paper delves into the intrinsic rationale and determinants underlying the metamorphosis of objects within domestic spaces, offering an underexplored "object-centric" lens through which to comprehend the progression of modern Chinese residential interior design.

Learning Typography through Graphic Comics

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This paper explores how comics can be a potential tool for teaching the basics of typography to enhance student involvement. A typical class takes students through the fundamentals, guidelines, and classifications. The question arises- is there a way to make typography education more captivating? Being constantly bombarded with advertisements, it makes people furious to read for leisure. As a result, it is challenging to read lengthy theoretical text and more so to retain it for a long-term. Typography, too, is perceived as a technical and theoretical subject and it becomes vigorous to read and understand theories. Comics can cover diverse genres such as action, adventure, science, fantasy, history and politics, that help deconstruct complex issues. This makes readers culturally aware and promotes understanding of different backgrounds. Comics present facts informally that make learning more enjoyable for visual learners with elements that help break the monotony over lengthy text. The integration of comics into education tries to make typography more accessible with the help of 20 students from the elective typography class who were asked to study various topics such as letterpress printing, ligatures, ink traps, font psychology, Book of the Dead and papyrus paper. They were taught how to develop a story by gathering information, converting it into action, depicting a conflict, and finally emerging with a resolution for the story. Though comics have been used as a method for storytelling and entertainment, their potential in education is slowly being recognized.

The Design Landscape Framework for Product Design Education in Singapore: A Blueprint for Developing Skills, Mindsets, and Creative Excellence

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In Singapore, where design is seen as both creative and pragmatic, multicultural yet modern, collaborative and future-thinking, it has become a key driver for business performance and value creation. Design education in Singapore is deeply intertwined with industry and technological advancements, requiring learning environments that foster structured innovation alongside open-ended creativity. This paper explores the Design Landscape Framework as a foundational approach to developing learning environments for product design education, focusing on how it fosters knowledge, skills, and attributes essential for designers to thrive in a VUCA (Volatile, Uncertain, Complex, and Ambiguous) world. The framework encompasses four key areas: (i) the designer's state of mind, (ii) design cognitive processes, (iii) the product and systems design processes, and (iv) the design environment. This comprehensive model prepares students to apply design thinking not only in traditional design roles but across diverse sectors such as healthcare, technology, and business. The paper also emphasises the integration of curriculum and non-curriculum programmes, recognising that both are vital to nurturing students with relevant attributes needed to succeed in today's innovation-driven global landscape.

Cultivating Socially Conscious Designers: An Innovative Approach to Participatory Design Practices in in Architectural Pedagogy

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Urban spaces often lack child-friendly amenities that promote play and learning, particularly in underserved communities. This deficiency can hinder children's development, especially in areas with limited educational resources. To address this issue, a novel approach integrating playful learning installations into urban environments has emerged, transforming underutilized spaces into engaging learning landscapes. This innovative strategy sits at the nexus of child development and urban design, necessitating architects and designers well-versed in playful learning principles. A new college-level course, "Designing for Playful Learning," has been developed to equip students with the knowledge and practical skills needed to create these interactive urban installations. The semester-long course focuses on teaching students how to design urban installations that encourage meaningful child-caregiver interactions; facilitate playful exploration of concepts in literacy, math, science, and music and leverage unique urban environments as learning opportunities. Students engage in hands-on learning through partnerships with local community-based organizations (CBO), applying participatory design methods to create contextually appropriate playful learning installations. This approach not only enhances design education but also fosters civic engagement and social impact. The open-source model college-level “Designing for Playful Learning” class aims to scale up the impact of playful learning by disseminating the full course materials and instructions to other universities and potentially high schools. By cultivating a new generation of designers skilled in playful learning principles, this initiative addresses the growing need for child-friendly urban spaces. The community-engaged pedagogy nurtures professionals committed to promoting equitable access to enriching play and learning opportunities in public spaces.

Stakeholders in Industry-Oriented Learning Model: Developing Specific Professional Skills for Design Management

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In 2022, the end of quarantine gave way to a hybrid teaching model. Despite increased face-to-face contact, the conflicts of virtual education became more evident about specific professional competencies. These include isolation, lack of social interaction, problem management, difficulty maintaining discipline, motivation and autonomy. Therefore, this study aims to reinforce the learning of the theoretical subject of Design Management from the field study of manufacturing companies, strengthen professional competencies and include external actors as a teaching strategy. The study was conducted on 17 fourth-level Product Design students and 7 company cases during a year using quantitative and qualitative methods. Instruments such as interviews and surveys were conducted with students and employers, and the specific professional skills and academic skills acquired by the students at the end of the course were analyzed and compared using statistical methods. The results showed that students had significantly improved in specific professional competencies related to Critical and Creative Thinking, Context Mastery, and empathy with the business culture. In addition, there was a significant increase in academic competencies related to Reflection In and On Action demonstrated during class reflection sessions. The new perspectives on the Industry-Oriented Learning model suggest identifying the specific roles of each model actor within the learning activities and exercises. This suggests an initial strategy for increasing the company's involvement throughout the inclusive co-creation and co-participation learning process. A pedagogical model needs companies' participation and active role in the teaching process to reinforce the student's skills.

Navigating the Transient Economy: Speculative Futures of Design Education

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The state of design faces an existential crisis. Traditional paradigms are being disrupted, as noted by Bruce Mau (2024), who describes a significant shift: "(A) shift from the old world, where design was a subset of business, business as a function of culture, and culture happened in a natural context." Mau argues that design carries a profound responsibility to shape the world. However, it faces numerous challenges: the growing influence of the volatile gig economy, unprecedented technological advancements, the uncertain role of designers in an AI-driven world, and the blurred lines between practice, professionalism, and expression. Moreover, design must contend with social acceleration and shifting priorities across finance, healthcare, and politics–an ephemerality that can be termed the Transient Economy. In light of this transitoriness, what position should design education adopt to prepare the next generation of designers? How can we design today to create a preferable future for the designers of tomorrow? This paper seeks to offer insights by examining signals and drivers from various design research and pedagogical approaches in design education, as well as findings from a series of design futuring workshops.

Bridging Academia and Practice: A Comparative Study of Brand Design Projects in Higher Education

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This study investigates the application of Project-Based Learning (PBL) in higher education design courses, focusing on its effectiveness through two distinct case studies involving brand design projects. The research was conducted at a private higher institution (PrHI) and a public higher institution (PuHI), each employing PBL in different contexts and durations. The findings indicate that PBL significantly enhances student engagement, motivation, and practical skills by involving students in real-world design problems. At PrHI, the project spanned two and a half months, allowing for individual in-depth exploration, while at PuHI, the shorter one-month project emphasised group collaboration and rapid iteration. Teachers played a crucial role as facilitators, providing guidance and feedback, while external partners enriched the learning experience with professional insights. Despite challenges such as resource-intensive support and the complexity of aligning academic assessments, PBL proved to be a versatile and effective teaching strategy. Furthermore, it provides a structured methodology consisting of five steps: 1) getting an idea, 2) designing the project, 3) detailing the project, 4) doing the project, and 5) showcasing the project. The study underscores the adaptability of PBL and its potential to bridge the gap between academia and professional practice, advocating for its broader implementation in design education.

Seating Tales: Uncovering Design Students' Classroom Chair Needs and Goals

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Design education in India has seen remarkable growth in recent years, with design departments being established in technology and architecture institutions (like IITs, SPAs, etc.) as well as dedicated design institutions (like NIDs, NIFTs, WUD, etc.). The purchase of furniture for design classrooms often occurs with minimal or no consultation from design students, the primary users. This study addresses this gap by examining the needs and goals regarding classroom chairs. An online study was conducted with design students from undergraduate and postgraduate programs in India. The survey utilized the sentence completion projective technique to uncover underlying thoughts and feelings regarding classroom chair needs and goals. The responses were subjected to thematic analysis and sentiment analysis. 203 design students participated in the online study. The analysis of chair needs revealed three themes: i) Comfort and Ergonomics, ii) Health and Posture Support, iii) Functionality, Aesthetics, and Sustainability. The goals resulted in four themes- i) Enhanced Productivity and Focus, ii) Health and Wellness, iii) Creative Outcomes, and iv) Collaborative and Prolonged use. Most student responses were predominantly neutral (70%), followed by positive sentiments (30%). Based on the recurring patterns observed, student personas can be categorized as follows: Comfort Seekers (40%), Health-Conscious (35%), and Task-Oriented (25%). The study's findings indicate key intervention areas concerning classroom chairs for design students. It emphasizes the need for better-designed seating solutions and points to the vital role that design institutions, furniture designers, and manufacturers play in addressing these specific needs.

Equity-Centered Design Thinking Approach to Transforming Education Systems and Policies

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This research focuses on understanding existing education systems and policies to evaluate and refine strategies that support design as a practice. It addresses the challenge of incremental additions to systems that often lack clarity and a quantified understanding of how effectively design is integrated into new frameworks. Using the Equity-Centered Design Thinking (ECDT) approach, the study emphasizes the proactive definition and hypothesis of new methods for evaluating systemic perspectives in design, fostering adaptable methodologies tailored to diverse educational contexts. The research synthesizes effective global frameworks, including Enterprise Design Thinking (EDT), Agile, and Research Operations, to refine ECDT's application in introducing and scaling design practices. The implications of this study aim to empower key user groups, such as teachers and students, by promoting individuality and equity in knowledge absorption through design-driven methods. The ECDT framework offers a structured approach to restructuring pre-existing policies and systems, enabling them to accommodate and embrace innovative understandings and methods for future-ready education systems.

Plurality and Interdisciplinarity in Visual Design Education: Case Studies from Spain and the United States

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This paper builds on collaborative discussions initiated at last year's conference. The study examines and compares teaching pedagogies in Bachelor of Design programs in the United States and Spain. Focusing on the integration of technology, fine arts, and social or cultural issues, highlighting how diverse perspectives foster creativity, problem-solving, and collaboration among culturally varied students. The United States case involves an 8-week augmented reality (AR) integration project where students used AI to draft problem statements and help with the development of initial concepts addressing a variety of problems and accessibility issues. Collaborative teams developed interactive prototypes such as menus and sign language tools. In Spain, a 3-week project encouraged students to explore the work of underrepresented contemporary female artists, translating their sculptures into two-dimensional patterns and creating museum branding using AI and digital fabrication, addressing gender inequality in the art world. Both case studies emphasize critical thinking, creativity, and technical proficiency while differing in methodology. The US approach focuses on utilizing contemporary technologies in problem-solving, while Spain emphasizes contextualized design addressing social issues. Shared elements include AI-assisted ideation, interdisciplinary collaboration, and tackling real-world challenges. Key insights underscore the value of cross-disciplinary skills, cultural diversity, and balancing AI with traditional methods like sketching. Fine arts enhance critical thinking and social empathy, preparing students for dynamic, inclusive, and innovation-driven design roles. Embracing plurality in methodologies equips future designers to navigate the evolving intersections of art, design, and technology in a global context.

Bridging Classroom and Community: Collaborative Design Education for Social Change

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Juliana F. Duque, Assistant Professor | Researcher, Design, IADE, Faculty of Design, Technology and Communication, Universidade Europeia | CIEBA - Centro de Investigação e de Estudos em Belas-Artes, Universidade de Lisboa, Portugal

The paper presents a project-based learning (PBL) initiative developed between IADE–European University and the Aga Khan Foundation (AKF) in Lisbon, Portugal, in the third semester of the academic year 2023/24. In this context, the second-year students of the Global Design Bachelor's Degree were challenged to develop a project in synergy with the AKF, which works to improve vulnerable populations' conditions and their quality of life. This transdisciplinary project covered the different curricular units of the program. In the Project course, around which all the other courses work, students developed a visual identity, branding, and product design for artisans linked to the AKF. In other courses, students developed an ethnographic approach to the community of artisans previously identified by the foundation to better understand their design problems and contribute with useful solutions. The materials they created demonstrate how a collaborative approach, which goes beyond disciplinary boundaries and the classroom itself, can give rise to meaningful experiences and a more inclusive and sustainable world. In addition to the main design subjects that inform the PBL briefing, such as visual identity, branding, and product design, the literature review explores the concepts of transdisciplinarity, design for social innovation, wicked design problems, and design ethnography. Informed by these subject matters, the methodology is explained and validated by a panel of experts made up of professors from other design universities.

Bodies-Thinking: Towards Support of Body-literacy Goals in Design Education

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There is an urgent need in design education to consider the ways we are supporting our students to develop body-literacy. Our current technological moment has the potential to increasingly alienate us from the experience of understanding our bodies and the ways our physicality and forms intersect with our understanding of ourselves and others. The implications of this alienation from the body has outsized impacts on design students, their development as designers and the resultant design products that will populate our world in the future. The work presented here developed out of a Faculty Learning Community (FLC) which convened in Fall 2023 at Pratt Institute of Art and Design in order to initiate a transdisciplinary discourse on the body. In this paper, we share the results of a transdisciplinary discourse leading to the proposal that all design disciplines integrate bodies-thinking as an educational methodology meant to question, challenge and reframe pedagogy to teach through and with the body. By drawing connections to the body, students are able to both learn about their own bodies and the bodies of others and build personal, embodied relationships with diverse disciplines, enhancing motivation and information retention, and resulting in the production of informed and empathic designs on, for and of bodies.

Visual Thinking in Graphic Design: Reflections on the Nature of Graphic Design Knowledge

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When participants in a recent graphic design study on knowledge externalization were instructed to document their work processes in a design task, only one participant submitted documentation in writing, whereas the other participants submitted only images. This prompted reflections on how graphic designers perceive their processes. "We are, after all, visual thinkers," said one participant, and the study outcomes seem to affirm that statement. Furthermore, this rhymes with a common view on design knowledge that it is largely visual and ineffable, and therefore different from knowledge that can be expressed. If this is so, what does that mean for knowledge dissemination among graphic designers and to those outside it? And what is "visual thinking"? This paper presents these topics and shows that methods such as participatory design studies and self-interviews can facilitate knowledge externalization, helping to make the unexpressed, "visual" knowledge shareable. It further discusses the importance of such knowledge externalization and presents a future study aimed at deepening our understanding of how knowledge is expressed and interpreted in real-life design projects. This text is intended as an introduction to the topic of visual thinking within the profession of graphic design and a contribution to the discussion of visual thinking in design education.

Teaching Students How to Create Information-based Narratives that Can Effect Societal Change

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There are so many societal problems to be addressed today. However, polarized thinking has made it harder for people to look at data and understand the questions, and find human-centric solutions. This paper reviews how a design course on data information can allow students to make informed discussions on topics ranging from social injustice to climate change. There is little doubt, that the need to read, evaluate, and digest data is more important than ever. Students explore methods to research, clean, and analyze data using creative methods and media to develop data storytelling. By setting goals, defining audiences, and using qualitative and quantitative data representation, the class helps students develop methods to tell data narratives that reveal human stories in the numbers. Projects include charts, data visualization, data tableau, interactive presentations, and mapping/unmapping. Students learn what effective methods to present data to engage others with the hope that they use these methods to help effect societal change.

Case Study for Fashion Design Education: Fashion as Media for the Transmission of Cultural Heritage

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Traditional cultural heritage is increasingly at risk of being lost amidst the forces of globalization and modernization. However, the fashion industry has emerged as a potential medium for the transmission and preservation of local cultural elements. This research explores how fashion design education can facilitate the integration of cultural heritage into contemporary fashion practices. The study was conducted at the Technological and Higher Education Institute of Hong Kong (THEi), one of the higher education institutions offering a bachelor's degree in fashion design in Hong Kong. Through interviews with students, observations of studio-based courses, and analysis of student design portfolios, the research examines the pedagogical strategies, challenges, and outcomes of teaching fashion as a vehicle for cultural heritage transmission. The findings suggest that fashion design education can play a crucial role in equipping the next generation of designers with the knowledge, skills, and sensibilities to respectfully engage with cultural heritage. Key pedagogical approaches include immersive cultural immersion experiences, collaborative projects with local communities, and the development of design processes that based on the chosen cultural topics.This case study offers insights into how fashion design curricula can be reimagined to empower students to become custodians and ambassadors of local cultural heritage. The research has implications for fashion education programs seeking to cultivate designers who can contribute to the sustainable transmission of cultural identities through their creative practice.

American Dream: Indian Student Migration to the US

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Indian international students contribute to American society by sharing their diverse cultural heritage, from cuisine and festivals to fashion and beyond. However, they often face a complex balancing act between embracing new values and traditions while preserving their cultural roots. This process of cultural adaptation can be further complicated by xenophobia and anti-immigrant rhetoric, particularly in the post-9/11 era. Such narratives have led to challenges for students to navigate their identity within a host society that often views them through stereotypes. Global political tensions and rising anti-immigrant sentiments further hinder their integration. Moreover, the UN SDGs recognize the need to reduce inequalities and promote peace and prosperity by 2030. This includes addressing structural barriers that limit the full participation of immigrant communities. As a result, this design research inquiry explores immigration policies, resistance to assimilation, and strategies to overcome cultural and bureaucratic challenges. By creating a more inclusive space for international students, this research aims to contribute to the evolving relationship between the U.S. and India. As U.S.-India relations deepen, it's crucial to consider the social and cultural aspects of this partnership. This research documents the experiences of Indian design students in the U.S., illuminating their aspirations, realities, and the myths surrounding their journey. By using storytelling to map their immigration experiences, the research highlights employability challenges, emerging trends, and key obstacles they face. Amplifying their voices fosters a more inclusive and equitable future in the field of design and technology.

Advancing Faculty Mentorship in Design Higher Education: Research, Applications, and Impact

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Mentorship is an essential component to achieving success as a design educator. Faculty members bring a tremendous amount of professional design experience and knowledge to their students and schools, but they cannot be expected to learn and grow as academic professionals in isolation. This study discusses best practices for establishing and developing mentorship programs for design educators. To begin, an introduction to mentorship is provided. The definition and standard functions of mentorship, responsibilities shared by participants, and activities performed in the mentor-mentee relationship are examined. Close attention is given to the ways in which teacher-mentees, particularly those who are new to academia, can be socialized into the profession and the institution itself. A list of guiding principles and characteristics of mentorship is also enclosed. These include collaboration, purpose, trust, and mutual benefits. Then, following these overviews, focus is given to explaining how design schools and their faculty members can develop effective mentoring programs. A review of diverse mentorship models and their approaches are described, along with step-by-step methods for cultivating a dynamic partnership between mentors and mentees. To conclude, extensive research-based findings explicate the key benefits of mentorship for mentees, mentors, and the institution itself.

Exploring the Relationship between Problem-Based Learning and Self-Regulated Learning: A Case Study of Performance Courses

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Wen Huei Chou, Professor, Digital Media Design, National Yunlin University of Science and Technology, Yunlin, Taiwan

With technology becoming an indispensable part of daily life, traditional lecture-based methods no longer meet the diverse skill requirements of emerging fields. Innovative teaching methods are thus crucial for enhancing students' abilities. Digital tools support self-directed learning anytime and anywhere, improving efficiency and outcomes. This study centers on the Problem-Based Learning (PBL) model, designing activities based on teacher-proposed issues and integrating digital tools. The aim is to explore whether combining PBL with digital tools enhances learning motivation and self-regulated learning abilities. Additionally, the study investigates the interaction between team and individual goals within the PBL framework, focusing on adjustments and coordination in goal conflicts. A questionnaire survey was employed, with independent sample t-tests used for data analysis. The study assessed students' self-regulated learning abilities, including goal setting and strategy adaptation to changing scenarios. Open-ended questions gathered qualitative feedback on addressing goal conflicts. Findings demonstrate that integrating PBL with digital tools significantly enhances self-regulated learning abilities. Incorporating diverse activities and fostering a collaborative environment improves problem-solving skills, motivation, and interest. Instructors' targeted guidance during goal conflicts is essential for effective goal coordination. This approach equips students with core competencies necessary to adapt to workplace challenges, providing empirical support for innovative instructional design.

Along Came AI: How Prepared Are Design Schools to Equip Students with the Necessary Skills for the AI-driven Design Landscape?

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This study tackles the current state of Artificial Intelligence (AI) education in design schools, identifies gaps and challenges, and aims to propose recommendations for enhancing AI preparedness in Design Higher Education. Our methodology starts with a comprehensive literature review of existing research on AI education in design, focusing on best practices and challenges, and a mixed-methods approach to confront the literature contents with the data obtained. For that, we use a content analysis of top-ranked Design schools to assess the current state of design higher education readiness with AI. Finally, we use interviews with experts who have worked, researched on, or taught AI-related content. The study assesses how Design Higher Education Institutions (HEIs) integrate AI into their curricula to equip students with the necessary skills. The study's main objectives are to evaluate the current state of AI education in design schools, identify gaps and challenges in AI integration, and develop recommendations for enhancing AI preparedness in design schools. This research is significant as it provides valuable insights for design schools to improve their AI education offerings. By addressing the identified gaps and challenges, design schools can better equip their graduates with the skills and knowledge needed to thrive in the AI-driven design landscape. The findings will inform recommendations for improving AI education in design, ensuring that graduates are well-prepared for the AI-driven design landscape. Design

University Interdisciplinary Collaboration in Packaging Design

Lorrie Frear, Professor, School of Design, Rochester Institute of Technology, New York, United States
Mindy Magyar, Associate Professor, School of Design, Rochester Institute of Technology, New York, United States

This poster highlights projects from the interdisciplinary packaging design course of fourth year undergraduates in industrial and graphic design. The course integrates principles of design, engineering, sustainability, and marketing to equip students with the skills needed to create innovative and functional packaging solutions. The course bridges the gap between creative design and practical applications, providing students with a holistic understanding of the packaging lifecycle–from material selection to production, branding, and end-of-life considerations. Students work in cross-disciplinary teams, combining their expertise in graphic design and industrial design to develop packaging solutions that are visually communicative, structurally innovative, ecologically responsible, and which address the problem presented by the industry sponsor. The curriculum emphasizes the importance of interpersonal communication and teamwork strategies, empathy for the other discipline, utilization of the design thinking process, and the creation of a wide variety of concepts before refining and testing a final concept that is presented to the industry sponsor. The competitive environment echoes professional design practice. The industry sponsor provides feedback that is based on professional expectations, providing valuable preparation for the workforce. The course highlights the economic impact of packaging decisions, considering factors such as cost, marketability, and consumer behavior. By engaging with industry professionals and hands-on projects, students develop a comprehensive skill set that prepares them for careers in packaging design, product development, marketing, and sustainability. This interdisciplinary approach fosters creativity, problem-solving, and critical thinking, enabling students to design packaging that meets functional and aesthetic goals and aligns with broader environmental and societal values.

Empowering Design Education: Student-Centred Learning Outcomes based on Quality Assessment Reference Framework

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This paper discusses the Qualification Assessment Reference Frameworks for the Design discipline in the European Higher Education Area. It also examines the recent learning outcomes of design graduates based on a qualification framework developed by the CALOHEE project and its Subject Area group. The Qualifications Reference Framework defines specific and general competencies, such as cognitive, interpersonal, and practical skills, as well as ethical values, that graduates should acquire as a result of their learning process within the European Quality Frameworks. These frameworks cover knowledge, skills, autonomy, and responsibility, that are relevant to the wider world of work and society. They also identify the necessary competencies for success in the workplace and as a responsible citizen. The survey of undergraduate design graduates was conducted to analyse the student learning experience. The respondents participated voluntarily and anonymously. The results provide insight into the learning outcomes of design graduates at the undergraduate level across eight subject dimensions and their subdimensions: 1. Creative/Artistic Practice: Design practice, design methodology 2. Knowledge, Creative Understandings, Critical and Generative Thinking: Design theories, critical thinking, creativity 3. Autonomy, Judgement, and Critical Reflection: Analytical thinking, reflection and synthesis 4. Collaborative, Participatory, and Cooperative Processes: Co-designing, teamwork, responsibility 5. Sustainable, Societal, and Cultural Awareness: Ethics & integrity, social & cultural capital, inter- and cross-sectoral disciplinary knowledge; financial literacy 6. Communication and Presentation: Visualization, presentation and communication 7. Professional Awareness and Practice: Career preparation, professional pathways, legal frameworks 8. Independent Development: Professional development, mindfulness and well-being.

Navigating Design Education: Using Co-Design for Student Engagement and Inclusivity

Jessica Freire, Programme Leader, First Year Design, School of Design Innovation, Victoria University of Wellington, Wellington, New Zealand

Design education is in a constant flux of innovation and growth. As our students adapt to a world of ever-changing technology, wicked problems and global policies, as educators, we must also shift and change with them. At Te Herenga Waka, Victoria University of Wellington, by applying Co-design methods to our First Year Design curriculum I've been able to build coursework that is organic, fluid, and versatile. First Year Design students must be introduced to foundational skills that teach them how to tackle the issues our future will present. While Bauhaus methods are still very much ingrained in our ways of western education, we must open the door to approaches that are culturally inclusive and forward-thinking. A Co-Design mindset can be utilised to give our students agency over their studies and facilitate new pathways for creativity and involvement. Co-design can be used to build community among students, enhance student engagement and give students a sense of ownership over their learning. This approach can provide the platform to instill Te ao Māori values, such as - Whanaungatanga (Collaboration), Whai Mātauranga (Intellectual Curiosity) and Rangatiratanga (autonomy and leadership). To build students who are engaged and excited. He waka eke noa (We are all in this together). Education is not a 'one size fits all' and by recognising this, we can build meaningful and equitable learning environments.

Exploring Cultural Inspiration: Utilizing Historical Elements in Design Practice and Experiments

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The world is a big place. Culture is the art of everybody. If we choose to focus on only one culture or part of the world, we limit our thinking, our growth, and our experiences of the world. As designers, we need to be widely exposed to a multitude of cultures so that we can fill our creative toolboxes with possibilities that best serve our clients with creative solutions. Since not every student can travel the world for a personal look at the many cultures it offers, it is helpful that design projects explore how visual design can connect various cultures. Even with a large design toolbox, without an increased comfort for using all of one's tools, decolonization will not occur. This paper focuses on how the design projects encourage students to include diverse cultures, interests, and identities through design projects, all with a focus on culture. Cultural, social, and conceptual issues are inextricably integrated with design. The focus on culture not only expands the learners' design perspectives and assists them with defining their own design identity but also opens worlds and can change hearts. This paper explores the impact of introducing designers to the idea that the design art form has the power to change hearts and influence people to think differently and be more open to other cultures. The goal of exploring various cultures is to expand students' knowledge of other cultures, help them feel more connected to and respectful of new cultures, and achieve decolonization of design.

Object-Oriented Fieldwork: Addressing the Disembodiment Issue in Architectural Design Education

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Site analysis is one of the foundational skill sets that both architecture students and practitioners engage in. Analytical thinking in design education originates from Cartesian tenets entering architectural design in the 19th-century Beaux-Arts. During that same period, colonial governments sent anthropologists to survey colonies' built environments worldwide. Thus, two distinct academic directions dealt with the site: the architectural-Cartesian-Analytic school of thought and the anthropological-colonial-ethnographic school of thought. Echoing Foucault's call to engage in knowledge archaeology, the contemporary universal challenge for architectural educational practices to cultivate sustainable built environments invites the inquiry into the context and legacy of both schools of thought and tracing their influence in the present. This paper engages in the above investigation and propose a counter-methodology to site analysis found in design fieldwork. Introducing the binaries of site-field and analysis-work the proposal speculates on an embodied and relational pedagogy for disciplines that are concerned with the built environment.

Material-Energetic Assemblages for a Curious Climate

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Climate change makes the world a curious place. The earth is getting 'dimmer' and 'wobblier'. The tectonic plates are 'dancing' an unprecedented dance. The arctic has become 'wavier,' and these waves are creating 'microscopic creature clouds' in the sky. While there is scientific evidence supporting these emergent conditions, they are causally complex, with temporal and spatial boundaries that are difficult to demarcate. This paper posits there is pedagogical merit in embracing the curious nature of climactic conditions and in conceiving of the entanglements between buildings, materials, natural scientific processes, and energetic exchanges together as assemblages. The pedagogical research presents a series of workshops in a comprehensive design building studio that the authors taught at Carleton University in Ottawa, Canada. Deliberately scale-less and without specific application, the material constructions and their associated qualitative tests were designed to elicit curiosity about the material-energetic workings of the world. Students each designed and fabricated five specific material artefacts (over 200 in total as a cohort) and correspondingly tested them within five different custom-made qualitative heuristic devices. Observations gleaned through the material explorations informed development of the building design proposals that students designed in tandem. The material studies led to a conception of buildings and landscapes less as assemblies of discrete material elements and more as complex assemblages of material-energetic phenomena enmeshed in wider ecologies and energetic systems. Overall, the studio traded metric-based and longevity-centric construction conventions for open-ended, curious learning methods inspired by the 'stranger than fiction' geophysical conditions previously noted.

Designing Across Cultures: Building Cross-Cultural Competencies Through Studio Learning

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In an interconnected world, equipping designers with the skills to navigate cultural complexities is vital. This paper explores strategies to foster cross-cultural competencies in design education through a global seminar conducted in Rome and Syracuse, Sicily. The course integrates experiential learning with the "emic-etic" framework and the Cultural Inventory for Studio (CITS), a self-developed pedagogical tool. CITS examines ten cultural parameters to identify and address the cultural dynamics shaping studio-based education. The "emic-etic" framework, inspired by Kenneth L. Pike, contrasts insider (emic) and outsider (etic) perspectives, encouraging students to approach culture, space, and design from multiple viewpoints. Course activities included guided reflections, intensive sketching, and immersive fieldwork to examine the interplay between culture, history, and urban form. Structured reflections on identity, ethics, and context enabled students to critically assess their experiences and refine their design processes. Engagements with local professionals–architects, artisans, and historians–offered insights into regional practices and cultural nuances, while workshops with Italian students fostered a rich exchange of perspectives, further enhancing cross-cultural understanding. The studio culminated in student design proposals for a historic site in Syracuse, presented to local experts, illustrating how culturally responsive methodologies inform meaningful design solutions. This research emphasizes the role of experiential learning and culturally informed pedagogies in cultivating the competencies necessary for creating contextually sensitive designs. It underscores the importance of integrating pluralistic approaches in advancing inclusive, globally relevant design education.

Developing the DREAM Instructional Innovation Framework from the Interplay of Cognitive Flexibility, Growth Mindset, Transdisciplinary Thinking, and Academic Resilience in Design-Based Biology Education

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Addressing the longstanding challenge of bridging theoretical learning with practical applications is essential in education. To tackle this, educators must adopt innovative instructional approaches, integrating real-world experiences into learning. This study investigated how Design-Based Biology Education (DBE) influences students' cognitive flexibility, growth mindset, and transdisciplinary thinking, alongside exploring the moderating role of academic resilience, and the predictive relationship between transdisciplinary thinking and cognitive flexibility and growth mindset among biology students. Conducted with 141 senior high school students in Quezon City, the study employed a three-group pretest-posttest quasi-experimental design, dividing students into DBE, Problem-Based Learning (PBL), and conventional teaching groups. Data collection involved Likert scales (Cognitive Flexibility Inventory, Mindset Theory Scale, Filipino Learners' Academic Resilience Scale, Transdisciplinary Thinking Scale) and qualitative methods (student journals, focus groups, observational notes). Analysis methods included Levene's test, ANOVA, Tukey's HSD, moderated and simple linear regression, supported by thematic analysis of qualitative data. Results highlighted DBE's significant enhancement of cognitive flexibility, growth mindset, and transdisciplinary thinking, with PBL also improving transdisciplinary thinking. Academic resilience moderated DBE's effects on outcome variables, while transdisciplinary thinking positively predicted cognitive flexibility and growth mindset. The study identified five core features forming the DREAM instructional framework: integrating design thinking with empathy, fostering resilience, promoting transdisciplinary projects, teaching growth mindset principles, and using authentic assessment. Implications include enhancing biology education through DBE and exploring its broader impacts on systems thinking, engagement, critical thinking, and metacognition. Future research should refine methodologies and explore diverse educational contexts to deepen understanding DBE's effects.

New Design Methodologies "Through" Architecture: Operational Strategies

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Contemporary design methodologies require mechanisms capable of producing system integration based on transdisciplinary approaches, as opposed to static systems. A project is no longer just about focused design but also about transversal operational strategies. The design laboratory for the master's degree in architecture at the Universidad de Los Andes has experimented with tools and instruments that diversify research processes through architectural projects. The course integrates design thinking approaches with transversal readings on theories and strategies for project thinking in architecture to develop these methodologies. Four transversal modules have been tested in relation to the architectural project: Images, Diagrams, Analogies, and Tactics. Each of these modules implies a transdisciplinary approach to architectural design. The image serves as a research instrument and a creation methodology, the diagram as a codification strategy and definition of operational structures, analogy as a method of approaching non-architectural references, and tactics as a proposal for a systemic approach. These interconnected systems are a project in themselves. The result is a methodology of dynamic processes synthesized through compression, abstraction, and simulation. Transforming project strategies means transforming how we look at things. Secondly, it means seeing architecture as an assembly of extensible capacities and energies, not as an inert, moldable object. Today, the figure of the designer and the architect can no longer be formulated solely as a producer of objects but as a strategist of design processes.

Integrating Biomimicry and Sustainable Materials in Design

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This study examines the connection between sustainability and technology in the field of interior design education. It focuses on the need to incorporate biomimicry and sustainable materials into the curriculum for "sustainable interior environments" to bridge the existing gap. The aim is to assess the extent to which drawing inspiration from nature, in conjunction with artificial intelligence (AI) tools, can amplify students' creative thinking and ability to solve problems, hence promoting the development of new and sustainable solutions. Using a qualitative case study method, the study looks at how interior design students use biomimicry ideas and AI visualization tools to come up with sustainable interior design ideas. The study investigates how they conceptualize, develop, and create 3D-printed models by utilizing recycled filaments derived from plastic bottles and wood fibers. Information was gathered using student portfolios, interviews, surveys, and an evaluation of the final models to evaluate the implementation of sustainable design concepts. The results suggest that students effectively utilized biomimicry to create inventive and ecologically conscious interior solutions. AI tools enabled the investigation of natural shapes, while the utilization of recycled materials in 3D printing showcased the practicality of integrating sustainability into design education. The installations exhibited a wide range of sustainable strategies, including energy-efficient designs and materials that reduce indoor pollution. This research adds to the discussion on the significance of technology and sustainability in design education, emphasizing the possibility of using interdisciplinary methods to address environmental issues.

Docu Dynamics: Designing an Engaging Educational Module for Documentary Filmmaking

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An engaging, interactive learning module for beginner documentary filmmakers was designed and developed by integrating the arts, multimedia, technology and educational design principles. Due to the COVID-19 pandemic, what started out as an instructional unit meant to be presented in person became an innovative, interdisciplinary journey to create a digital educational resource to guide novice filmmakers. The module introduced the art of documentary film creation with crucial information and insights from industry-leading filmmakers. It delved into the instructional design process, which involved iterative, progressive refinement to shape the educational resource into its dynamic, final online version. This research utilized data from a previous study by the author that captured and synthesized the knowledge and expertise of 12 professional filmmakers and highlighted their key points and suggestions in the development, research, and content gathering required of documentary filmmaking. Following the analysis and interpretation of the in-depth, qualitative interviews, five significant themes emerged and they were organized as valuable recommendations or "tips." Motivational, instructional, and multimedia learning models served as the frameworks to inform and design the module. Experienced reviewers conducted multiple formative assessments and the instructional module evolved into a content rich, technology-enhanced, participatory website featuring the actual voices of the filmmakers who were interviewed. The importance of designing and constructing significant information from authentic, knowledgeable experts into a dynamic, hands-on digital module to support, scaffold and enhance overall learning, creativity and production, could be applied to different disciplines and fields, including the arts, humanities and other creative endeavors.

Teaching Sustainability: Challenges and Opportunities

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This paper examines the complexities of sustainability education, influenced by diverse cultural, social, and educational backgrounds. These differences challenge educators, especially when ethical considerations do not resonate equally across groups. To teach sustainability effectively, educators must reflect on their biases and assumptions. Through this process, educators can foster self-awareness and incorporate inclusive teaching methods, to facilitate meaningful, student-centred discussions. By actively reflecting on their biases and assumptions, educators can create a learning environment responsive to the varied experiences and perspectives of all participants.

Reshaping UX Design Education for AI Agent-driven Multimodal Solutions: A New UX Design Approach in the Era of Advanced AI Models

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The evolution of AI technologies–encompassing large language models (LLMs), compound AI systems, and large multimodal models

(LMMs)–is reshaping the landscape of UX design. These advancements enable AI agents to achieve deeper context awareness by integrating diverse data streams, such as text, images, and voice, to deliver tailored, real-time solutions. To prepare future designers for these challenges, UX design education must evolve, equipping students with the skills to design adaptive, ethical, and user-centered AI-driven systems. This paper introduces a reimagined educational framework for UX design that emphasizes human-AI collaboration and multimodal interaction design. By teaching students to design systems where AI agents leverage LMMs for rich context understanding, the framework prepares them to create personalized, intuitive, and dynamic solutions. The curriculum integrates cutting-edge tools and techniques, empowering students to address challenges like transparency, adaptability, and system-level coherence in their designs. Two case studies–an AI-driven medication management system for older adults and an AI-supported creative workflow assistant–will be briefly introduced to illustrate how this approach can be applied. These examples demonstrate the potential of multimodal AI agents to address complex user needs, from improving accessibility to streamlining creative processes. This study offers educators practical strategies for updating UX curricula to reflect the opportunities and challenges of advanced AI models. We offer insights into fostering the next generation of designers equipped to lead the development of impactful, multimodal AI solutions for diverse domains.

The Impact of Multidisciplinary Curriculum on Design Students

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Due to the intertwined nature of design-related fields such as architecture, landscape architecture, and interior design, it isn't easy to draw firm boundaries between them. Based on this idea, the educational structure of the Faculty of Fine Arts and Design (FFAD) at Izmir University of Economics is designed in such a way that students from all five departments of the faculty start their design education together and take core courses such as Art and Design Studio, Drawing and Representation, and History of Art and Design together in the first year. As the departments continue their curricula separately after the first year, this multidisciplinary approach continues with certain common compulsory and elective courses. The common courses in the curricula and the collaborative projects enable students to study, work, and learn together in this faculty. This paper discusses the role of multidisciplinary education in design-related fields with some examples of courses and projects where students from different departments work together. Through the multidisciplinary structure of the faculty, the paper highlights two important discussions. Firstly, including students from different disciplines in the same course and the opportunity to work on group projects with peers from different disciplines help broaden students' perspectives on problem-solving skills and increase students' success rate through cross-learning experiences. Secondly, while projects that require group work increase students' peer learning experiences, factors such as different knowledge backgrounds and different course schedules can create obstacles that need to be overcome for a successful outcome.

Insights into Perceived Authorship in Designer-AI Collaboration: Exploring Design Students' Perspectives on AI-Assisted Design Processes

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This paper highlights teaching and research efforts aimed at exploring the integration of AI tools in design education, with a focus on perceptions of authorship in collaborative design processes. A study conducted within an AI and design workshop introduced second-year industrial design (ID) and interior architecture (IA) students to the use of AI during the idea refinement phase of their studio projects. Students utilized image prompts derived from their own work to generate AI-assisted designs, varying the level of AI influence from 0% to 100%. A survey (n=30, ID=12, IA=18) was administered to assess their perceptions of authorship at different contribution levels. The study results revealed no statistically significant differences between ID and IA students' responses. A notable 33.3% of participants considered AI-generated outputs as their own creation up to a 50% prompt influence, while 46.4% reported comfort collaborating with AI and acknowledged its contributions. The findings underscore the importance of equipping students with the skills to effectively navigate AI collaboration, ensuring a balanced approach that values both human creativity and technological innovation.

Integrating Design Thinking and Territorial Intelligence in Pedagogy: Towards a New Approach for the Transmission of Tangible and Intangible Heritage

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The transmission of heritage represents a crucial challenge for preserving the cultural and historical identity of territories. This paper explores the application of Design Thinking and Territorial Intelligence as educational tools, based on student projects in this field. By adopting a methodology based on the analysis of student projects, this research combines the principles of Design Thinking, which emphasizes a user-centered approach, with the concepts of Territorial Intelligence, promoting a deep contextual understanding of local dynamics. The results show that student projects incorporating these innovative approaches allow for the development of more engaging and tailored pedagogical methods, while enriching heritage transmission through improved contextualization. The analysis reveals that the combination of Design Thinking and Territorial Intelligence overcomes the limitations of traditional methods, offering a more interactive and contextualized approach. However, challenges remain, particularly regarding student training and the resources needed for the effective implementation of these methods. Student work demonstrates that these tools can transform pedagogical practices and enhance the conservation of cultural heritage. The implications suggest that it is crucial to support innovative educational initiatives and develop training programs for students. By integrating these approaches, it is possible to positively influence cultural and educational policies, thereby fostering better preservation of intangible and tangible heritage at both local and national levels.

Introducing a Non-Zero Post-Humanistic Framework for Problem Solving in Design Education

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This paper proposes an innovative framework within interdisciplinary higher education courses that integrates non-zero post-humanistic design thinking and the concept of embodiment for addressing problem solving. We explore how design education can move from a human-centered approach, to a post-humanistic more-than-human approach. Central to our approach is "non-zero" thinking, emphasising collaborative solutions that benefit all stakeholders–human and non-human–recognising our shared responsibilities within ecosystems. We also introduce the notion of qualia in design education, highlighting how immersive experiences can evoke deeper emotional responses, fostering empathy and a greater understanding of complex problems. This combined approach achieves three key outcomes for students: 1) a deeper intrinsic understanding of the world through subjective experience; 2) an ontological framework for understanding interconnection; 3) an appreciation of collaboration with the more-than-human world through non-zero thinking. Identifying gaps in higher education, we detail the implementation of this framework in three courses across design (Creative Futures), creative industries (Extended Reality for Social Impact Design), and computer sciences (Software Development Fundamentals) and use the United Nations Sustainable Development Goals as examples for problems students need to address. Results from student outputs, surveys and reflections indicate a shift toward broader, more innovative ways of thinking, underscoring the potential of this integrative approach to cultivate resilience and interconnectedness. We discuss possibilities for extending this educational model to assist students in addressing global challenges through a holistic, inclusive and empathetic lens.

Design Guided by Rules: Introducing Alternative Design Variables in the Textile Design Process

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Searching for ways to develop the field of textile design, this research aims to explore and introduce abstract design variables in surface pattern design processes. Workshop experiments with design students were used as a practical method. The purpose of the workshops was to introduce rules as design variables, and to understand the roles that they play in design processes and how they affect a design outcome, in order to open up for unexpected and unpredictable results. Another aim was to provide a foundation for reflection and critical discussion about using unconventional means for developing methods in pattern design and how that can influence the design process. The results show that the students' design solutions were clearly influenced by the provided rules and opened up for another approach and awareness to alternative design methods. The analysis utilised a phenomenographic approach, wherein the intention was to study and describe the different types of experiences that can occur when designing surface patterns with these design variables, and to catalogue examples of the ways in which the participants interpreted these in their design processes. The implication of this research is in-depth knowledge of the field of textile design and surface patterns, and the highlighting of an area that is rarely in focus within design research. The main purpose has been to contribute to a broadening of the understanding of the design of surface patterns; to open up, develop and change design processes.

Innovation and Creativity of Sustainable Interior-Product Design: Bridging The Gap of Design Theory and Industrial Practice Contextual in Indonesia

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Circular economy has great potential to be developed in Indonesia. Designers have a significant role, especially in the development of innovation and creativity. The gap between design theory and practice in the industry is a problem in optimizing sustainable design learning. A collaborative project between design learning classes and industry is proposed to be implemented to bridge the gap while achieving the goal of developing a circular economy. The problems targeted to be solved in the collaborative project are innovation, creativity, and evaluation in the design and production process of sustainable furniture and home décor. The industry that is a partner in design learning is a producer that has a problem of waste material in its production process. The collaborative project responds to the Sustainable Development Goals (SDG's), especially goal 12: Responsible Consumption and Production. Design thinking is used as a method in the learning process through collaborative projects with industry. The stages used are understand, ideate, prototype, and test. The development of sustainable-products that will be carried out is also oriented towards innovation that considers 3 main aspects: feasibility, viability, and desirability. The expected implication of the collaborative project is the generation of innovative ideas for the utilization of industrial waste from the main business production process into sustainable-products with added value in the circular economy. The benefits for students are gaining experience in solving real problems in the industry, and producing innovation and creativity that are appropriate to the context of the problem.

From Archetype to Algorithm: Utilising AI to Modernise Consumer Personas in Design Education

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Rooted in Carl Jung's theories and popularised by Margaret Mark and Carol S. Pearson, brand archetypes have long been foundational in developing compelling brand narratives. However, advancements in consumer psychology research, data analytics, and artificial intelligence (AI) have significantly transformed the field. Traditional brand archetypes now require updating to maintain their relevance. This paper explores the application of AI in evolving archetypes, utilising machine learning, large language model processing, and data analytics to enhance design students' understanding of consumer personas and profiling within contemporary design curricula. Bridging the gap between tradition and technology, this paper introduces a practical matrix as a case study designed for design students in higher education. This novel, systematic approach, grounded in Jungian archetypes, is modular, dynamic, and customizable for specific design briefs. The matrix facilitates the transition from a traditional demographic market model to a more nuanced psychographic and behavioural segmentation based on shared interests and values. It also incorporates generational cohorts and other consumer research theories. In a dynamic landscape where consumers continuously redefine their identities and personas, this paper discusses the effectiveness of this case study when applied by design students to their research methodologies. Moreover, the paper underscores the critical importance of integrating AI into design practice pedagogy, advocating for design students to use AI and technology responsibly and confidently.

Designing for Care: Case Studies on Design Education, Social Impact and Environmental Sustainability from Toronto, Canada

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In light of urgent social and environmental challenges, we propose a transformative shift in design education from "form follows function" to "form follows care." This research highlights three case studies–DESIGNwith, One Lovely Hour, and NOURISH–that embody this care-centered approach. DESIGNwith operates as a design lab committed to social innovation and environmental sustainability within the circular economy. One Lovely Hour is an ongoing research initiative that explores the intersections of care, culture, and memory in design practice. NOURISH, a mobile kitchen project, examines how food can deepen connections to identity and culture, illustrating that cooking can serve as an act of care, fostering wellness and belonging. Together, these case studies demonstrate pathways for integrating care into design education, offering vital strategies to navigate the complexities of the 21st century.

Integrating Industry Standards into Classrooms: Help Students Adapt Their Future Career by Bringing It in Early

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Many new students graduated with four years of learning, but lack industry experience. It is also common to see entry level jobs with a required 3-5 years of experience, something most students would not be possible to have. To help the students adapt, industry-oriented content was integrated in many classes to help student gain experience, and have projects aimed towards real world products. Professional development weeks are added to help improve their exposure to the industry, and many industry veterans were brought in to give presentations and teach classes. A studio like system is applied to the senior thesis projects where students follow proper protocol, workflow, and take responsibility of their assigned roles. A controlled hierarchy is implemented to ensure accountability and the quality of the project, industry management tools are also used to track tasks and assigned personals. The approaches not only improve students' skill, preparez them with much polished projects, but also greatly increases their understanding of a studio environments, and the behavioral know-hows, which is one of the deciding factors in a job interview on top of skills and experiences.

Educator Perspectives on Teaching Design Thinking

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Design Thinking is routinely taught in design schools around the world today, due to its usefulness in the types of interdisciplinary, complex problem-solving that designers are commonly required to engage in. Its popularity in design education has accordingly spawned interest in how design thinking is learned and taught – researchers have examined this across different modes and contexts, comparing these approaches, and speculating on the optimal ways to do so. This paper adds to this existing body of research, by reviewing the collective experiences of four educators who have taught across four different units (two undergraduate and two postgraduate) within Curtin University that involve the use of design thinking. This review consists of three main stages: first, each educator reflects individually on their experience within the unit or units they have taught; second, the individual reflections are then shared with the group so each educator can review everyone's reflections individually; third, the group meets to discuss their thoughts and perspectives. The outcome of this review is presented in this paper, along with an analysis of the similarities and differences across the different units, as well as key considerations for the effective teaching of design thinking.

Designing Ideas into Concepts II: Further Defining the Ratio of Ideas to Great Ideas

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With the success of last year's presentation "Designing Ideas into Concepts" at the 17th Annual Design Principles & Practices Conference, the authors now wish to return with a follow up workshop: Designing Ideas into Concepts II. In Lisbon, we shared our research which showed that the "Idea Ratio" (Utley, Klebahn, 2022) was 376 to 1. That is, one needs 376 ideas to stand a chance that one of them will be great. And the design challenge was to "Sell a Brick". For the upcoming conference, the team offers a workshop, with a new design challenge– Sell a Crystal Ball–and invite collaborators to join our research and help us to arrive at a new discrete number for the Idea Ratio. How many ideas need to be generated for one of those ideas to be considered great?

Exploring the Effectiveness of Course Design Based on Cooperative Learning and Peer Feedback in Fostering Students' Innovative Thinking and Critical Thinking Skills: A Case Study of a Design Methods and Creative Thinking Course

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In university classrooms, most courses are traditionally delivered by a single teacher, and large-class settings further challenge teachers to address the learning progress of all students and provide timely guidance. Cooperative learning is a strategy that facilitates interaction among learners to achieve shared learning objectives. In the context of university design courses, curriculum planning often includes elements such as design proposals and presentations. However, students have historically shown low levels of attention during presentations from other one and a lack of proficiency in asking questions. To address these challenges, this course design incorporates not only group-based cooperative learning but also an intergroup feedback mechanism. Groups serve as advisory units, supplementing the teacher's role as the sole evaluator and mentor. During group presentations, advisory groups collect and consolidate their perspectives anonymously through online tools. This approach not only mitigates the dominance of a single viewpoint provided by the teacher but also offers objective insights and experiential feedback from peers on the same topic. This strategy enhances students' attention and contributes significantly to the cultivation of their critical thinking skills. Moreover, intergroup feedback is synthesized and presented to the reporting group to refine their design proposals. This integrative feedback mechanism helps improve the overall quality of design outputs while fostering an environment that supports innovative and critical thinking.

We've Got Your Back!: Exploring Social Support's Influence on Academic Performance

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The design studio is an active social-learning environment. However, the ubiquitous One-on-One Master-Apprentice pedagogy has arguably fostered an individualistic and competitive climate. Despite the perceived richness of collaboration and social support in design studios, few studies have explored its impact on academic performance. This pilot study addresses the gap with a randomised controlled trial, examining differences in beginning design students' perceptions of social support (teacher-student (STR) and student-student relationships (SSR) and their impact on academic performance. The control group were taught in One-on-One desk critique settings counterpointed with the heterarchical Cross-pollinative Team Learning (CTL) experimental group. The CTL pedagogy recalibrates the asymmetrical power relations in traditional One-on-One studios and actively encourages the cross-pollination of ideas for students' individual design projects. The cohort shared a standard project brief and assessment criteria, and a panel of three tutors averaged their grades. The Child and Adolescence Social Support Scale (CASSS) was administered to participating first-year architecture students from both pedagogical groups at the beginning and conclusion of Semester Two. The independent t-tests revealed that both One-on-One and CTL students enjoyed comparable levels of TSR (p=.067) and similar academic attainment (p=.134), but CTL students significantly perceived better SSR (p=.025). However, during the second half of the semester, CTL students perceived significantly higher levels of TSR (p=.0016), SSR (p=.0013) and academically outperformed their One-on-One peers (p=.0010). These positive findings suggest that healthy levels of TSR, catalysed by CTL, provide academic benefits when leveraged in socially driven design studios.

Research on Strategies for Interactive Teaching in Smart Classrooms under the Background of Digital Technology: A Case Study of the "Introduction to Art" Course for Digital Media Arts Majors at University X

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The deep integration of digital information technology and education provides technical support for promoting smart education, which, in turn, relies heavily on the smart classroom as a crucial carrier. Existing research reveals that the actual effect of smart classrooms in practical use is less than ideal, with most schools emphasizing their construction while neglecting the innovation of interactive teaching methods. Therefore, based on the characteristics of interactive teaching in smart classrooms, this study designs interactive teaching strategies for smart classrooms, implements and tests the effects of these strategies, and proposes teaching strategies to enhance the effectiveness of interactive teaching in smart classrooms. This study focuses on first-year students majoring in Digital Media Arts at University X, using the course "Introduction to Art" as the teaching case. The research scope encompasses infrastructure, digital media technology, digital teaching resources, and interactive teaching methods within smart classrooms. Firstly, by reviewing previous research, this study clarifies the concept of smart classrooms and the characteristics of interactive teaching, providing a theoretical foundation for subsequent research. Subsequently, interactive teaching strategies for smart classrooms are designed and implemented in the theoretical course "Introduction to Art" for Digital Media Arts majors. Questionnaires are utilized to gather students' evaluations and suggestions regarding these interactive teaching strategies. Finally, based on the survey results, improved strategies for interactive teaching in smart classrooms are proposed, leading to research conclusions.

Research through Design – Practice-based Research in Design Disciplines

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In practice-based research, designers engage in iterative cycles of experimentation, prototyping, and evaluation. This hands-on approach allows designers to directly tackle design problems by testing ideas in tangible forms, enabling them to observe user interactions and gather empirical data. This process not only leads to improved designs but also uncovers insights about user behavior and preferences, contributing to the broader understanding of design principles. Moreover, practice-based research often intersects with theoretical frameworks, allowing designers to explore complex questions about aesthetics, functionality, and social impact. By integrating theoretical insights into the design process, designers can refine their approaches and ensure that their solutions are grounded in established knowledge. To meet academic research requirements, practice-based research must also provide substantial documentation and critical analysis of the design process and outcomes. This includes articulating the context, methodology, and significance of the design work, thereby demonstrating originality and contribution to the field. The resulting outputs–whether they are artifacts, services, or novel approaches–serve as evidence of scholarly inquiry. Ultimately, practice-based research not only addresses immediate design challenges but also enriches the academic landscape by generating new knowledge that can inform future design practices. This dual focus on problem-solving and knowledge creation positions practice-based research as a vital component of contemporary design disciplines. This study explores Research through Design and its application within practice-based research. It also highlights the Doctor of Design program at the Hong Kong Polytechnic University, showcasing how it enhances the understanding of design theories for design professionals through hands-on, practice-based research.

Integrating 3D Modeling Applications into Interior Design Education: A Curriculum Enhancement Approach

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This paper explores the potential for integrating advanced digital tools into the interior design curriculum of an undergraduate program, with a particular focus on building design process skills through the addition of a 3D modeling applications. The study investigates how the curriculum structure supports the development of students' proficiency in these essential design technologies. By analyzing course materials, assignments, and instructional strategies, the research evaluates how foundational skills in design can be expanded with the introduction of more sophisticated 3D modeling software. The selection of the 3D modeling application was guided by its compatibility with the existing curriculum and its ability to enhance students' design capabilities. Key factors in the selection process included the software's user-friendliness, its alignment with course objectives, and its potential to bridge the gap between introductory and advanced design concepts. A pilot project was conducted to implement the chosen application, with its effectiveness monitored through an analysis of student work and feedback. This project highlights the importance of a well-structured curriculum that effectively scaffolds learning and integrates technological tools. The findings provide valuable insights into curriculum development and the integration of digital tools in design education, aiming to equip students with the skills and knowledge necessary to meet the evolving demands of the interior design industry. This work contributes to the ongoing discourse on best practices for preparing design students for professional success.

Sustainable Design Pedagogies: A Practice-based Analysis of Transformative Design Education in Indonesia

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In the Anthropocene, an era significantly impacted by human activity, universities emerge as pivotal in shaping future generations through education. This responsibility extends to the design professions, recognized for their potential in forging a sustainable and resilient future. These professions are tasked with developing innovative solutions that minimize environmental damage and promote open, democratic societies. This encompasses a commitment to ecological and socially conscious design practices that address the challenges posed by human influence on the planet. The discourse on sustainable design education is integral to preparing designers for contemporary and forthcoming challenges. This includes incorporating discussions on climate change and Sustainable Development Goals (SDGs) into design pedagogies. Such education examines the practicalities of teaching sustainability, focusing on course structures, syllabi, and methodologies. It explores how design education integrates sustainable principles, the strategies employed to equip students with necessary skills, and the emphasis on certain SDGs. The role of educators and students in shaping future design practices is scrutinized, questioning whether sustainable design is a core or peripheral part of the curriculum and whether it involves hands-on experience or theoretical study. A critical evaluation of sustainable design education's effectiveness in readying students for professional challenges is essential. This includes assessing how students apply theoretical knowledge to practical solutions and the impact of educational approaches on their readiness to tackle environmental crises. This study aims to generate actionable recommendations for enhancing sustainable design education globally.

Playful Participation: Serious Games for Climate Change Engagement within Design Education, and Urban Sustainability

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The current climate emergency demands innovative and participatory educational approaches to foster awareness and engagement. Serious games offer a way to bridge knowledge gaps, encourage participation, and enhance students thinking around climate education. This paper explores the potential of game-based learning, where a participatory serious game (Rooftops Reimagined) was designed as part of the EU and UKRI Horizon funded GREAT project (Games Realizing Effective and Affective Transformation) to engage participants in the complexities of urban sustainability through design. Using playful and dilemma-based learning principles in roleplay scenarios, Rooftops Reimagined immersed participants in decision-making scenarios where they negotiated environmental, economic, and social trade-offs related to rooftop greening. The study draws on data from 97 participants, including citizens, architects and design students, gathered through game sessions, surveys, observations and feedback sessions. Findings reveal that the approach fostered deeper empathy, strengthened problem-solving skills, and encouraged collaborative solutions to sustainability challenges. Additionally, the game's interactive format made complex climate issues more accessible, particularly for younger audiences. This research highlights the value of serious games in design education and policy discourse, emphasizing the potential to cultivate critical thinking, engagement, and behavioral change. The study underscores the importance of playful participation in shaping more inclusive and participatory climate action strategies. By integrating game-based learning into urban sustainability, environmental and design education, educators and policymakers can create more impactful, experiential learning experiences that empower individuals to engage with climate challenges in meaningful ways.

Complicating the Connections Between Design Curriculum and Sustainable Development

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Reforming tertiary design education that is committed to empowering students to develop agency, knowledge, and skills for timely and impactful design responses to sustainability crises demands a substantial rethinking of the curriculum. This is no easy task. Our paper describes a reconstructivist and pluriversal approach to curriculum reform we are testing in the School of Art and Design, UNSW, Sydney. The paper reports on how our school is focusing on and problematizing the UN's sustainable development goals (SDGs) in response to the contradictory findings of a curriculum audit of the Bachelor of Design. We compared the frequency of references to the SDGs in course outlines to the SDGs underpinning Design Honours project descriptions over a five-year period. To our surprise despite the marked absence of references to the SDGs in course outlines, student descriptions of their Honours projects demonstrated sound understandings of the SDGs. To contextualize our curriculum revisions we provide an overview of current shifts in Australian design education and outline plans for initiatives that we anticipate will contribute to turning the rhetoric of SDGs into meaningful actions that respond to the call for changes that contribute to just and equitable societies for all people and the planet.

The Impact of the Empathic User Experience Research Process on Design Students' Empathy and Communication Skills

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Sustainable development in the design field requires innovation to keep pace with the evolving times. To achieve this, it is essential to understand users' needs and desires accurately and minimize unnecessary waste and consumption through sustainable design. Empathy and communication skills are the most critical competencies for designers who create sustainable, user-centered designs. Therefore, instead of solely focusing on design techniques or outcomes, developing the ability to communicate and empathize with users is essential. So, design curriculum changes are needed to prepare future design professionals adequately. Research on curriculum and teaching methods to enhance design students' empathic ability and communication skills is necessary. This study designs and implements an empathic user experience research process that emphasizes empathy and communication in design. It assesses how this process improves design students' ability to grow into future design professionals by enhancing their empathy and communication skills.

Visual Musicality in Three-Dimensional Design: A Study on Basic Design and Material Interpretation

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This practice-led research explores the concept of visual musicality within the framework of three-dimensional design, examining how musical elements such as rhythm, melody, harmony, and dynamics can be translated into tangible forms. It investigates the translation of musical elements into three-dimensional design through iterative student experimentation. Centered on experiential learning, the study documents a series of student-driven projects that explore the interplay between auditory and visual-tactile forms. Participants selected musical compositions (spanning genres such as classical, jazz, and electronic), analyzed their structural components–rhythm, melody, harmony, and dynamics–and iteratively translated these elements into physical forms using materials like wire, wood, fabric, and recycled plastics. The experimental process prioritized hands-on exploration, where students tested material playful behaviors and construction techniques. Key outcomes include the development of spatial narratives that mirrored musical progression, with emphasis on proportional balance, textural contrast, and visual dynamism. The final works, confined to a 50x50 cm field, highlighting the challenges of aligning abstract sound with tangible form. Findings reveal how iterative experimentation fosters creative problem-solving, material literacy, and cross-sensory design thinking. This research contributes to design pedagogy by demonstrating how music can serve as a scaffold for teaching three-dimensional composition, while underscoring the role of trial-and-error processes in nurturing student innovation. Evaluation criteria focused on experimental rigor, conceptual coherence, and the ability to articulate synergies between musical inspiration and material outcomes.

Tracking Pluriversal Design Pedagogy: A Longitudinal Study of an Intercultural Design Course

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This paper presents a longitudinal study of a pluriversal design pedagogy developed through the Melbourne/Kulin Study Tour, an intercultural course co-delivered by RMIT University (Australia) and the Singapore Institute of Management. Reflecting on the past twelve years of the authors' involvement, within a course running since 2006, this study examines how a plural approach to design education was iteratively built and adapted across the distinct cultural contexts of Singapore and Australia, challenging entrenched power dynamics in design education. Our study critiques traditional frameworks of expertise in the teaching models of both institutions, exploring how curricular shifts reflect growing awareness of broader social changes and Experience Design's role in shaping socio-cultural narratives. Drawing on decolonisation, standpoint theory, and situatedness, we outline a pluriversal approach that prioritises place-based learning through public pedagogy, positioning designers as authors of mediated realities. Informed by pluriversal principles, we demonstrate how curriculum adjustments invite deeper engagement with diverse ways of knowing through a case study of an annually iterated brief (2017–2024). This brief invites Singapore-based students to create zines, documenting their insights during a two-week stay in eastern Kulin (Melbourne). Set within the academy, we highlight the risk of 'pluralism' being co-opted into universalist frameworks akin to institution-driven notions of CALD and inclusion. However, we also argue that pluriversal principles can improve job-readiness by enhancing critical thinking, cultural awareness, and meaningful design outcomes. This emphasises the enduring value of sustaining pluriversal design practices for navigating interconnected worlds.

Exploring Interdisciplinary, Collaborative Learning Process in Design Pedagogy through a Case Study

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Educators in the fields of art and design have constantly strived to explore new, unconventional and effective ways of teaching. However, with growing specialization and compartmentalization of various design domains, their pedagogical methods are also becoming increasingly segregated. This results in higher domain expertise, but has a counter impact on innovativeness, creativity and lateral thinking; traits that are fundamental and extremely critical to a designer. The academic project presented here is for interdisciplinary 'Collaborative Studios' for students of different design disciplines, which emerged from the need to expose them to holistic and collaborative thinking and problem solving, across heterogeneous contexts and conditions. The paper looks at the 'Collaborative Studios' as a case study and demonstrates how this approach in design education has proved to be very valuable and also brings forth issues and concerns that could come up in such pedagogy – which could be of use to other design academicians and researchers. This study aims to demonstrate how interdisciplinary and lateral connections across design disciplines play a very important role in design education.

Interdisciplinary Design Approaches: Case Studies in Graphic Design Teaching, Research, and Scholarly Activities

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Interdisciplinary design approaches have become vital in Graphic Design teaching, research, and scholarly activities in U.S. higher education. The objectives of this study are to articulate and disseminate knowledge based on my reflections on graphic design teaching, and collaborative research and scholarly activities the U.S. higher education between 2014 and 2024. Interdisciplinary design approaches can be employed by individuals and/or a team who possess different disciplines to investigate complex design situations and problems to generate advanced knowledge which is not possible to accomplish in a single discipline as well as create positive and sustainable solutions for stakeholders and participant communities. The methodologies were a mixed-methods research approach that combines both qualitative and quantitative methods in a single study and series of case studies. This involves multiple research methods for data collections, analysis, and evaluations on the effectiveness of teaching, research and scholarly activities. In this paper, multiple case studies of graphic design teaching, research, and scholarly activities are presented. Reflections and discussions of each case study are included.

Self-Empowerment Through Design: Participatory Teaching as a Paradigm Shift for Unlearning Ableism in Design Education

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The objective of this applied research is to establish a comprehensive theoretical and practical educational framework for disability design that can be utilised by both students from BA/MA level and faculty members of design universities across various teaching modules. The framework can serve as a base for individual student-led projects on inclusive design. By engaging in participatory teaching and research, I collaborate with a national-level disability organisation to develop an inclusive teaching methodology that prioritises a process-oriented approach. This methodology aims to contribute to inclusive design education and facilitate the unlearning of ableism. The results will be published in the form of a methodological manual, toolkit and a reading book that will include literature review. I will summarize the outcomes of disability design related educational projects and student works through case study analyses and interviews in the form of an online archive. The publication will provide a comprehensive overview of among others the following topics: disability studies, inclusive and disability design methods, participatory education methodology, desires and opportunities for social innovation in the field of disability. The project I present briefly summarizes the experiences and results of "Disability design – I can do it! Self-empowerment through design" a semester-long course implemented in 2023. The course was conducted in collaboration with the Hungarian Association for Persons with Intellectual Disability. The assigned task was to create an inclusive workshop toolkit to assist workshop facilitators and participants with intellectual disabilities to enable them to conduct effective thematic workshops in the Independent Living Centres.

Osmotic Sensoria - a Neurodiverse Learning Space: Cognitive Flexibility through Guided Play

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In the ever-changing landscape of technology, young generations navigate the complexities of a technological world, it is imperative that we, the educators, understand the conditions that foster enriched learning environments that are truly diverse, equitable, and inclusive. As new technologies emerge, like MixReality, the Metaverse, and AI, we need to reshape the educational paradigm. Despite innovations and efforts to embrace different ways of thinking and creating, the Industrial Revolution model still stands as the norm. There is a pressing need for a paradigm shift, particularly in the realm of diversity, equity, and inclusion, where neurodiverse learners often find themselves marginalized in traditional learning spaces. To contest the status quo, my project, Osmotic Sensoria, is a pop-up installation that explores ways to naturally, and organically, stimulate brain learning systems–neurodivergent and neurotypicals alike–through an immersive experience where multiple participants engage in guided play, kinetic learning, and multisensory stimulation (oral narrative, visual projections, and other) to enhance cognitive flexibility and creative thinking. Grounded in principles of human-centered design and informed by research in educational models and cognitive neuroscience, Osmotic Sensoria serves as a design-led research artifact–a living laboratory–that collects people's group learning experience to open discourse about the future of education as it relates to neurodiversity within a DEI model.

Sustainable Buildings for Culture in Italy: Lessons from SustainabITALY, an Itinerant Exhibition Designed by Students

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Italy has recently experienced the realization of exemplary sustainable buildings for culture - museums, universities, schools, and cultural foundations - satisfying high environmental and comfort standards. Many hold LEED Gold and Platinum certifications, serving as benchmarks for sustainable architecture. The Green Building Council (GBC) Italia database shows these projects are distributed nationwide, with a higher concentration in the North, covering both new constructions and renovations. Disseminating knowledge about them at national and international levels is crucial. This study investigates the potential of an itinerant exhibition as a tool for promoting best practices. To what extent can such an exhibition facilitate the dissemination of knowledge about Italian sustainable building for culture? The paper examines SustainabITALY, a reusable, environmentally friendly experimental exhibition designed by University of Arkansas Rome Center students. Launched in 2024, it traveled from Italy to the USA, the UAE, and back, hosted by various universities. Students assembled and disassembled it, fostering interdisciplinary collaboration and hands-on learning. Funded by the Italian Ministry of Culture, the initiative amplified Italy's sustainable architectural visibility internationally. It emerged that itinerant exhibitions are effective knowledge dissemination tools, particularly when integrated with conferences, webinars, and digital platforms. The project also offered valuable real-world experience for students, who collaborated with young Roman female architects. Despite logistical and managerial challenges–coordinating stakeholders, shipping, and certifications–the initiative provided insights for future itinerant exhibitions. By describing the SustainabITALY project, this paper contributes to experimental strategies for knowledge dissemination and highlights the role of student-led initiatives in advancing sustainable design globally.

Closing the Opportunity Gap with Playful Learning Landscapes in Cities

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This paper explores an innovative approach to urban design education that addresses societal inequities through playful learning landscapes. College design students engage in a community-focused experiential class to create interactive STE(A)M and literacy installations in underserved neighborhoods. The process challenges students to shift from personal aesthetics to co-creating designs that meet community needs and cultural contexts. Key aspects of the participatory design process include spatial integration through guided neighborhood tours and mapping exercises; cultural representation via community stories and artwork, addressing specific community needs and concerns and fostering multi-generational appeal and inclusivity. Students learn that authentic community engagement is crucial for creating meaningful, sustainable playful learning spaces. Residents become equal partners, ensuring cultural resonance and desired learning interactions. This deep involvement extends beyond input-gathering, as community contributions shape all aspects of the installations. The immersive experience provides students with real-world impact while developing proficiency in participatory design. The resulting child-friendly spaces become organically woven into the neighborhood's physical and cultural fabric, benefiting both students and the community. This approach demonstrates how design education can address societal challenges by creating equitable learning opportunities in urban environments.

Looking Back and Forward, a Future for Design Pedagogy: Does Everything Have to Be about AI Now?

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Every technological innovation has been a threat to creativity from letterpress to digital typography, from hand-crafted graphics to digitally produced compositions, and now AI. This paper covers twenty years of my evolution of teaching design. It examines the issues of integrating emerging technologies within design education pedagogies. To cultivate innovation and creativity among students, we have always adopted an experiential learning model, we incorporate hands-on projects to actively engage students in problem-solving and iterative design processes. We encourage experimentation and the exploration of diverse perspectives. How does that map to our pedagogy with new media spaces such as social media and now AI? AI (in whichever form it takes) has been framed as a creative threat and an indispensable creative tool. What has my students the most concerned is that whilst they want to use AI and incorporate it into their processes, their real fear is that it will ultimately replace them. How is a budding new designer not viewing this new design landscape with trepidation? I have approached this disruption to the design education method and adopted new ways of thinking about design in my classes and in the student mindset. What are the new principles of design in the era of AI? My paper offers hard won insights into effective pedagogies which equip students with the skills they need to excel in a fractured design landscape by bridging theoretical concepts with actionable teaching strategies.

Thinking Through Making: A Self-Reflective Making Approach to Design-based Research

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Although educational institutions are designed to expand knowledge and encourage growth, they also miss opportunities for self-reflection. It is in educational spaces where students begin to self-identify with race, class, gender, and cultural heritage. However, design-based research courses rarely discuss the importance of self-discovery and reflection. Drawing inspiration from bell hooks' Teaching Community: A Pedagogy of Hope, a 500-level graduate studio course was designed to address this gap. Students were challenged to step away from traditional design frameworks and allow experiences, self-expression and counter-narratives to lead the making. Thinking through making–a self-reflective making approach to design-based research–attempts to generate dialogue around identity, race, class, and cultural heritage to meet the increasingly complex and ever-evolving design challenges in the classroom, and the world. The study offers a reflection of, approaches to, and insights to design-based research. This paper 1). Contextualizes the course through a CRT and LatCrit lens, 2). Shares details of the assignments through three student use cases: "Unequal Power Relations in Climate Change Mitigation: A Simulation on the Global Carbon Market", "Exploring Alternatives for Neurodiverse Connections Among Children", and "Visual Media, Black Girlhood, and Sexual Social Scripts"; and 3). Ends with a reflection on how design educators might better prepare students for the complexities of the design industry.

From Theory to Practice: Exploring the Intersection of Design Education and Industry

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Design, particularly through the lens of design thinking, is increasingly recognised as a strategic driver of innovation, corporate strategy, and competitive advantage with non-traditional design contexts. This shift positions designers as facilitators of innovation and digitalisation within corporate strategy, rather than solely as problem-solvers or product designers. However, this transition raises concerns about a disconnect between tertiary design education and industry demands, as well as the potential atrophy of traditional design skills due to insufficient practice in professional settings. This research seeks to bridge the gap between academia and industry by offering insights into the role of emerging designers in non-traditional design contexts and the alignment of design education with current industry needs. The work presented here forms part of a larger investigation into the role of design expertise in multinational corporations, with a global automotive manufacturer. This study combines a five-month longitudinal autoethnographic investigation at a leading logistics and robotics company, with an eight-week ethnographic study of industrial design interns at a leading global automotive manufacturer. Findings reveal a strong demand for digital visualisation and 3D animation skillsets, while traditional skills like sketching, prototyping, and product development were scarcely utilised. Designers with broader generalist skill sets, often beyond the bounds of design, were perceived as more valuable due to their usefulness across diverse teams and projects. These findings enhance understanding of the evolving design profession and lay the groundwork for future research and discussions on tertiary design education.

Education for Future Focused Designers - Developing Ecological Awareness Through Problem-based Learning: A 'Futures Focused' Pedagogical Intervention for Level 5 Textile Design Students

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The climate crisis foregrounds a need for an 'ecological literacy' which can situate design practice as a critical activity to develop sustainable futures. Design Education, in turn, must meet this emerging challenge to a broad set of disciplines whose very moral and ethical frameworks are reframing not only what it means to 'design' but also 'who', or what, we design for. Design Futuring asks us to imagine the purpose and function of design outside of capitalist and neo-liberal frameworks, recognizing that what is 'designed' will design patterns of behavior shaping morals and ethics, whilst backgrounding others. Many are calling for a mode of design which pays more attention to ecological systems and the non-human when deciding what to design. This paper outlines a pedagogical intervention developed within Cardiff School of Art & Design to foster a mindset shift in level 5 Textile Design students towards 'Futures thinking'. Adopting a speculative approach to design through a problem-based approach to learning, the project titled 'CMF Design: What is the Future of Luxury Transport?', asked students to engage with future and non-human ecosystems to challenge the status quo of material choices in transport design. Present in the students' outcomes, was a futures focused ecological attunement but also a critical approach to the future of their discipline and its potential to enact change, allowing further themes such as design hegemony, classism, and gender bias to be explored. All resulting in higher levels of engagement and attainment.

Traditional Knowledge and Ecological Practices in Design Education

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This study reflects how traditional knowledge and ecological practices can be transmitted, instilled, and promoted in design education. Three hypotheses were considered, and a literature review and case studies were conducted to evaluate them. The first part contemplates traditional knowledge and ecological practices that add value to design education. The hypothesis was that design education has several benefits when introducing traditional knowledge and ecological practices, particularly concerning cultural preservation. The second part considers promoting innovation and creativity. The hypothesis was that traditional knowledge can inspire innovative design solutions by offering alternative perspectives and approaches.. The third part evaluates the stimulation of entrepreneurship through design by motivating young designers to create careers in this area of expertise. A whole range of traditional practices needs to be explored in terms of know-how, belief in, and motivation to use this unrivaled knowledge, which can be applied to more commercial solutions or simply creative exploration. Finally, it is presented a curriculum structure for this type of activity based on the studies carried out by other authors and our own teaching experiences, exploring a methodology that promotes temporary support for students as they develop new skills, gradually eliminating this help to become more proficient. The conclusion is a set of guidelines for creating an academic curriculum on teaching traditional knowledge and ecological practices applied to design education. It reflects the learning experience, promotes sustainability and cultural preservation, fosters innovation and creativity, and cultivates ethical and holistic approaches to design.

Teaching Sustainability in Design Practice-based Programs: Connecting Pedagogy to the Learning Experience

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Education for Sustainable Design (ESD) requires a comprehensive systems approach to higher education design practice-based course and curriculum development. Internationally recognized agencies stress the current need for ESD to address climate change, greenhouse gas emissions, and public health impacts. In practice-based design programs, curriculum maintenance is complex, addressing more than individual class structures, and continuously evolving through ongoing assessment not only of students' comprehension but also ensuring content relevant to the designated practice discipline and positive environmental outcomes. Teachers in practice-based programs must strike a balance between constructivist pedagogies supporting students creating their own knowledge to the detriment of not acquiring best practice knowledge, and cognitive-based or "instructivist" delivery methods that can discourage innovation. In the context of ongoing research in interdisciplinary sustainable design education, this paper focuses on the teachers' comprehensive pedagogical role across course design and curriculum strategies including the position of the student within the class experience. Studies have shown that design students learn in many ways, with an individual often employing multiple styles. Learning styles are informed by perceptual modalities, information processing methods, and personality models. Studio class teaching methods, appropriate for practice-based programs and for accommodating learning style diversity, include Kolb's Learning Styles, Howard Gardner's Multiple Intelligences, and Active Learning course structures which are not confined to one theory. This research showcases how teachers have responded robustly to sustainable design education utilizing a variety of active learning strategies including project-based learning, service learning, participatory action research (PAR), and interdisciplinary or cross disciplinary collaborative learning.

Stories from Our Wardrobe: Developing 21st Century Competencies through Storytelling, Zines and Exhibition Making

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This paper revisits "Stories from Our Wardrobe", an action-research addressing the challenges of facilitating student collaborations and fostering design exploration among diploma design students. Employing storytelling, zines, and exhibition-making, the research aims to cultivate designers ready for the challenges of the 21st century. It references and challenges Singapore's Ministry of Education's framework of 21st-century competencies, which aspires to develop students who are active contributors, self-directed learners, and confident individuals. Beyond an industry-focused curriculum, it proposes classroom conditions that promote mutual learning, adaptability, collaboration, and exploration. Drawing from a diverse source of qualitative data from student surveys, interviews, and reflections, the research advocates for a shift towards engaged pedagogy in design education. This paradigm values personal narratives as integral to the learning experience and presents the possibility of harnessing them to design culturally relevant curricula. The initiative encourages students outside of dominant fashion narratives to tell new, authentic stories that resonate with diverse and global audiences. It seeks to empower students to critically engage with their cultural contexts and develop a deeper understanding of their own creative processes. By shifting the culture within diploma education, which often values commercial outcomes over reflective introspection, this approach fosters educational practices that inspire a new generation of learners to make an impact in the future fashion industry. The project highlights the importance of creating a supportive learning environment that encourages experimentation, personal growth, and the development of a unique creative voice.

Advancing Fashion Design Education With AI: Scaffolding Learning and Enhancing Curriculum Integration

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This study explores the integration of artificial intelligence (AI) into the undergraduate fashion design curriculum to enhance students' proficiency in digital design. By introducing AI alongside traditional tools like Adobe Illustrator and Photoshop, the research aims to elevate students' design capabilities, ensuring they are well-prepared for the evolving fashion industry. A pilot project was conducted using a carefully selected AI tool that aligns with course objectives and complements existing skills. The project's impact on learning outcomes was evaluated through analysis and feedback from student work. The findings underscore the importance of incorporating advanced technologies like AI to enrich fashion design education, providing valuable insights for curriculum development and preparing students for professional success.

Construction of a Design Process: The Use of a Parametric Tool for Digital Fabrication

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Carlos Alejandro Nome, Associate Professor, Department of Architecture and Urbanism, Universidade Federal da Paraíba - Brasil, Brazil With the advancement of digital technologies, higher education institutions face the need to update their curricula to incorporate tools that effectively integrate theory and practice. Digital manufacturing offers significant advantages, such as greater precision in production, improved quality, reduced errors, optimization of costs and time, in addition to enabling customization to meet the specific needs of users. Incorporating these concepts into the academic environment is essential to prepare students for a constantly changing market. Therefore, a design tool aimed at digital manufacturing was developed, which combines concepts of user-centered design, Parametric Design Thinking and Technology Readiness Level (TRLs). In addiction, a pedagogical plan was developed for its application in academic disciplines and workshops. The validation of this approach is being carried out in a pilot course in the Architecture and Urbanism course at the Federal University of Paraíba, in Brazil, with the aim of evaluating its effectiveness in promoting teaching aligned with contemporary demands.

Student-Community Engagement and Graphic Design Education: A Case Study of Logo Designs for Thai Local Pottery Products

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This study explores the branding development of locally-produced pottery in Ban Mo village, Maha Sarakham province, Thailand. It involved a student-community engagement project in which 22 graphic design students from Mahasarakham University collaborated with the Ban Mo community to create unique logos promoting local pottery products. A questionnaire was distributed to 40 community members to evaluate the key factors in branding development and identify preferable logos. The findings show that Logo 9 was the most preferred, featuring a simple design with the graphic identity of local products. The study highlights the mutual benefits of collaboration between local communities and students, whereby students gained real-world experience in developing knowledge and skills and personal growth, and communities benefited from the creativity offered by the students. Finally, the study suggests that such student-led collaborations could promote local products and help in shaping graphic designers' roles and impacts in the business world.

How Is Story Used in Higher Education for Design in Japan?

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The term "story" is widely used in the field of design; however, its definitions vary, and a comprehensive understanding has yet to be established. This study investigates how the concept of "story" is employed in the curriculum of Japanese higher education to provide an organized framework for its roles and associated design disciplines. A total of 224 syllabi containing the keywords "story" or "narrative," collected from 37 Japanese universities with design-related faculties, departments, or courses were analyzed. Each syllabus was examined based on the descriptions found in their overviews, objectives, and schedules, and the roles of the keywords, as well as the classifications of design disciplines, were identified. The analysis revealed four key roles for "story": (1) Component, representing an element of the content itself; (2) Foundation, providing background information for design works; (3) Experience, defining the relationship between design works and users; and (4) Process, outlining the sequence of design activities. The roles of Component and Foundation were predominantly observed in content design disciplines such as film and manga, whereas Experience and Process were more common in fields like product and service design, urban and architectural design, and business. These findings suggest the potential for "story" to be applied across disciplines, enabling innovative design concepts that transcend traditional frameworks and adapt to evolving societal and technological contexts.

Making History: Teaching Historical Research Methods in a Graphic Design Studio Course

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To meet the challenges of our age, designers must deal with change, complexity, and contingency – key aspects of historical thinking. Yet graphic design students have few opportunities to develop these skills in design history. Most undergraduate programs in the United States require design students to study art history, but it is less common for programs to require design history, and some may not even offer courses. The common exception is the design history survey, usually a single semester in which students broadly explore the development of design professions from a perspective that often favors art historical framings and a Eurocentric canon. In this paper, I bring a critical historiography lens to graphic design pedagogy, arguing that teaching historical research methods can support the development of critical practices by inviting students to think historically about design instead of reducing history to a record of aesthetic exemplars. I substantiate this claim with data from the field and a case study, using my own course, "Making History" at Washington University in St. Louis. I propose that when we expose students to the historian's skillset – examining sources, interpreting evidence, framing arguments, and understanding historiographical issues – they learn to interrogate inherited narratives, connect design to social worlds, and find the content that most resonates with their interests.

Visual Making: Teaching History Through Design Processes

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This paper explores the teaching of the history of art, decorative arts, furniture, interior design and architecture through design work and case study learning. Instead of traditional, humanities-based lecture and exam arrangements, this approach give students a deep understanding of stylistic approaches and methods through the study of a curated list of projects and studio assignments that allow for creation of original work.

Sustainable Design for Healthy Communities: Applying Gardner's Theory of Multiple Intelligences to a Service-learning Case Study

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Johnnie Stark, Associate Professor of Interior Design, Design Department, University of North Texas, Texas, United States

Growing concerns regarding climate change and diminishing resources have prompted educators to adjust their teaching practices. However, addressing these complex concerns effectively in the classroom remains challenging, especially with regards to accommodating diverse student learning modalities. This analysis proposes Gardner's Theory of Multiple Intelligences (GTMI) as a comprehensive model for exploring students' sustainability skills in the current educational landscape. Through evaluation of the studio course Sustainable Design for Healthy Communities (SDHC) as a case study, this paper outlines the purpose of our study, the methods employed in our course design, and the potential impact our findings could have on the training of teachers interested in developing design pedagogy related to sustainable development. The SDHC project demonstrates the practicality and effectiveness of GTMI in a real-world context. In this project, fashion design students actively engaged with sustainable development in their local community. The course pedagogy, which employed active learning and reflection cycles, was adapted using Gardner's comprehensive modalities structure, identifying individual needs through ten levels of experiential learning. The researchers used qualitative mixed methods to track the evolution of student outcomes. The findings revealed that students participating in the SDHC project strengthened their sustainability competencies and demonstrated increased pro-environmental behaviors. This study demonstrates a practical application of GTMI through the SDHC project as a case study. It proposes GTMI as a tangible solution to enhance students' sustainability competencies and foster behavioral change by deliberately focusing on both the teacher and the student's roles in active learning and evidence-based curriculum.

Sense of Place: A Pedagogical Framework to Align Personal Narrative for Collective Impact

Emily Tsiang, Associate Arts Professor, Program on Creativity and Innovation, NYU Shanghai, Shanghai, China

How might we reimagine sensemaking, traditionally applied to organizational systems, as a transformative tool for personal insight and growth in design education? This presentation introduces Sense of Place, a pedagogical framework that enables educators to design learning experiences that help students uncover connections between their formative environments and their evolving sense of self. A central element of this approach is the educator's role in facilitating powerful feedback sessions which allows students to make the leap from experience to insight. By expanding on Kolb's experiential learning theory, Sense of Place helps to align the student's personal "why" with their professional goals. Grounded in humanistic geography, reflective practice, and narrative inquiry, this framework equips educators with tools such as visual mapping, storytelling workshops, and place-based analysis, supported by structured reflective feedback methods. These practices guide students through a process of self-discovery, helping them integrate personal experiences into their creative work with intentionality and emphasizes the interplay between place, identity, and practice.

Wuxing and Shoe Design: An Exploration at the Bridge Between Novel Material Combinations and Chinese Culture

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Wuxing (Five Elements) is a conceptual scheme used in Chinese culture to explain many phenomena, including the interaction between internal organs, cosmology, and traditional medicine. The elements, called phases, are fire, water, wood, metal, and soil. Even though the Wuxing scheme is rooted in Chinese culture, modern-day generations are losing this knowledge and consider it an unappealing and unscientific approach. This research is an innovative exploration that combines traditional Chinese culture, novel material combinations, and shoe design. In collaboration with a well-known local shoe manufacturer, a group of product design students has been tasked to design a series of creative concept sneakers as part of their studio courses. Novel materials and eye-catching combinations have been used to interpret the meanings and concepts behind Wuxing. A team of experts has reviewed the prototypes, and given their cultural relevance, they are now displayed at the company's museum. This research exposes the importance of tinkering with materials in design education and attempts to make younger generations more concerned about the traditional intangible cultural heritage. Besides, given that Chinese and foreign professors led the research, it is also an outstanding case of international collaboration and cultural appreciation. The partnership between academia and the private sector demonstrated how academic institutions can adapt their teaching to support local companies while preparing students to become competent designers. The course's pedagogical relevance interests design practitioners and academics who operate in Asia – but not only – and are approaching similar topics.

Course Design for Peace: A Graphic Design Approach to Peaceful Societies

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Peace is not merely the absence of conflict but a proactive and intentional cultivation of harmony within societies. This paper introduces and discusses the need and thought process behind the design for a course 'Design for Peace'. This theme holds immense relevance in today's world, as we continue to grapple with various conflicts, both overt and subtle, arising from political, social, economic, and cultural differences. In today's interconnected world, conflicts in one region have a ripple effect globally. This course acknowledges this interconnectedness, looking to foster global collaboration and understanding and leverage the power of design as a catalyst for peacebuilding. Some of the core objectives for this course are: To understand the concept of peace from various standpoints and levels. To apply Human-Centered Design principles to create inclusive and culturally sensitive solutions. To analyze historical and contemporary graphic design examples showcasing the impact of design in fostering peace initiatives and understand the role of design in promoting peace and societal harmony. To appraise the ethical considerations and challenges inherent in design, addressing issues of cultural sensitivity, power dynamics, and the need for participatory approaches. To harness the power of graphic design and storytelling, in the creation and communication of peace-oriented messages effectively. By synthesizing theory with practical applications, this course looks to contribute to the discourse on leveraging the power of design as a proactive instrument in cultivating sustainable solutions for peace, thereby paving the way for more inclusive and harmonious societies.

Design Being: Towards an Embodied Perspective of Design Education

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This pedagogical theory is framed by play, employing embodied cognition as a medium to teach the principles of design. In this paper, I am proposing that the activity of bouldering can be a tool that develops a deeper understanding of a variety of design principles. Play is often thought as frivolous, its pedagogical potential often relegated to early childhood education. This study argues that it can be a transformative force for accommodating existing knowledge through novel experiences for students to realise their creative potential. By integrating design practice with bouldering, the body is instrumentalised, translating the movements of the eye on a page into the movements of the body on the wall. Students merge thoughts with actions, externalising thinking by spatialising information in order to cultivate new modes of conceptualisation. This study employs a hybrid of Participatory Action Research and Design Thinking to first gather information from both design and bouldering communities, which were synthesised to develop an intervention, qualitative data was collected and analysed to gain insights into the experiences of the participants. This transdisciplinary approach to design education seeks to liberate students from their stationary desk/screen bound environment, allowing for a critical review and examination on how they can access new forms of knowledge/ways of learning. Thus, transforming their understanding of themselves and their perspectives in order to reclaim the human value within design practice.

Navigating Visual Integrity: Addressing Plagiarism, AI Ethics, and Design Education Challenges

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Visual plagiarism is a persistent challenge in art and design, where the boundaries between inspiration, referencing, and copying are often ambiguous. Over the past seven years, my research has laid the groundwork for addressing this issue. Cut and Paste, a study investigating perceptions of undergraduate art and design students, resulted in the development of a conceptual framework for addressing Visual Plagiarism. Project Echo introduced a modular toolkit aimed at pre-tertiary educators, while the KATS framework–focusing on differing levels of Knowledge, incorrect Assumptions, lack of Time, and lack of Support–highlighted key barriers to addressing visual plagiarism for art and design faculty. The emergence of AI tools for image generation adds a further level of complexity to this discourse, raising new moral and ethical concerns regarding visual integrity and image ownership. Building on my previous research, my latest project explores these challenges from a multi-stakeholder perspective, engaging international art and design faculty and industry professionals through participatory design workshops and in-depth interviews to co-create resources and establish best practices. This paper first outlines the key findings and impact of my earlier research before introducing the objectives and research trajectory of my latest initiative. Through the recently established Design Ethics and Visual Integrity Lab (DEVIL), this work seeks to foster a deeper understanding of visual integrity while equipping educators and professionals with the tools to navigate the evolving ethical challenges of image production and consumption in contemporary design education and creative practice.

Exploring Integrated Creative Activity Instruction to Enhance Student Creativity in Design Thinking through Artificial Intelligence Integration

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Thinking Skills (TS) in problem-solving will guide each individual using smart problem-solving steps and produce thoughtful ideas in design thinking, opinions, precise arguments and have a high level of creativity in daily life especially for a student. Hamdan et al. 2022 and Yee et al. 2010 research findings have confirmed that most common problem faced by tertiary students when completing tasks in producing products was finding ideas to develop a tangible product. Karan and Angadi (2023) reported that the rise of artificial intelligence (AI) is rapidly influencing our education system. This research experiment explores to prepare graduates for future AI in creative industries. Integrated Creative Activity Instruction (ICAI) is a framework developed to measure the impact of thinking skill infusion on graphic design students. Design thinking and creativity are among the two important constructs to nurture future talents for IR 4.0 transformation. The Minister of Education needs to nurture more talented young Malaysians, and therefore new curriculum should be revised to ensure the country has produced sufficient young talents for IR 4.0 transformation. This research aims to explore the possibility of AI integration in teaching to stimulate students' creativity at tertiary level. First, exploration in AI integration. Second, implementation of the experimental instruction. Last, measuring the impact of new experimental instruction. The assessment tools are designed based on ICAI framework, Torrance Test of Creative Thinking, focus group interview and class observation. The results show that ICAI instructional approach to enhance student creativity with AI integration was significant.

Investigating the Effectiveness and Learner's Perception of Scenario Based Learning

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Scenario-based learning has been the style of teaching employed in Nanyang Polytechnic, School of Applied Sciences, Diploma in Pharmaceutical Science for the module Pharmacotherapy. In this project, a Choose-Your-Own-Adventure approach is adopted to allow learners to make decisions in a virtual environment without challenges present in a physical consultation session. As learners progress through the video scenarios, they will be prompted to ask questions and make decisions during patient consultation. Based on the decisions made, they will be led to different outcomes and feedback. This allows learners to receive timely feedback which may be tedious to achieve in a physical setting due to the high instructor to learner ratio. This study aims to investigate the effectiveness and learner's perception of scenario based learning in the applied science context through an education design research approach, employing a mixed methods methodology. Intrinsic Motivational Inventory was used to measure aspects such as interest, perceived competency, pressure, value and effort. Results show that there was statistical significance in areas such as interest, competency and pressure. These results are supported by students' positive qualitative feedback. Based on the encouraging results, such an approach can be considered and employed in other disciplines.

Cognitive Impact of Computational Design on Interior Designers: Exploring the Impact of Computational Design Methods on Interior Design Processes

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This study examines the impact of computational design (CD) methods on designers, focusing on their potential to enhance problem-solving capabilities. Computational design offers a novel approach distinct from traditional design methods, yet its application within the architecture, engineering, and construction (AEC) sector - especially in interior design - remains underexplored. This research investigates how computational methods influence design processes, and cognition, thus contributing to the evolving landscape of design problem-solving. Methodology: A comparative analysis approach is adopted to evaluate the substitutability and effectiveness of computational methods in design tasks. Drawing on cognitive and metacognitive frameworks such as the Significant Learning Experiences framework, the study assesses how computational workflows impact designers' reasoning process, design development, design hypothesizing, and solution testing. The research bridges cognitive theories of learning with computational design to identify overlaps and areas of divergence between human and machine-driven workflows. Outcomes and Implications: Findings demonstrate that computational design methods foster innovative problem-solving strategies by enhancing human-computer collaboration. Findings also support the development of metacognitive skills, such as reflective thinking and adaptive learning, which are less emphasized in traditional design approaches. Despite technological advancements, the research highlights the irreplaceable value of human designers in addressing the emotional and relational dimensions of design, reinforcing the need for balanced integration of computational tools. This study underscores the importance of human interaction and the presence of the designer; suggesting a collaborative future for computational and human-driven design processes.

Transdisciplinary Learning: The Future of Digital Product Design Education

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As the digital product design landscape continues to evolve, the integration of diverse disciplines becomes essential in preparing students for the challenges and opportunities of the future. This paper explores the concept of transdisciplinary learning in product design education, with a focus on how blending technology, design, and creativity can foster innovation. By examining the teaching methodologies employed at FIT's Creative Technology & Design program, this study highlights cutting-edge courses such as kinetic typography, AI-assisted design, and design systems for UX/UI, which are shaping the next generation of designers. The session will showcase pedagogical strategies that encourage cross-disciplinary collaboration and adaptability, essential for navigating an increasingly complex design ecosystem. A central feature is a case study of student projects that exemplify the power of transdisciplinary approaches, demonstrating how students synthesize knowledge from multiple fields to create innovative and impactful designs. This study aims to inspire educators to rethink traditional boundaries in design education and embrace a holistic, future-forward curriculum that prepares students not only to meet current industry demands but to anticipate and shape the future of product design which will meet the demand of an increasingly complex world in the digital age. Concrete examples of student projects illustrate how transdisciplinary learning prepares students for the complexities of the contemporary society. These case studies focus on how students integrate AI, UX/UI design, and experiential design to create innovative solutions for real-world problems.

Students and Real Tools: Educating Through Individuated Design

Eric Zeigler, Assistant Professor of Art, University of Toledo, Ohio, United States

University students arrive in design classrooms with mental models about how the world around them works. Increasingly, these students' mental models abdicate to paradigms created by global technology and social media companies, instead of being built from a vast and variable array of learnings about the world based on one's local context and individuated experiences. This phenomenon is not new, but its implications are starting to be seen by companies that place design at the forefront of their value model. How can design education create an environment where an individual's curiosity and learning don't depend on the pervasive narratives of a few large companies, but rather on rich and specific insights about the world? Developing insights in this way has the potential to solve truly important problems large entities ignore. To experiment with ways to generate this type of curiosity and thought, we created a space at the University of Toledo called Axon Lab, housing our Foundations of Art Studio Technology course. The course and the lab are a haven for the subversion of dominant thought processes that pervade our world. The key ongoing experiment in the course is the Tool Project, wherein students design a tool that works to solve a problem they identified in their own lives, or the lives of people close to them. Using the cumulative understanding of shop tools, mechanisms, and materials from the course, they prototype and create a tool, answering a real design problem–not one constructed for them by a distant corporation.

Share a Coke: Creating Community Through Brand Identity and Personalization

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A brand identity is the strategically planned and purposeful presentation of a brand manifest in its name, logo, tagline and color palette. The Share a Coke campaign relied on Coca-Cola's famous brand identity design to introduce a campaign that evolved into a global phenomenon. Coca-Cola bottles in 80 countries were debranded - the official brand identity was removed - and instead personalized with the phrase "Share a Coke with …" followed by each country's most popular names. This marketing approach prompted consumers to share the soda with their friends, both in person and through photos posted to social media platforms. Some of the metrics of the campaign's success include global sales of 150 million personalized bottles, global trending hashtag in #shareacoke, and one billion media impressions. In the US, sales increased for the first time in a decade. This case study traces the origins, evolution and success of the award-winning global campaign, with a focus on how the design of the iconic Coca-Cola brand identity was integral to that success.

Scientific Illustration for Blind and Visually Impaired: Toward a More Sustainable Society and What Design Can Do About It

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As part of the Visual Literacy Research Programme at the Academy of Fine Arts and Design, University of Ljubljana, the 2024 Kaverljag International Summer School (KISS) focused on marine biology with a unique aim: visualizing marine organisms for the visually impaired. Illustrated materials in marine biology for this group are rare, so this project seeks to expand accessible resources. Prior to the summer school, an interdisciplinary student group (biology, visual communication, and illustration) conducted preliminary research. During the eight-day KISS (21–28 July 2024), 24 participants from five countries engaged in field sketching, scientific illustration, and creating 3D models, alongside writing recommendations for tactile illustrations. These were iterated in many different graphic techniques and later adapted for 3D printing. Lectures from scientists, artists, and tiflopedagogues, as well as excursions to institutions like the Aquarium of the Science Centre of the University of Primorska, and Marine Biological Station of the National Institute of Biology provided theoretical foundations. The results were exhibited at various locations for testing by blind and visually impaired participants, with support from institutions like the Slovenian Association of the Blind and Visually Impaired. The project aims to make tactile illustrations more widely available through 3D print kits for educators and tiflopedagogues, empowering design students in social design. Additionally, recommendations for scientific illustrations tailored to the visually impaired are further developed and published.

Place, Memory, and Artifact - an Expanded Drawing Workshop: Transcending Global Borders through Community Building and Collaboration Within and Beyond the Classroom

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Joanne Pang, Lecturer, School of Design Communication, LASALLE COLLEGE OF THE ARTS, UNIVERSITY OF THE ARTS SINGAPORE, Singapore

Hybrid Designers/Educators/Practitioners are powerful conduits for engagement within and beyond the classroom. This workshop presents the personal and pedagogical practices of collaborators Shea Chang and Joanne Pang. As co-designers of THE FLIPSIDE PROJECT, a COIL (Collaborative Online International Learning) initiative, and as recent artistic collaborators on Place, Memory, and Artifact: an Expanded Drawing Workshop, Chang + Pang relay their investigations of place and displacement through collaborative authorship & virtual and tacit drawing methods. The session is focused on drawing translation (reform), drawing iteration (remix), and drawing as object/artifact creation (remember). Participants will be asked to explore the notion of place and memory through embodied drawing exercises, iteration stations, and will leave with a unique artifact of their collaborative engagement. While in spontaneous dialogue with each other and facilitators, participants will gain understanding of how to combine virtual and tacit materials and processes (synergistic drawing practices) to ignite new collaborations within local and global communities.

Y2K Aesthetics and Its Influence on Singaporean Punk Zines of the 1990s to Early 2000s

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In this paper, the definition of Y2K aesthetic and canonical punk D.I.Y. zine aesthetics and methods of production are brought into sharp relief. I examine the aesthetic influence of Y2K design elements on the graphic production of Singaporean punk zines from the mid-1990s to the early 2000s. Characterized by futuristic elements, bold vivid colours, gradient and translucent elements, Web 1.0 aesthetics, metallic textures, and futuristic typography, the global Y2K aesthetic marked a significant shift in visual culture at the turn of the millennium. Singaporean punk zines of this period adopted and applied these stylistic trends, resulting in a synthesis of the raw, cut-and-paste ethos of punk with the sleek, tech-driven aesthetic of the digital age. With the increased accessibility to word processing software such as Adobe Photoshop and WordPerfect, the nature of the graphic production in the punk community would inevitably evolve in this period. Experimenting with layering, digital typography, and image manipulation, together with traditional cut-and-paste techniques, the resultant hybrid designs reflected the era's visual zeitgeist. Through a visual analysis of zine graphics, layouts, and graphic composition, this paper investigates how the Y2K aesthetic and emergent technological tools influenced the visual language of punk zines ultimately changing the course of its design approach and aesthetic direction. By highlighting the interplay between global design trends, technological innovation, and local punk DIY practices, this paper offers insight into how the visual styles of the late 1990s and early 2000s left a lasting imprint on Singaporean punk zine culture.

The Hidden World of Visual Narcoculture: The Branding of Mexican Cartels

David Gardener, Student, Assistant Professor in Graphic Design, Northumbria University, Newcastle, United Kingdom

The world of visual meaning has no boundaries; it transcends and influences at every conscious and unconscious level. As observers of this ever-present vanguard, we can be forgiven if impact is lost through familiarity. Modern-day brands exist in a multimodal world catering to a shifting audience's demands. However, this study embarks on a unique journey, exploring a new design aesthetic that challenges to resonate on a different level. This research and the broader visual analysis delve into the intricate world of the visual brands from Mexican drug cartels, specifically, the word-marks and emblems used to identify which specific cartel 'family' is associated with the contraband. Drug cartels employ specific formal structures not unlike conventional organisations and will have more than one identity that often flexes in response to political and popular cultural shifts. The cartel identities are added to the packages using hand-drawn marks, stickers, printed wrapping, and the physical embossing of the merchandise. In these rarely seen 'ownership' motifs, they establish their authority whilst giving a historical 'seal of approval of the product–a statement of quality assurance. The research deconstructs the identities and explores factors such as its 'sense of place', metaphors, and semiotics, presenting how critically relevant these are. Parallels are drawn between the practice of the cartel identities and that of modern-day commercial brands. The signification and semiotics employed in the individual cartel designs are an untold story, unique in storytelling and rich in narrative, especially from the point of view of visual culture.

Representation of Adjustability and Interactivity in Architectural Space: Achieved through ParametricDesign

Tianyu Han, Student, PhD Student in Design, Faculty of Fine Arts, University of Porto, Portugal

This paper examines how parametric design serves as a powerful tool to enhance the dynamic representation of architectural spaces, promote adjustability and interactivity, and encourage user participation in the design process to create engaging spatial experiences. Through a combination of literature reviews, case studies, and prototype representation of digital modeling, this research highlights the potential of parametric design in achieving these goals. It focuses on generating building component systems, facilitating interactive control of interior space changes, and enhancing human behavioral perception, all of which confirm the feasibility of using parametric methods to transform static architectural elements into interactive experiences. The results show that parametric design allows spaces to continuously adapt and interact, making spatial representation an active participant in the user experience rather than a passive object. This approach not only fulfills functional requirements but also anticipates and accommodates future developments.

On the Representation of Women's Clothing Depicted by Taiwanese Painters Under the Influence of the Social Trend of Japanese Taisho Culture

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Clothing often conveys the spirit of the times and also represents its cultural characteristics. By reviewing the representation of clothing, this study explores female images depicted in the works of Taiwanese painters who were influenced by the Japanese Taisho culture. Women's clothing presented in Japan's Taisho period (1912-1926) was characterized by a mixture of traditional styles with Western influences. These changes of fashion in Japan had some influences on Taiwanese clothing. As Taiwan was under Japanese rule during the Taisho period, some painters depicted images of women then and thereupon. The content and style of the paintings clearly reflected social changes and artistic phenomena hereafter, including changes in the status and image of women. This study explores the artists' cultural identification through the clothing items of the female figures of the colonized people portrayed by Taiwanese painters. This study discusses the following key issues: (1). The reflection of social changes and cultural manifestations in Japan's Taisho period over Taiwanese art. Based on pictorial references, the paper explores the characteristics of the female images depicted in the paintings under the influence of the Taisho culture in Japanese-colonized Taiwan. (2). How did Taiwanese painters illustrate the clothing styles of women in their works at that time, including the connection or blending of Chinese, Japanese and Western clothing in concerning fashions? From these appearances, this study further explores how do the representations of female clothing reflect the cultures and values that these artists identified with Taiwanese society then.

Collaborative Collage: A Method for Teaching Ideation in Graphic Design

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

Perhaps the most challenging part of being a graphic designer is the anxiety one feels when facing a blank page. How does one teach a new designer to effectively and reliably come up with ideas? I developed a process for teaching ideation to graphic design students that can be applied to a wide range of design projects. This process is inspired by my personal design practice, the Surrealists' exquisite corpse drawing game, and Skolos-Wedell's form-to-content method for designing posters. We begin with an exciting collaborative collage exercise, involving an enormous selection of unconventional tools and materials, leading to spectacular and complex sculptural creations. Each sculptural collage is altered by each and every participant. Next, students photograph the sculptures to create two-dimensional images that we then mine for ideas, similar to how a miner would chip away at earth to reveal valuable gems. In a matter of hours, students generate hundreds of ideas, each with corresponding examples of design elements such as typography, grid, texture, color, and image. Then, I lead students through a flexible morphology that teaches them how to take these raw ideas and expand them into applied pieces of graphic design. Students are able to take this process with them into their careers and future work, ensuring that they will never again face designer's block. In this paper I illustrate exactly how this process works, with real examples of student work, and explain how this innovative pedagogy could be applied to a wide range of design problems.

Crafting Visual Hierarchy for Achieving Simplicity in Visual Communication

Jinsook Kim, Associate Professor, Communication and Graphic Design, Georgian Court University, New Jersey, United States

Visual hierarchies are fundamental strategies in visual design that establish relationships and order among elements. This research explores simplicity through the lens of visual hierarchies, examining how cognitive perception both shapes and is influenced by the relationships and order of elements. It identifies key principles of dominance, such as meaning and its boundaries. By analyzing visual compositions that employ visual hierarchies across diverse contexts, this study contributes to a deeper understanding of simplicity in visual communication design and its implications for practical design knowledge.

Measuring Historical Color Data with a Mobile Spectrophotometer: An Analysis of Two 1925 Real Silk Costume Color Harmony Charts

Marcy L. Koontz, Curator, The Fashion Archive + Associate Professor, Clothing, Textiles, and Interior Design, The University of Alabama, Alabama, United States

This project undertakes a rigorous historical and colorimetric analysis of two Real Silk Costume Color Harmony Charts from 1925, emblematic promotional objects produced by the Real Silk Hosiery Company of Indianapolis, Indiana. Founded in 1922, the Real Silk Hosiery Company swiftly rose to prominence as a distinguished manufacturer of silk hosiery, lauded for its avant-garde marketing strategies and superior color fidelity. The 1925 charts, curated by color expert Katherine Harford, present a meticulously crafted selection of color sets designed to mirror the prevailing fashion decrees from the epicenters of style, Paris and New York. To conduct a precise color analysis, a NIX Pro 2 mobile spectrophotometer was used to capture the color measurements represented in the charts. The measurements were systematically recorded in RGB, CMYK, and CIELAB color spaces, ensuring a comprehensive understanding of the color data. This methodological approach facilitates accurate digital replication and allows for detailed analysis. The resultant color metrics furnish critical insights into the chromatic preferences and marketing paradigms of the 1920s, elucidating the intricate interplay between aesthetic values and commercial imperatives of the period. By digitizing these historical color charts, this project not only preserves an invaluable fragment of sartorial history but also provides a resource for ongoing academic inquiry and practical applications within contemporary design and marketing domains. This endeavor underscores the imperative of synthesizing historical objects with cutting-edge technological methodologies, thereby fortifying our cultural and academic heritage through the confluence of historical insight and modern innovation.

Type That Speaks: Shaping Meaning Through the Narrative Power of Typography as an Independent Visual Language

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Typography is often seen simply as a tool for expressing textual meaning. However, is this view complete, or does typography, beyond its primary function, serve as an independent visual language capable of telling stories? This research challenges traditional perspectives by showing that typography can go beyond just communicating words; it can shift perceptions and create new layers of meaning beyond the text's original intent. Using Sylvia Plath's "The Bell Jar" as a case study, the project explores how a single sentence – five words and eleven letters – can be reimagined through typography to express the emotional journey of the novel. By integrating a combination of analog and digital techniques, the study offers new ways to interpret and experience the text, pushing the conventional literary practices. Typography here becomes more than just text; the emphasis on its visual aspects allows the letterforms themselves to carry meaning and tell their own story. The research begins with a simple example to introduce the central idea, then progresses through the creative process of the study, and results in complex designs. By focusing on the relationship between text and its visual representation, this work shows how typography can reshape literary interpretation, offering readers an alternative way to connect with the material. This research highlights typography's potential to create multi-layered narratives, emphasizing its role as a powerful expressive visual language for improving the emotional and conceptual aspects of storytelling.

Sight Unseen: New Ways of Seeing Climate Data in Singapore

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The project explores how design might bridge the gap between technology and nature to reimagine climate change communication in Singapore. By integrating data humanism, multisensory design, synesthetic approaches, and posthumanist perspectives, it addresses the challenges of conveying the urgency of climate change in urban contexts. The research examines effective frameworks for visualizing climate issues, engaging audiences emotionally and cognitively, and fostering actionable responses. Through an interdisciplinary lens that combines ecological insights, semiotic studies, and technological innovation, this study develops a design toolkit to inspire empathy, critical thinking, and hands-on solutions for climate adaptation and mitigation.

The Aesthetics of Immersion - Towards a Visual Design Lexicon for Emerging Spatial User Interfaces: Perspectives from Research and Teaching Explorations

Gabriel Lipkowitz, Assistant Professor, Industrial Design, National University of Singapore, South West, Singapore

Spatial computing interfaces being introduced into the mass market hold the promise to offer users compelling immersive and interactive 3D experiences for applications ranging from media and entertainment to gaming and sport to productivity and education. Nonetheless, there is a lack of visual design methodologies and frameworks to facilitate the creation, criticism, and communication of visually compelling such spatial computing applications. In this showcase, several case study applications from the speaker's pedagogical experience teaching design students at both Stanford University and the National University of Singapore are discussed from a visual design perspective. The study highlights both opportunities and challenges for visual design associated with the unique considerations surrounding such immersive experiences, including scene reconstruction, object and image tracking, real-time 3D rendering, including through the integration of novel artificial intelligence models for 3D computer vision and 3D asset generation tasks. Particular emphasis is placed on the novel aesthetic qualities made possible by such technological modalities, while also highlighting the risk of producing visually incoherent and disorienting user experiences if visual design perspectives are ignored during the design and development phases. The discussion concludes with perspectives and predictions on the short to medium term future for such technologies in the context of visual design, and the skills required to prepare visual designers of the future to render such emerging immersive interfaces not only functional but visually delightful to users.

A Research on the Creation of Realism in Mimetic Documentary-Style Horror Film Imagery: A Case Study of the Korean Horror Film Gonjiam: Haunted Asylum

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Hae Yoon Kim, Korea Economic Institute of America

Since the release of The Blair Witch Project (1999), which pioneered the found-footage style in horror cinema, this genre has witnessed rapid development and garnered widespread attention for its unique visual language. Found-footage horror films primarily emulate documentary filmmaking techniques to create a believable sense of "realism" within fictional narratives, thereby enhancing the audience's sense of fear. Consequently, effective visual design plays a critical role in this process. This study takes the Korean horror film Gonjiam: Haunted Asylum (2018) as a case study to explore how found-footage horror films construct realism through visual elements. Using a combination of case analysis and literature review, the study systematically examines visual elements such as perspective, camera movement, composition, lighting, and color in the film. The findings indicate that the film employs extensive handheld camera techniques and subjective perspectives to simulate the characters' visual perception, reinforcing the authenticity of "real-time recording." Fixed perspectives from surveillance cameras mimic the objectivity of documentaries, enhancing the audience's trust in the realism of the visuals. Informal composition increases the randomness and life-like quality of the imagery, while the combination of natural and low-light settings further enhances the documentary-like feel. Additionally, low-saturation color schemes closely align with the realistic tones of everyday life, simultaneously intensifying the documentary-style atmosphere of realism. These findings not only address a scholarly gap in the analysis of visual design in found-footage horror films but also provide valuable references for filmmakers aiming to enhance realism through visual elements.

The Expression and Study of Light and Shadow Aesthetics in New Media Installation Art

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This study examines the aesthetics of light and shadow in new media installation art, with a focus on the innovative application of light and shadow as core elements of artistic expression and their cultural significance. It explores how the fusion of technology and art enables light and shadow to create immersive sensory experiences, offering new dimensions for contemporary artistic creation. Using a case study approach, the research analyzes representative new media installations to investigate their aesthetic characteristics, technological applications, and audience experiences. The findings reveal that the aesthetics of light and shadow not only enhance visual impact but also amplify the cultural narrative and emotional resonance of artworks through interaction with technology. As a medium, light and shadow demonstrate unique advantages in shaping immersive environments and enhancing audience engagement. Additionally, they present new opportunities for applications in entertainment, cultural communication, and urban space design

Filtering the Microworld: Visualising Sea Sponges through Microscopy and Machine Learning

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Technology shapes the way we perceive nature. From microscopic cameras that reveal organisms invisible to unaided human eyes, to computer algorithms used for species identification, scholars in media and visual studies have highlighted how our perception is mediated by the tools we use. This paper examines some of these concepts in my recent project on sea sponges, observed using scanning electron microscopy and transformed into moving images using generative AI. I discuss this work in relation to ideas about machine, computer and scientific vision as visual culture, exploring its creative potential, its aesthetic qualities, and its ideological implications, reflecting on how this may influence our perception and representation of the natural world. While applications of technology often focus on precision, clarity, and efficiency, this paper advocates for a more open-ended, artistic approach and considers its significance for design practice.

Language Design Translating Scents into Colours and Shapes: Colour's Leading Role in Synaesthesia

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The market for scented products like perfumes and air fresheners is growing annually (Forbes, 2023). However, e-commerce platforms offer anosmic experiences, requiring users to imagine scents based on descriptions that emphasize experiences rather than the scents themselves. In a unique approach, since 2018, Universidad Anáhuac, in collaboration with Olfativa Home, has been developing images designed to evoke olfactory synaesthesia. This paper presents the key findings of our work, focusing on a method that translates scents into images with specific characteristics. Firstly, simple layouts must generate modules that allow for repetition. Secondly, the applied colour palettes must be precise. Our research focuses on the role of colour in achieving effective synaesthesia in the market. We found that simple layouts must generate modules that allow for repetition, and the applied colour palettes must be precise. Yet, the most intriguing discovery lies in how colours interact with each other. Concepts such as warm and cold only hold meaning when discussing isolated colours. When colours relate to other tones, various effects emerge–opaque and light tones, for example, can either enhance luminosity or diminish it as colours continuously influence each other. Moreover, we discovered that altering the colour palette within two equally functional shape compositions completely changes the olfactory-visual sensation. Interestingly, this effect is not reciprocal: if a colour palette remains, modifying the shapes does not impact synaesthesia.

The Art Style of Game Character and Environment in Thai Video Games

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The video game industry is a culture of mainly visual language communication, and digital content holds a growing market share in the entertainment industry. Gamers experience joy through game characters, interacting in the cyberspace environment. However, video game studies within the design research field in the Thai mainstream context are limited. This research explores the art style of game characters and environments in Thai video games across different genres. It is based on the theory of pictorial vocabulary, anthropomorphism, and baby-faced bias concepts. Content analysis and descriptive statistics were used to analyze data from a sample of 17 Thai video game titles currently available on the Steam store. The study found that the most popular video game genres, ranked from highest to lowest percentage, were Action/Adventure, Horror, RPG/Strategy, and Visual Novel games. The dominant game character design trend across many genres was the Cartoon/Manga art style, reflecting the concepts of anthropomorphism and baby-faced bias, similar to Japanese cultural influence. Game environments were primarily based on Semi-Realistic and Cartoon/Manga styles to accommodate the varied genres of Thai video games. Additionally, the study observed a correlation between realistic game characters and realistic game environments.

The Impact of Bilateral Readability on Visual Communication

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The intersection of linguistics and typographic design provides a distinct viewpoint on visual communication design. This research seeks to inquire how these typographic expressions, such as variations in reading direction, affect the borders of visual communication. The importance of this kind of typographic expression is to attract the audience's attention, increase retention, and make them think about the content while conveying two different messages simultaneously. In this research, which is conducted using the quantitative research method, various case studies were analyzed by examining practical applications within the framework of visual communication design. This research inquires about the importance of the reading direction and exemplifies the situation through terms including but not limited to ambigrams and palindromes, accepted as typographic expressions. And emphasize their role in visual communication design. This research also uses implementation examples and typographic principles on readability to interpretively support design knowledge and provides a model for the design process that serves as a research blueprint. Therefore, this study questions whether or to what extent it is acceptable to compromise readability for an effective message transfer, and it also questions the practical value of creative typographic expressions that interact with the reading direction in expanding the possibilities of visual communication.

The Rise of the Social Media Siren: investigating TikTok's influence on the Design and Construct of Singaporean Female Identity

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Singapore's robust digital infrastructure fosters a unique environment where social media platforms like TikTok significantly impact youth identity. This study investigates how design elements and user agency interact on TikTok to shape identity performance among female Singaporean Gen Zs. The paper analyses the content and profiles of prominent young women on TikTok in Singapore through case studies. Content analysis examines how design elements (e.g., music, editing, visuals) are utilised within content to construct and express identity. Scholars like José van Dijck of Platform Society and Platform Studies expert Jean-Christophe Plantin emphasised the transformative effect of digital technologies. Platform analysis will explore how TikTok's design features influence content creation and identity performance. The paper identifies how young women leverage design elements on TikTok to express themselves and navigate the platform's cultural landscape. The analysis explores how algorithmic curation and platform affordances interact with user agency in shaping identity performance. The case studies offer valuable insights into the interplay between design, user agency, and identity on TikTok. It contributes to understanding how young women navigate social media platforms to construct their identities within an algorithmically driven environment. Furthermore, the insights will allow businesses to create social media experiences that empower users to curate intellectually stimulating content and engage in meaningful discussions.

Bridging Identities: Mediating Authenticity in Nigerian Visual Design Practices

Ashley Stewart, Lecturer, Graphics, Department of Fine Arts and Design, University of Port Harcourt, Rivers, Nigeria

Nigerian visual design, rooted in traditional art forms such as Igbo Uli motifs, Yoruba Adire patterns, and Northern Nigerian geometric designs, offers a dynamic lens for exploring cultural authenticity in a globalized world. This study examines how these symbols are reimagined through modern visual communication channels like digital typography, animation, film, and social media, positioning Nigerian designers as agents of cultural preservation and innovation. Grounded in postcolonial theory, the research addresses tensions between continuity and change in global design practices. Semiotics decodes cultural narratives within visual forms, while actor-network theory (ANT) maps relationships among designers, technologies, and audiences. Visual culture theory highlights the broader role of media in shaping societal perceptions and identities. Using a qualitative methodology, the study integrates visual ethnography to document traditional and modern design practices, alongside content analysis to compare artifacts and their digital adaptations. Case studies of branding campaigns and advertisements explore practical applications of cultural motifs, while participatory workshops engage designers in co-creating digital reinterpretations of traditional art. Critical discourse analysis examines public narratives, including social media and international reception. The research advocates for an inclusive global visual grammar that respects local narratives and addresses intellectual property concerns to sustain Nigerian visual heritage. By bridging local and global identities, Nigerian designers emerge as cultural mediators, redefining universal design principles through innovative visual representations.

Choreography of Thought: Exploring the Intersection of Typography, Body Movement, and Chinese Philosophy in Contemporary Art Practice

Haocheng Zhang, Student, Ph.D Researcher, Victorian College of the Arts, Faculty of Fine Arts and Music, University of Melbourne, Victoria, Australia

Haocheng firmly believes that the life of art and the art of life are one. Similarly, designer praxis and research are inseparable as they are driven by inquiries into humanity and pursuing how we construct the world with its gifts and traumas from history. His research is in new cross-disciplinary genres and forms as well as combinations of body, natural with graphic design and technology. This project experientially investigates choreography and typography in Chinese philosophical thought–using the context of contemporary art. In particular, it explores the ways in which choreography and typography may overlap in the assumed infinite realm. By dissection the performance HEY, his practical performance project at the 2023 Melbourne Fringe Festival, was used as the main project of critical discussion and research. How to stimulate and externalize the subconsciousness of the body, and explore the potential similarities and connections between the nature of body movement and Chinese philosophical thought? This project will develop a speculative conceptual framework for identifying and mapping productive resonances between the phenomenology of the body and the disciplines of graphic design, exploring choreography as a novel practice area within the discipline of graphic design. He is expanding his interest in typography and experimental performance study from a multidisciplinary approach and trying to draw appropriately from multiple different disciplines to redefine the problems outside of the cultural, design, technique, and body boundaries and trying to reach solutions based on a new understanding of arts and body situations that surround us.

Bridging the Gap: Exploring Mental Health Awareness, Stigma, and Campaign Strategies Among Young Adults in Jordan

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Young adults globally are contending with profound stressors, encompassing economic adversities, occupational pressures, displacement, forced migration, food insecurity, and numerous other challenges. This paper examines individuals aged 18-24 in Jordan, specifically those enrolled in prominent private and public universities within the kingdom, delving into the nexus between design and mental health. This study explores how design methodologies and frameworks can address mental health challenges within this demographic in Jordan, with a particular focus on reducing the stigma surrounding mental health, which acts as a significant intercultural barrier to the prevention and treatment of mental health disorders. The researcher collected data through implementing a mixed method approach that includes (Questionnaire, Interviews, and Focus Group). The findings of the study were categorised across various dimensions, including mental health issues, the impact on help-seeking behavior, the need for mental health awareness campaigns, preferences for visual and interactive media, the integration of cultural relevance, the importance of sustained engagement, and the promotion of early intervention. In conclusion, the study demonstrates a high level of mental health awareness among young adults aged 18 to 24. It serves as an invaluable reference for addressing the prevention and management of mental health disorders in low- and middle-income countries (LMICs) as well as upper-middle-income countries. Furthermore, the research emphasizes the potential of multimedia and digital media as essential tools for designing and implementing effective mental health campaigns.

The Influence of Housing Values on the Design of Built Environment in Kuwait

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Alnajadah Ali

Architects and interior designers are continually faced with the challenge of how to accommodate their clients' social and cultural needs and requirements. The purpose of this descriptive, cross-sectional, study is to investigate Almutlaa City household wants and needs of households in Almutlaa City for their housing projects and the housing values that influence their residential design. Almutlaa City contains around 28,000 housing projects, making it the largest project under construction in the state of Kuwait. This study employed an online survey questionnaire as part of a quantitative research approach. Participants were recruited via social media platforms such as WhatsApp and Telegram. A total of two hundred and nineteen (N = 219) current households took part in this study. Kuwaiti people who were assigned to build homes in Almutlaa City were invited to take part in this study using a purposive sampling technique. The findings of this study revealed that interior design facilities play an important role in Almutlaa housing design. The top economic value in the study is healthy housing, while the top social value for the study participants is a home that provides freedom. The top two psychological values for families in Almutlaa City are comfortable and beautiful dwellings. The findings of the study along with several interior design projects demonstrate housing values and cultural beliefs. This research provides valuable information about how cultures and values of certain people can influence the design decisions of their residents.

New Media, Ethics, and Traditional Design: Digital Aesthetics in Islamic Societies or Communities

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Paper 1: Posting can help – visual media activism and gender violence in Melbourne's Bangladeshi community (Rajoanna Mowly): this study explores digital media as a space for discussion of gender violence, by second and third generation women from the diaspora Bangladeshi community in Melbourne. The study applies uses and gratification theory to investigate how members of the Bangladeshi community in Melbourne used social media aesthetics as a forum for communication of gender violence. Paper 2: Generation Z expectations and experiences – interaction, browsing, and Saudi digital newspaper design (Eman Alkhomees) This study looks at the user experience of two Saudi digital newspapers to compare the reactions and responses of Gen Z Saudi readers to navigation and interaction tasks on two newspaper websites, investigating whether online newspapers with traditional print backgrounds are limited by classic layouts (which may hinder users from browsing content efficiently), and the extent to which these Saudi newspapers offer sufficient tools for Gen Z readers to actively engage in the news process. Paper 3: Ethical digital communication design among Saudi banks during the coronavirus pandemic (Abdulmajeed Alomayri) This study aims to elicit various insights on how banking industry professionals practiced ethical communication design during a defined crisis (the coronavirus pandemic of 2020). Digital communication practitioners from two major banks in Riyadh were interviewed about ethical design, and the visual communication design principles they relied on during the pandemic.

Cultural Rooted Creativity as a Manifestation of Symbols, Heroes and Rituals: The Study of Portuguese Costumes

João Barata, Assistant Professor, Department of Cinema and Media Arts, Lusófona University, Lisboa, Portugal Carolina Fadigas, Phd researcher, Arte dos media a comunicação, Universidade Lusófona, Portugal
Creativity depends on the interaction and reciprocity among the creator/self, one's creativity, community, and culture as stated by Glveanu

(2010). This study advocates that cultural manifestations can be divided in several levels according to Hofstede (1983) and colleagues (2010, 1990). The costumes are designs to represent the very own cultural language and translate national symbolic manifestations. Portuguese Costumes are part of the national lexicon and major messages are understood by its community. This research analyzes the costumes/image of three heroes (Amália Rodrigues, Zé Povinho and Olivia the Boss/ Olivia Seamstress), six symbols (black shawl as past, student's black capes as future, Zé Povinho's costume, Zé Povinho ofensive gesture, Olivia the Boss/Olivia Seamstress Denim trousers as symbol of labor, Salazar as oppression) and one ritual (Fado representing saudade and Amália).

"I LIVE POLITO" - Co-Designing Policies for Inclusion: Shifting to a GEDI Perspective in Higher Education Governance

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The "I LIVE POLITO" workshop initiative at Politecnico di Torino highlights the role of design in shaping social policy by promoting Gender Equality, Diversity, and Inclusion (GEDI) through participatory methodologies. Launched by the Vice-Rectorate for Equal Opportunities, Inclusivity, and Quality of Life, the initiative adopts a strategic and political approach to embedding diversity and inclusion into the university's governance framework. Anchored in a co-design process, the workshop brought together approximately 50 representatives from across the university, including students, faculty and staff, to collaboratively explore key themes: "Equality", "Accessibility" and "Well-being". Facilitated by an interdisciplinary team and supported by an external communications agency, participants identified systemic challenges and proposed actionable strategies to foster inclusivity and enhance organizational well-being. Building on these outcomes, the workshop has initiated an ongoing process to define GEDI actions for the university's next Strategic Plan. This process, structured around three parallel working groups, adopts a bottom-up approach that actively involves students, teachers, technical-administrative staff, and university governance. It seeks to establish clear objectives and implement feasible, shared, and measurable policies, ensuring Politecnico di Torino evolves into a more inclusive and accessible institution. The results of this participatory framework have informed a comprehensive report that will shape the forthcoming Gender Equality, Diversity and Inclusion Plan, aligning with Horizon Europe eligibility criteria. By integrating diversity into strategic planning, the "I LIVE POLITO" initiative demonstrates the potential of design to drive social innovation, fostering ethical and democratic policy-making while enabling sustainable institutional transformation in Higher Education.

MAPArts: Memory Enhanced by Art and Design

Elaine Brodie, Professor, Faculty of Animation, Art & Design, Sheridan College of Applied Arts and Technology, Ontario, Canada

MAPArts is an interdisciplinary research program that teaches the fundamentals of design and basic art-making skills to seniors who are concerned about changes in their memory. It was created as a collaboration between myself, a professor in the faculty of Animation, Art & Design, and Dr. Dupuis, a professor and clinical neuroscientist, from Sheridan College in Canada. Our participants had no formal art training and no formal diagnosis of cognitive impairment, as determined by a screening questionnaire. The program integrates embodied art-making with an existing, clinically proven "Memory and Aging Program" (MAP), developed by Baycrest Heath Sciences in Toronto, Canada. The goal of our research was to discover if adding visual interpretation and art-making, linked to Baycrest's teachings, would enhance participants' retention of memory-enhancing skills. We used pre and post intervention surveys as well as a six-week follow-up session to test our program's results, which were then compared to Baycrest's, which were collected in similar surveys. Our participants' memory and continuing adoption of the skills taught six weeks after the program ended were significantly higher (by about 19%) than Baycrest's own data for their program. Given the number of aging baby boomers, this research suggests potential benefits for an enormous number of seniors. However, additional funding has proven difficult, so far.

Design as a Catalyst for Co-creating Knowledge between Academia and Society: Thoughts on Reflective Design Practice that Addresses Power Dynamics and Fosters Equitable Knowledge Co-creation and Sharing

Sara Ceraolo, Student, PhD, Politecnico di Torino, Italy

The research discusses the role of design as a facilitator of knowledge co-creation between academia and society. Despite the development of engaged university models and Third Stream initiatives, Academia struggles to overcome its traditional detachment from communities and real-world issues (the "ivory tower"). University-society interactions are frequently limited to uneven initiatives that tend to benefit researchers more than the communities involved. Often, societal engagement is restricted to data collection or participatory actions, lacking collaborative processes that add meanings and value to the engagement. This missed opportunity is significant, as shared experiences of knowledge production, interpretation, dissemination are essential for supporting community autonomy and self-determination (Wenger, 2008). Within this context, design–particularly participatory and socially engaged design–shows notable potential due to its inherently collaborative nature (Manzini, 2015). Contemporary critiques, however, challenge the "saviour" narrative of design, emphasising the need for practitioners to engage with greater critical awareness of their societal role and impact (Taboada et al. 2024). Decolonial and queer studies, and Global South onto-epistemologies can support this reflexivity, and concepts such as pluriversality (Escobar, 2018), corazonar (Albarrán González, 2022), and situated knowledge (Haraway, 1988) can be critical tools to address hegemony, exclusion, and cultural extractivism in knowledge production (McGowan et al., 2020) and to underscore the political-ontological implications for design, advocating for increased reflexivity. To discuss these issues, the paper proposes a preliminary framework for reflective design practice that challenges technocratic and Eurocentric perspectives while advocating for an approach that empowers communities and fosters equitable knowledge co-creation and exchange (Fry, 2009).

Generative AI in Senior Footwear Design: Exploring Aesthetic Preferences and Innovation for Aging Consumers

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Chui Shan Lee, Senior Researcher, Department of Design and Architecture, Technological and Higher Education Institute of Hong Kong, Hong Kong

The research aims to elucidate a fundamental scenario of Generative Artificial Intelligence (GenAI) driven image content generation in senior footwear design and development. The study explains how GenAI works with fashion ideas in the footwear industry. The extraordinary potential of AI drives trends to create exquisite designs that captivate the sophisticated preferences of the senior female population. This study integrates a comprehensive analysis of existing academic literature with quantitative analysis findings derived from the survey about the aesthetic design of senior footwear involving the ageing population in Hong Kong. Through examining existing solutions and cases of GenAI-based generation of images, the exploration of the underlying synergy between artificial intelligence algorithms and fashion concepts reveals the perceptions and requirements surrounding footwear design that resonate with senior consumers in the market. According to the survey, women demonstrate a higher acceptance of the aesthetic footwear design. Decisive features of senior footwear have come up with illustrating a new design of pink in colour, flyknit fabric, no fastenings and a one-inch heel height. By intertwining various creative concepts from the findings, the generative artificial intelligence programme generates a series of women's footwear designs. Indeed, these images present abundant visual inspiration, accelerating the evolution of ideas and refinement of product development through designated GenAI Prompt description of keywords, including pink colour, slip-on, flyknit materials, one-inch heel and ultra-high resolution. The result concludes with an exploration of how these design elements can enrich the theoretical concept grounded in scenarios of GenAI-driven footwear styles.

Inheriting Design: A Narrative Methodology for Tracing Cultural Dynamics in Design Praxis

Ann-Marie Conrado, Associate Professor, Art, Art History and Design, University of Notre Dame, Indiana, United States

This paper introduces a novel narrative methodology for exploring how cultural values influence design practice, focusing on design educators' role in transmitting these values to future generations. Positioned within Design in Society: Value, Culture, and Knowledge Systems, it outlines the research framing, data collection processes, and challenges in understanding shared cultural frameworks alongside initial insights. Drawing on qualitative interviews with 35 Scandinavian design educators, the study traces personal histories from childhood through professional roles to reveal how formative experiences and societal dynamics shape design practice and pedagogy. By examining early inspirations and cultural influences, this approach investigates how shared values are embedded into creative practice and teaching, shaping the ethos of the next generation. It highlights the dynamic interplay between individual experiences and collective cultural values, showcasing oral histories as a tool to contextualize design practice, particularly in fostering critical consciousness and examining the role of design in challenging or reifying cultural norms. The focus on educators underscores the importance of mentorship and pedagogy in sustaining and evolving cultural narratives within design. As part of a larger, ongoing project, this research shares emergent themes and insights to encourage reflection on how life histories influence practice and foster more intentional and culturally attuned approaches to design and pedagogy.

Better Everything: Publication Design and the Fruit Industry in Early 20th Century Pacific Northwest

Cristina de Almeida, Professor of Graphic Design, Design, Western Washington University, Washington, United States

This paper explores the strategic role of graphic design in promoting and consolidating the early 20th-century fruit industry in the Pacific Northwest. Specifically, it examines the creation of Better Fruit magazine, a publication intended to advocate for "progressive" (i.e., industrial) farming while attracting affluent European Americans to settle in the region. The magazine's exceptional typography and presswork were intentionally crafted to dispel the notion of the Northwest as a rugged frontier, instead portraying it as a prosperous and refined society. The editors' self-awareness of the publication's aesthetic choices underscores how the magazine's design served as a proxy for the high standards the Northwest fruit industry aspired to.

Integrating Design Thinking into Self-Help Groups: A Framework for Participatory Product Development

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Sugandh Malhotra, Associate Professor, IDC School of Design, IIT Bombay, Maharashtra, India
Gene Bawden

This paper explores the integration of design thinking, particularly participatory design methods, into the operations of Self-Help Groups (SHGs) in India, with the aim of fostering inclusive innovation and enhancing product development processes. Drawing from an extensive literature review, the study examines SHGs as platforms for collective action, focusing on the interplay between traditional knowledge and modern design practices. The review identifies significant gaps in existing design interventions, which often adopt a top-down approach, overlooking the tacit and traditional knowledge of SHG members. The research employs a qualitative methodology, including participant observations, semi-structured interviews, and fieldwork in two pilot case studies. The first case, Jhilmil SHG in Chaygaon, Assam, focuses on soap-making practices, revealing barriers such as limited member involvement in ideation and decision-making. The second case, The Antaran Project in Mirza, Assam, explores weaving practices and highlights challenges in integrating traditional knowledge with innovative design processes. Findings from these cases informed the development of a conceptual framework for participatory design, emphasizing co-creation, collective knowledge sharing, and the empowerment of SHG members. The final conclusion of this study is the conceptual framework, which aims to guide the integration of participatory design in SHGs for sustainable and scalable product innovation. Future work will focus on translating this framework into actionable design thinking toolkits that enable SHG members to leverage their traditional knowledge and skills for collective innovation and market viability. This research contributes to the fields of design thinking and grassroots innovation, offering a model for inclusive development in marginalized communities.

Graphic Design and Literature on the Way to Greater Inclusiveness of Women in Society: A Case Study

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This paper discusses how the intertwining of graphic design and literature can challenge gender stereotypes and work toward more inclusiveness of women in society. Graphic design and literature are historically two fields in which women have struggled for a place and recognition for their work. With notable exceptions, sometimes hidden behind gender-ambiguous names or even design agencies, both areas still lack gender equality. Even major anti-establishment design movements, such as those of the 1960s, Punk, and Rave, have little to show on women's contributions at first sight. One must delve into a rabbit hole to find more about the women of these design phenomena. The same happens in anti-establishment literary movements that impacted graphic design, such as the Beat Generation, in which women are regarded more as muses or companions rather than being known for their work. This research explores how graphic design can work against today's women's social bias together with literature through the case study of Pro.Vocazione, a contemporary Italian feminist magazine that challenges the public with the visual outcome that the intertwining of graphic design and literature processes propose.

A Review on the Relationship Between Social Impact and Design Thinking

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Design thinking gives the opportunity to use designer tools to solve problems of all sorts. Specifically, solving social problems and creating social impact has been the issue of academic research and professional practice. In recent years, notions like social innovation and social entrepreneurship with the purpose of creating social impact have been used and studied together under the umbrella term of design thinking. This paper focuses on the relationship between creating social impact and using design thinking methods to solve social problems. To identify their potential, the study examines the theoretical structure of design thinking, social innovation, and social entrepreneurship through social impact-oriented projects. As long as providing a review of the common points between the two; especially the way they try to tackle wicked problems; examples of projects created within the framework of design thinking are exemplified to demonstrate this relation.

Being, Bearing, Becoming: Navigating Cross-cultural Codesign through Practices of Reflexivity

Ashleigh Dharmawardhana, Research Assistant, Media and Communications, RMIT University, Victoria, Australia

Whilst cultural diversity in codesign is celebrated, sessions where practitioners work outside of their own culture can often become challenging if practitioners are ill-prepared to acknowledge their position, and work alongside epistemologies outside of their own. In this paper, I explore how theories of reflexive practice can provide this preparedness for cross-cultural codesign. Reflexivity, where personal histories are reflected upon and situated within broader social contexts, is evidenced to help dampen the effects of cultural bias, often implicated in codesign. Despite this, reflexivity is not strongly elucidated within current training frameworks. This study works to discover and embed methods of reflexive practice into a codesign training toolkit. Prior to its creation, a thematic analysis of ten toolkits is conducted to ascertain if, how, and where training on cultural awareness, reflexivity, and positionality exists within current approaches. I also integrate autoethnographic writing into this work, to make explicit the tacit knowledge inherent to this personally-driven research. Presenting a new training framework, this work draws from Buddhist conceptualisations of the self as interconnected, impermanent and ever-changing, which is found to promote deeper levels of introspection; spaces where one can sit with the discomfort arising from reflection, and the unpleasantness oftentimes associated with discoveries of privilege and bias. Proposed here is that adapting to discomfort in this manner prepares practitioners to work alongside, not against, unfamiliar ways of knowing; I argue that this is the central tenet in ensuring all cultures are respected and empowered to participate in codesign practices.

Digital Twins in Public Services and Stakeholder Engagement for Systemic Innovation

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Public sector organizations face the dual challenges of constrained budgets and increasing citizen demand for accessible, high-quality public services. The Digital Twin (DT) approach offers significant potential for optimizing processes and enhancing decision-making. However, current implementations predominantly focus on technical aspects, often neglecting the human dimension. The contribution investigates how Service Design (SD) can address these challenges by incorporating Human-Centered Design and Systemic Thinking into DT development for the Public Sector. The focus is on optimizing DT implementations through stakeholder engagement, ensuring these systems are efficient and collaboratively designed to meet diverse user and organizational needs. While SD has been introduced in DT projects, its application has often been limited to economic frameworks, such as value creation through service-dominant logic. Additionally, Interaction Design–a discipline within SD– primarily focuses on interface development in DT projects rather than broader systemic applications. These gaps highlight the need for a conceptual model emphasizing SD's capacity to align DT implementations with user and stakeholder priorities. Through a literature review, this study develops a conceptual model for integrating SD into DT projects for the Public Sector, emphasizing stakeholder engagement. The model was applied in a case study of a Public Building with DTs for resource optimization, where SD methods were employed to engage key stakeholders, focusing on their interactions with the DT system. Findings show how SD-driven stakeholder engagement aligns DT projects with organizational goals, enhances workflows, and addresses human-centered priorities, while research challenges remain in variability across public sector contexts.

A Framework for Visual Analysis of Public-Interest Advertisement in China

Allana Gama, Student, PhD Candidate, Shanghai Jiao Tong University, Shanghai, China

Invisible, strong, and ubiquitous, National Identity is a concept that permeates and shapes modern life, yet its significance often goes unnoticed and underappreciated. The necessity of studying it as a powerful communication tool is often not considered when we talk about graphic design heritage. This research proposes a framework where design acts as a tool for nation-building processes, translating its sociological concepts into graphic features and using it as part of a visual analysis of graphic artifacts and its proper archival. Using these concepts, a method for cataloging public-interest advertisement signs was proposed. The catalog register includes informational, graphic, and symbolic content, such as location, color dominance, and style of the message. A mix of qualitative, visual and historical research was used to validate this framework. We collect information on how Chinese citizens and foreigners living in China react to public-interest advertisement signs and their graphic features. The results suggest that when analyzed as symbolic content, National Identity has the same functions as the graphic elements of Visual Literacy. The results also suggest that foreigners also present National Identity ideas and feelings towards their host nation, as they often recognize themselves as the receptors of the visual messages contained in the street signs.

Proposing Indonesian Comic Ecosystem-making through Systemic Design: A Social Innovation through Artist-led Co-design

Gideon Hutapea, Assistant professor, Faculty of Art and Design, Universitas Multimedia Nusantara, Indonesia

After many unsuccessful national plans, steps towards systemic thinking and new leadership to improve the Indonesian comic ecosystem have emerged. The research investigates comic artists' leadership capability in improving the ecosystem by understanding it as a systemic problem. Artists are regarded as creative agents capable of designing ("designers") their own ecosystems in addition to excelling in their material culture. The research shifts away from government reliance and put artists who were previously unrecognized to lead the effort. It reveals artists' inventive skills and to become theoretical prototypes of artist leadership interacting with the system's inhabitants. The effort is driven through systemic design methodology, operating through participatory design in social innovation to empower all inhabitants as "designers" in defining and achieving goals and devising enabling systems. By applying multimethod research, the first step is a holistic diagnosis analyses the Indonesian comic complexities. The result is a Giga map, which allows comic artists to focus groups on identifying system challenges in the next step. Focus groups then offer a mental model as a reference point to inform the artist-led co-design process. Co-design convenes system inhabitants as "designers," providing diverse skills, insights, and ways of thinking. The output is a white paper outlining recommended actions. The research is limited in size and scope and acknowledges the risks of unforeseen disruption caused by power shifts and government (dis)empowerment. In conclusion, this new understanding presents political and ethical power shifts, the intriguing possibility of artist-led system transformation, and creative methodologies.

A Study of Increasing Young Adult Civic Participation in Local Elections through Social Political Roleplaying: An Interactive Game Development, Denizen

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Local elections suffer from the lowest voter turnout across the United States despite these elections holding major influence in residents' daily lives. Additionally, young and voting-aged adults have different frameworks for understanding and engaging with politics from previous generations. This is rooted in their reliance on trusted personal networks in an age of information as well as their waning interest in traditional political institutions. This study utilizes survey and qualitative interview data to examine how young, voting-aged adults (ages 18-29) are motivated and discouraged to engage civically. Through iterative testing, we explored how interactive games help encourage them to become more involved in their local elections by demystifying the perceived hostility of politics, helping them learn more about their local environment, and fostering a cooperative model of civic engagement based on guided scenarios. A tabletop game, Denizen, was developed to help facilitate political discussions among young adults and help them learn more about local issues. The outcomes of this study underscore the importance of utilizing new engagement methods for young adults to re-engage them in traditional electoral duties. It also highlights the importance of knowledge-building and developing political expertise in improving civic motivation.

Podcast Studio Design: Form, Culture and Technology

Kim Lau, Associate Professor, Academy of Film and Creative Technology, Xi'an Jiaotong-Liverpool University, Jiangsu, China

This project highlights the design and commissioning of a media production hub in Singapore, completed in early 2024, emphasizing innovation for a traditionally audio-only form, facilitating cross-cultural interaction and multidisciplinary collaboration, and materialized with technology. The hub incorporates podcast studios, video studios, and post-production spaces tailored to the diverse needs of multilingual production teams working in English, Chinese, Malay, and Tamil. Key facilities include the Daily Podcast Studio, equipped for audio-centric content, hybrid video conferencing, and advanced self-operated automation systems; the Visual Podcast Studio, optimized for emerging video podcast formats and doubling as a compact video production space; and the Immersive Podcast Studio, featuring advanced audio technologies for spatial sound experiences. Additionally, XR Podcast capabilities are provisioned for future expansion as part of the Video Studio's adaptive design. This project's development involved a multidisciplinary team of audio-visual, interior design, mechanical and electrical (M&E), and acoustics consultants. Engaging diverse stakeholders, including production teams and management, was crucial in ensuring culturally responsive and user-focused outcomes. Spatial planning presented significant challenges during concept design, compounded by an intensive design schedule post the spatial design lock. Advanced audio-visual and networking infrastructure supports distributed production workflows, with a Command Center ensuring centralized control and monitoring. Navigating critical design changes, whether unforeseen or client-requested, required flexibility and innovation. Ultimately, this co-working production hub exemplifies Design for Society, fostering an inclusive and adaptable space that encourages cross-cultural collaboration and creative exchange. The presentation will feature visual examples from both the design process and post-commission utilization.

Designing Inconspicuous Social Inclusion at the Neighbourhood Level: Findings from a Pilot Programme

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Community inclusion efforts are mainly centre-based and driven by professionals. Doing inclusion can also be tricky: so-called inclusive practices can be perceived to be patronising or even oppressive. It is perplexing to those trying to help when they unwittingly get accused of doing harm. Can inclusion be achieved inconspicuously and unremarkably without calling out the marginalised identities of those you are trying to include? We take on this social design challenge by forming and supporting small groups to integrate marginalised individuals (e.g. people with disabilities and isolated seniors) into the communal life of their local neighbourhood. The solution is anchored by local walking tours, which creates an experience which does not feel like a social programme but is actually highly intentional in its design. First, a 'target of inclusion' is asked to show the group around their neighbourhood and this walkabout acts as a kind of unobtrusive 'needs assessment' and 'accessibility audit'. Next, neighbourhood tours for all are organised with pit-stops at different community hosts (social service agency, business, church etc.) and this acts as a kind of inconspicuous 'community asset mapping' without having to formally conduct such an exercise. We share findings on the outcomes, implementation challenges and implications for community building.

Solarpunk: Designing a Better Tomorrow?

Juliette Mac Donald, Chair Craft History and Theory, Edinburgh College of Art, University of Edinburgh, United Kingdom

Solarpunk is a movement which aims to replace society's apocalyptic and dystopian views of climate change with an alternative more optimistic vision of what the world might look like in the near future. Emerging in 2008, Solarpunk has been described as an eco-futurist movement which encourages us to avoid catastrophe by imaging a future that people would like to live in, rather than avoid. Such powerful utopian ideas arguably have their roots in William Morris, News From Nowhere, and Buckminster Fuller's beliefs that things can't be changed by fighting reality but rather by creating a new model. I believe Solarpunk is an ideal catalyst for the design community in that it provides an invitation to us all to put our imaginations to work to seek practical actions and interactions. The Gardens by the Bay in Singapore (2012) the Beijing City Library, created by Snøhetta (2018-2023) are wonderful examples of what can be achieved when design balances nature and technology. Through interpretive research methods this paper explores the design affordances and solutions which might emerge from a solarpunk rewilding of our imagination.

Signs of Decolonization: Processes for Change Making by Brave and Kind Designers

Susan Mavor, Owner/Founder/Principal, Environmental Graphic Design, Lost & Found Design, British Columbia, Canada

This study considers means of addressing decolonization–one sign design at a time. It will show how to create positive social change in practical ways through the design of simple wayfinding and interpretive signage. This highly visual presentation will share practical lessons learned through collaborative projects where, in addition to designing signage form, the designer shapes teams and processes. Ideas shared are the distillation of on-going autoethnographical design research which is embedded in professional design projects. The imperatives of design business market economics are explored in delicate balance with higher order ethical goals of intercultural reconciliation. The presenter is a professional design entrepreneur, mentor, and current PhD scholar with thirty years of experience working to support marginalized communities in putting their language and stories back on the land. It shows the power of making small changes to address the power imbalance of colonialism in relation to Indigenous peoples. Examples shared in the address come from the designer's experience working with Indigenous communities and government within Canada. Learning outcomes include de-centering the designer, active listening, empathy, discovering shared values, connection to the land, personal empowerment, and deepening psycho-spiritual growth.

Evolving Design Practices - Integrating Human-Centred Methodologies in Perth's Small-Scale Graphic Design Projects: Adapting to Systemic Approaches for More Effective Client Engagement and Sustainable Solutions

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Graphic design, as a discipline, has continually evolved to meet the shifting needs of clients and industries. While its application in large-scale projects is well-documented, there is limited literature on smaller-scale graphic design projects, particularly in geographically isolated regions such as Perth, Western Australia. In Perth, graphic designers are often hired to produce artefact-driven outputs like websites, business cards, or brochures. The broader strategic value of graphic design skills tends to go underappreciated. Additionally, holistic, human-centred design methodologies, such as service design, are perceived as more valuable yet are frequently seen as complex and lacking clear frameworks for application. This research investigates how holistic, human-centred design processes can be applied to small-scale graphic design projects typical of Perth. It also explores the potential for graphic designers to move beyond artefact creation to embrace more integrated, systemic approaches. The findings indicate that increasing complexity in project problems requires contemporary methodologies such as design thinking and service design, which engage human-centred approaches. However, Perth-based designers face challenges in adopting these methods because they are often poorly defined and difficult to explain to non-designers. Tools such as the double diamond framework, while useful, can also be problematic if followed too rigidly. This study argues that designers struggle to communicate the value of holistic methodologies to clients, underscoring the need for clearer, more adaptable design processes in Perth's small-scale project landscape.

Exploring Future Scenarios of Sustainable Food Design: Simulating Dietary Lifestyles through Serious Tabletop Game

You Qin Fang, Student, Master, National Cheng Kung University, Tainan, Taiwan

With the promotion of the 2050 net-zero carbon emission policy, sustainable diets have garnered increasing attention. Among the four key pillars of sustainable diets–environmental protection, health and nutrition, economics, and socio-cultural aspects–the socio-cultural dimension remains underexplored despite being a critical factor in advancing sustainable dietary behaviors. This study aims to design scenarios for future sustainable dietary lifestyles and to explore how sustainable food design can foster behavioral shifts towards sustainable eating. Targeting individuals with sustainability awareness who frequently dine out, this research employs serious tabletop games as a medium and adopts qualitative research methods. The game design, based on preliminary investigation, centers on scenario simulation. The study investigates participants' perceptions and imaginations of future sustainable diets by engaging them in food choices, scenario interactions, and responses to challenges. Data collection encompasses game process observations and focus group interviews, followed by thematic analysis to identify key insights. Ultimately, the research will construct three distinct future scenarios of sustainable dietary lifestyles. These scenarios will provide novel perspectives and methodologies for sustainable food design, highlighting how scenario design can facilitate sustainable dietary transitions and inspire new directions for the field of food design.

Pursuit of Happiness in Chennai: Designing an Intervention to Promote Happiness and Wellbeing among Young Adults

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This research investigates the potential of design to foster happiness and well-being among young adults in Chennai, India, addressing the region's low happiness levels as indicated by global reports. How can design play a role in augmenting happiness? By combining human-centered design and positive design frameworks, the study explores how carefully crafted design interventions can transform fleeting moments of happiness into long-term well-being. Drawing on historical, cultural, and psychological perspectives, the study examines the factors influencing happiness, including societal norms, mental health challenges, and environmental contexts. The methodology includes mixed methods research through qualitative interviews with key stakeholders, and surveys assessing happiness levels and needs. A cultural probe kit to understand what happiness means to young adults in Chennai would also be used to collect and understand data on happiness in Chennai. The findings aim to provide actionable insights into how design can reshape behaviors, perceptions, and societal structures, contributing to a culture of happiness in Chennai. This research underscores the transformative potential of design as a tool for addressing mental health challenges and promoting holistic well-being, a fairly new concept in Chennai.

Designing Accessible Social Futures with the Stylus Project: A Techno-Somatic Design Approach Towards Disability Inclusion

Stephen Fernandez, Lecturer, User Experience Design, Wilfrid Laurier University, Canada

Technology shapes how the future of society is imagined and constructed. Yet, social imaginations about the future tend to exclude disability. Amid such imaginations about social and technological futures, the accessibility of designed objects and interactive experiences continues to impact the lives of people with disabilities. Drawing on a techno-somatic design approach that uses critical making techniques and open-source digital design software to create 3D-printed assistive technology, the Stylus Project seeks to improve the quality of how people with disabilities interact with digital devices. A techno-somatic design approach foregrounds what Garth Paine describes as a "sensorial relationship" between the user's "intentional effort" and the "pliability" of a designed object, such as a stylus. Current stylus designs require considerable hand mobility to manipulate the tool, which can be strenuous and inaccessible to people with disabilities. Building on critical insights from people with limited hand mobility, we designed a "snap-band" forearm attachment that does not require precise hand and finger movement to manipulate. By integrating this attachment into a 3D-printed stylus, users with limited hand mobility can interact comfortably with digital touchscreens and perform tasks like ordering a pizza or socializing with others online. Indeed, the Stylus Project materializes accessible social futures that include people with disabilities. By illuminating key findings from user-testing sessions that assessed how our stylus facilitates accessible interactions with digital devices, this study demonstrates that a techno-somatic design approach can advance the accessibility of interactive experiences and create accessible social futures that include disability.

Exploratory Observations in Irish Women's Health Services: A Tool to Scope Opportunities for Responsible Design

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Eoin White, University of Limerick
Muireann McMahon, University of Limerick

This study outlines the use of exploratory observations as a scoping tool for design-based research in healthcare domains. It aimed to explore the current state of healthcare provision across women's health services in Ireland to identify future research directions and opportunities for responsible design interventions. Amidst growing global sustainability challenges, there is a pressing need to leverage design to drive lasting, sustainable change in healthcare services. Furthermore, the lack of innovation in design for women's health highlights an urgent need for focused, impactful design solutions within this under-researched field. Coupled with background research, exploratory observations were completed across a range of obstetric and gynaecological clinical settings in the Mid-West Region of Ireland. These settings included outpatient gynaecology clinics (ambulatory and referral clinics), a high-risk antenatal clinic, and guideline implementation meetings. In total, 31 hours of active observation were conducted across these settings to build an understanding of systems, processes, and products used within them. Observations were documented through detailed fieldnotes, which were subsequently used to identify opportunities for responsible design and future research directions in the field. This study found that conducting exploratory fieldwork at the outset of design-based research is a valuable tool for identifying opportunities for future research and for defining research scope. It also contextualised the realities of care provision within the sector, an insight essential for defining future research directions. This study triggered a future research direction focusing on reducing the environmental impact of maternity care services without compromising the quality of care provided.

Apple Philosophy 2.0: Using Service Design to Drive Service Quality Excellence at Tan Tock Seng Hospital,

Cheyenne Lee, Manager, Quality Service Management (Patient Experience Design), Tan Tock Seng Hospital, Singapore
Siew Yong Loh, Assistant Director, Quality Service Management, Tan Tock Seng Hospital, Central Singapore, Singapore

Traditionally, hospitals have provided paternalistic care, but as patient demographics and expectations evolve, so too must our approach to service. From October 2023 to May 2024, Tan Tock Seng Hospital (TTSH) embarked on a comprehensive people-centred design journey to redefine service excellence, aligning with the values of modern patients and caregivers. Leveraging existing patient feedback and various data, the hospital initiated a data-driven process to develop a preliminary patient persona, followed by interviews across various hospital settings to validate and refine these insights, culminating in the creation of the patient persona, Ashley. Ashley represents a patient who seeks a partnership with healthcare professionals, valuing recognition, proactive care, and personalised interactions. To ensure that Ashley's values are reflected in every aspect of care, TTSH developed a service persona named PaCEy, embodying the core values of Care, Empathy, and Professionalism. PaCEy serves as a guide for staff, shaping their interactions and ensuring consistency in the delivery of patient-centered care. This persona is not merely conceptual but is integrated into actionable strategies through workshops, communications, and training sessions that have equipped staff with the necessary knowledge, skills, and attitudes to personify PaCEy in their daily work. Furthermore, TTSH has refreshed its service philosophy–Apple Philosophy 2.0–which encapsulates the hospital's commitment to delivering "Care. Best For You. With You." This philosophy, supported by the PaCEy persona and a structured framework, ensures that all staff are aligned in their mission to uphold and enhance service standards across the hospital through a design-led approach.

Cultural Identity: An Appreciation of Chinese Culture in Western Fashion Design

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In fashion, producers and consumers have long been fascinated with the differences, the 'exotic', ambiguity, and uncertainty through style-fashion dress (Tulloch, 2010; Kaiser, 2012). In the West, many designers like and are fascinated by the "exotic" brought by the difference between the Eastern culture and their local cultural codes. Some designers, through time, have been appropriating these codes without paying homage to the original culture. In this research, the author investigated the current status of cross-cultural design research in the field of fashion design, emphasizing that Italy and France, as one of the world's leading fashion design markets, occupy an essential position in the field of fashion. In addition, the researcher shows and analyzes the fashion design works produced by some famous Western designers after understanding and appreciating Chinese culture and then carries out a deeper analysis and summary relying on the framework of the Chinese clothing symbol system. The conclusions drawn can help those who do not grow up in this cultural context to understand the use of these specific regional cultural symbols in the field of fashion from the perspective of cultural appreciation, and meanwhile, provide case references for designers who want to design inspired by Chinese culture.

Solarpunk: Designing a Better Tomorrow?

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Solarpunk is a movement which aims to replace society's apocalyptic and dystopian views of climate change with an alternative more optimistic vision of what the world might look like in the near future. Emerging in 2008, Solarpunk has been described as an eco-futurist movement which encourages us to avoid catastrophe by imaging a future that people would like to live in, rather than avoid. Such powerful utopian ideas arguably have their roots in William Morris, News From Nowhere, and Buckminster Fuller's beliefs that things can't be changed by fighting reality but rather by creating a new model. I believe Solarpunk is an ideal catalyst for the design community in that it provides an invitation to us all to put our imaginations to work to seek practical actions and interactions. The Gardens by the Bay in Singapore (2012) the Beijing City Library, created by Snøhetta (2018-2023) are wonderful examples of what can be achieved when design balances nature and technology. Through interpretive research methods this paper explores the design affordances and solutions which might emerge from a solarpunk rewilding of our imagination.

Signs of Decolonization: Processes for Change Making by Brave and Kind Designers

Susan Mavor, Owner/Founder/Principal, Environmental Graphic Design, Lost & Found Design, British Columbia, Canada

This study considers means of addressing decolonization–one sign design at a time. It will show how to create positive social change in practical ways through the design of simple wayfinding and interpretive signage. This highly visual presentation will share practical lessons learned through collaborative projects where, in addition to designing signage form, the designer shapes teams and processes. Ideas shared are the distillation of on-going autoethnographical design research which is embedded in professional design projects. The imperatives of design business market economics are explored in delicate balance with higher order ethical goals of intercultural reconciliation. The presenter is a professional design entrepreneur, mentor, and current PhD scholar with thirty years of experience working to support marginalized communities in putting their language and stories back on the land. It shows the power of making small changes to address the power imbalance of colonialism in relation to Indigenous peoples. Examples shared in the address come from the designer's experience working with Indigenous communities and government within Canada. Learning outcomes include de-centering the designer, active listening, empathy, discovering shared values, connection to the land, personal empowerment, and deepening psycho-spiritual growth.

Unscene - Unzine: The Plural Affordance of Zines as a Design Medium to Enable Different Ways of Thinking, Learning and Experimenting for 'Gen-Z' Social Constructs

Sayali Milind Phadke, Experience Design Lead, Product Design, Dentsu International, Maharashtra, India

This paper is based on 'Unscene Un-zine'- a design research project examining the plurality of zines as a design medium enabling design educators & students to think, learn and execute editorial design processes from the lens of 'Gen-Z' social constructs like 'situationships', 'FOMO', social quotient, 'ghosting', 'YOLO', gender expectations, gender roles, etc and how they impact the affordance of zines as a design medium. The research methodology in this project leverages learning from Gen-Z's unconventional sources like physical zines, digital webcomics, meme channels, and online communities from diverse cultures, age groups and gender roles to examine how the design of zines has a multi-fold impact on society to drive user behaviours like liking, creating content, 'trolling' engaging in comment wars etc. The pedagogy in this project deconstructs the plural nature of zines to demystify design concepts like progressive disclosure, word pictures, tone of voice and intuitive typography through quick ideation, and 'yay or nay' exercises. It includes teaching experiments from a series of zine workshops urging students from diverse demographics to acknowledge their own Gen-Z struggles, and release them by designing zines using blind typography and word pictures to analyse how Gen-Z's social constructs influence zines; thereby analysing how society impacts the design of zines transitively. The project outcomes analyse the plural ways of designing for zines serving as a product of society impressions; and at the same time highlight the affordance of zines as a design medium to create social impact.

Designing for Mental Health Through Singapore's Cultural Lens: Investigating Ways to Cultivate Cultures of Healing and Fostering a Culture of Care Among Young Adults

Saradevi Ng, Student, MA Design, Lasalle College of the Arts, Singapore

In September 2024, Singapore revealed alarming rates of "1 in 3" young adults with symptoms of poor mental health. This news however is a recurrent trend catapulting from the COVID-19 pandemic. This research investigates three key questions, how does Singapore's cultural norms affect mental health among young adults? How can Singapore tap into cultural ways of being to heal as a collective and lastly how can a culture of care be built among young adults? Three research gaps were identified. Firstly, mental health is a western concept, with culturally different beliefs of mental health between East and West. Secondly, young adults, despite increased mental health awareness, struggle to manage their mental wellbeing. Thirdly, older generations exhibit greater adaptability compared to younger generations, prompting the potential to foster resilience through ancestral and cultural ways of wellbeing. This paper proposes a new approach to mental health through the combination of habit building and design thinking. Resilience building and design thinking shares similarities, as both processes are iterative rather than linear. Both incorporate elements of reframing challenges and coping with problems. This research aims to expand the boundaries of both design and approaches to mental wellbeing by utilising culturally appropriate, holistic approaches to mental health, in combination with design's reiterative process. Hence, focusing on designing interventions for a more resilient and mentally healthy generation of Singapore young adults.

Shared Visual Experiences: Exploring the Application of Design in Cultural Storytelling

Narges Panahandeh, Assistant Professor of Graphic Design, Art and Design, East Carolina University, North Carolina, United States

Effective communication and a sense of togetherness thrive on mutual understanding. However, cultural boundaries often limit our ability to empathize with and comprehend each other's concerns and experiences. Shared Visual Experiences is a project that seeks to dissolve these boundaries by merging elements of American and Iranian visual cultures. Through a combination of illustration, typography, and storytelling, this project creates artworks that interweave traditional Iranian and contemporary American art and popular culture, fostering a shared space for cultural dialogue. This series of visual works explores the power of imagery in evoking emotions, memories, and collective identity. By visually juxtaposing popular heroes from Iranian mythology and American Hollywood culture, iconic characters, and national symbols, the work highlights how different cultures construct narratives of heroism, love, identity, and history. This juxtaposition enables individuals from different cultures to visually immerse themselves in a cultural medium where the boundaries have been challenged, redrawn, or erased. This immersion allows people to have bursts of feelings and memories that overlap with those of others, bringing them closer together. Five art pieces are included in this series. Using digital illustration, motion design, and typography techniques, Shared Visual Experiences explores hybrid design and highlights the potential of design in breaking barriers and creating an interconnected world.

Trends versus Paradigms in Fashion Cycles Equal to Niche Markets: A Genderless Clothing Approach

Benilde Reis, Professor, Department of Cinema and Media Arts, Lusofona University / CICANT, Portugal Madalena Rocha Pereira, Vice-President of Textiles Department; UNIDCOM I&D Member and FibEnTech, Textiles Department, University of Beira Interior, Castelo Branco, Portugal

It is inevitable to mention the fact that fashion is changeable. Just as fashion codes are changeable, gender has been continuously recreated and evolving. All products have a life cycle, and fashion products are no different in this respect. When it comes to fashion and its creation, looking back (in terms of what has already been done) is always part of it. Usually, everything we wear nowadays was once a trend in another decade of the past. The fashion life cycle is the length of time that a particular style or look is widespread, and this can vary, as we will confirm later. Fashion changes because the zeitgeist changes, meaning the spirit of the time changes. Fashion exists where the social system is fluid. In this way, genderless clothing is undoubtedly a reflection of our time because we are going through a time when, socially and politically, the fight for equality between the sexes is remarkable, influencing fashion designers to develop genderless clothing. As far as niche markets are concerned, these can also be part of fashion cycles. This is because, although they do not reach the masses, they have some impact as a niche market, which is notable through designers and brands that are successful in this market.

Navigating User Experience for the Repatriation Movement: An Interface for Decolonization and Reconstruction of Museum Spaces

Anika Sarin, Assistant Professor of Design, Graphic Design/Art, California State University Los Angeles, California, United States

With the movement to repatriate stolen art from South and Southeast Asian countries, museums in the United States are beginning to return artifacts and sacred objects to the country of origin. The app interface with its easy navigation and concise information architecture serves as a discourse on the colonial histories of museums with a focus on decolonizing and reconstructing museum spaces through increased repatriation efforts. Central features of the app including educating the public on the current location, context, and histories of the artifacts and archiving a collection of resources on published work. The app users experience guided rituals and performances meant to be used by ethnic groups in museum spaces as a way to pay respects to the scared sculptures and to redefine the otherwise restricted interactions in museums. The app interface leads users to a safe pathway for sharing information on undiscovered looted objects, especially the stolen artifacts in private collections. A user friendly interface assists with interactions and conversations around the use of culture as aesthetic through the commodification and exploitation of religious objects. The app initially designed for the 'Return Home' exhibition on stolen Cambodian Khmer Buddha statue heads by Phung Huynh, serves as a model for UI/UX Design focused on facilitating collective action and building an online archive for repatriation efforts.

Citizen Participation Design Innovation and Citizen Science Program for Solving Marine Litter Problem: Five Years Practice with Three Local Governments in Japan

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The field of design has expanded across different disciplines in recent years, extending into areas tied to community, government, and science. However, there is still a lack of research on how to design programs in which designers become catalysts over a long period of time, enabling communities to be a part of addressing the international problem of marine litter and implementing it through design. Over the past five years with three Japanese local governments I have led and worked with my team to conduct program design research and implementation, engaging governments, scientists, local businesses, and residents in design-driven, community-participatory solutions and observation to the marine litter problem. My design team comprises people with diverse backgrounds, including experience in design, product design, and engineering. The design team has produced a wide variety of program activities and outputs for the communities, including workshops, litter pickup products, visual guidelines, and videos. A review of the programs included interviewing the various stakeholders, to explore the elements of design that were effective or not. In our analysis, we focus on the differences in design perspective solutions from the activities conducted in the three municipalities, according to the characteristics of each region. This work contributes to academic research and public knowledge by presenting our findings from design-driven programs that involve the community, government, and academic researchers in solving the marine litter problem in Japan.

Public Health Murals as Practice Based Learning: Design Makes a Positive Impact on Women's Health in Malawi

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Edgar Mbalame

Design has the capacity to improve public health through device design, service design, and visual communication. A robust partnership between Virginia Tech and the Malawi University of Science and Technology has brought multiple disciplines together to address women's health in the Malawi. This paper documents a case study of supporting students in professional practice through a community engagement project in Malawi. Developing coursework to generate public art pieces addressing mother and baby care at the Thyolo District Hospital demonstrated best practices for partnerships and the importance of contextual research. Students worked to improve their technical skills, they developed a project proposal for approval by their community partner, the faculty was challenged to support the students in off-campus work, the medical facility welcomed the students to do work on the visual communication of important health facts, and group is now prepared for further projects and they have been invited to design original large scale public murals. The significance of this project is the establishment of how to cultivate working relations between universities and medical care facilities, as well as supporting students and their communities, demonstrating a sustainable model of professional practice in design education.

Decolonial Design and Indigenous Placemaking in the Wairaka Precinct

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Tanya White, Kaitiaki Taiao / Kaupapa Māori Research Advisor, Maia Māori Centre / Ngā Wai a te Tūī Māori and Indigenous Research Centre, Unitec Institute of Technology, Te Whare Wānanga o Wairaka, Auckland, New Zealand

The current and former campus areas of Unitec Institute of Technology are undergoing massive change because of the Carrington Residential Development, an urban intensification project that will eventually account for thousands of new residents and visitors here. Puna (pools, streams) nurture life in and around their flow paths, but are also vulnerable to negative consequences of the prevailing urban development paradigm. Many puna traverse the campus, connecting it with other parts of Auckland city. Puna Kōrero is an interdisciplinary design research project which provided opportunities for ontological reorientations in the Wairaka precinct, such shifts in worldviews holding the potential to improve the quality of relationships between people and this place over time, particularly its wāhi tapu (sacred sites), Te Wai Unuroa o Wairaka (an aquifer fed freshwater stream) and Te Rangimārie Pā Harakeke (a plantation of flax). Developed over several months, the project brought together staff, students and the local community across three collaborative strands culminating in a public event celebrating Matariki (the Māori new year) through a projection-mapped motion design show, the launching of a new puoro ataata (music video) Manaakitia and the prototyping of a mobile app to share stories of six significant sites inclusive of the marae (Māori meeting house) and its wāhi tapu. This poster presents Puna Kōrero as a case study demonstrating the importance of ontological design in ecological and cultural heritage protection; culturally responsive design and principles of co-design are understood to be critical to efforts to re-indigenize (decolonize) urban space and place.

Shaping Place Identity with Storytelling

Christabel Teng, Vice Dean, Faculty of Art and Design, Nanyang Academy of Fine Arts - University of the Arts Singapore, Central Singapore, Singapore

This study investigates the impact of rapid urbanisation on place identity, focusing on Sembawang, a residential district in Singapore. By leveraging narrative approaches within the field of cultural geography, the intention is to uncover the stories that can shape Sembawang's identity. The findings of this research provide insights to enhance the sense of affection and attachment between the residents and the place. The study details the methodology for uncovering interconnected stories within Sembawang to shape its place identity. It acknowledges the diverse voices and tensions of the residents while exploring how their varied experiences and shared stories foster a sense of belonging and resonance within the community. Using narrative inquiry, this research surfaces the multiplicity of stories within the place to understand individuals' emotional connections with their surroundings. To capture Sembawang's identity beyond its physicality, affective and non-representational dimensions are employed as an analytical framework. This approach investigates the interplay of emotions in shaping human experiences and interactions with the environment, portraying the nuanced, lived experience. By asserting the importance of surfacing diverse human experiences and identifying the collective resonance of these stories, Sembawang's identity can surface, fostering a sense of resonance and belonging among its residents. In conclusion, this study highlights the role of interconnected stories in shaping Sembawang's identity. It cultivates a sense of affection, attachment, and belonging among all its inhabitants, strengthening the community's overall sense of place.

Facilitating Lifestyle Changes through Self-reflection, Personal Values and Experienced Health: A Transdisciplinary Design Methodology

Naomi Van Stralen, PhD Candidate, Interaction Design Group, Faculty of Engineering Technology, University of Twente, Overijssel, Netherlands

Personal health technologies, such as smartwatches and mobile applications, can inform people about aspects of their health in real-time, making them a popular way to gain personal health knowledge. Such technologies are therefore relied upon to support people in lifestyle changes. However, these devices prioritize objective health indicators and do not account for or reflect the influence of people's individual values and the context of their day-to-day life on how they experience and build their health, nor their health identity. This lack of understanding of health identity in personal health technologies can limit uptake and long-term use. To explore the integration of people's health identity in building health and wellbeing through personal health technologies, a transdisciplinary design research methodology was developed to engage people in participatory activities that provided opportunities to reflect on experienced health, personal values and daily life. Over a three-month period, 13 participants from various demographic backgrounds participated in sequential individual sessions that used hands-on methods which led to personalized health and wellbeing goals and activities. Throughout the research, each participant experienced, applied and interacted with the research activities in different and unexpected ways that expressed how they identify with their health. Overall, the research methodology allowed for reflection on what health means for different people and brought forth insights that were highly personalized including contextual reasons for, and reflections on, health habits. This co-created knowledge can inform both the use and design of more personalized health technologies in the future.

Sensory Landscapes from the South: The Ingahurco Neighborhood of Ambato

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Juan Daniel Cabrera, Teacher, Faculty of Architecture, Universidad Indoamérica, Tungurahua, Ecuador

This paper aims to register the sensory characteristics of the Ingahurco neighborhood in Ambato-Ecuador. The questions that guided this research are related to the perception of sound, smell, touch, and taste: What are the characteristics of the soundscape in that area? What does the skin of the neighborhood tell us? What are the most prominent smells, and Where are they located? What is the foodscape in the area? What food can be found and Where? The visual features were not addressed since the image of the city is often studied supported by the sense of sight. Sensory ethnography methods such as collective sensory walks, sound recordings, and neighborhood surveys were collected and analysed. Then, data is processed using sensory interactive maps and sensory representations to reconstruct the predominant sensory features of the site. This paper shows that the analysis of urban space from the sensory approach discloses ignored dimensions of the urban experience, and the complexity of grasping and representing these data reveals opportunities for the creation of various means of representing the urban environment. Moreover, collective sensory walks can become shared and meaningful means to take over public space in contexts of crisis and insecurity.

To Understand Young People's Willingness to Engage with the Digitization of the Penang Peranakan Museum through Quantitative Research

Fengcheng Wan, Student, Master of Design, University Sains Malaysia, Pulau Pinang, Malaysia

The digitization of cultural heritage is crucial, involving various methods that require significant investment. This study seeks to understand young people's willingness to engage with digital cultural heritage at the Nyonya Museum in Penang. Using quantitative research methods, including questionnaire and SPSS analysis, the study examines awareness, preferences, and expectations of young respondents towards digital applications such as VR tours, AR exhibits, and interactive digital games. Findings indicate a generally positive attitude towards digitization, with high mean and median values demonstrating strong support for these initiatives. Additionally, a significant portion of respondents expressed a willingness to pay for high-quality digital content, highlighting potential monetization opportunities. However, the study acknowledges the limitation of sampling, which included a small number of older respondents potentially biasing the results. Future research should employ more precise sampling methods to better capture the true attitudes of young people, ensuring a more accurate representation. These insights provide valuable guidance for developing effective digitization strategies that resonate with the aspirations of Penang's youth, fostering greater engagement and participation in heritage preservation efforts.

A Human-Centered Approach to First Responder Care in Namibia

Clara Watkins, Senior Lecturer, Design and Innovation, Cardiff Metropolitan University, United Kingdom

Globally, road traffic accidents result in 1.19 million deaths each year and are now the leading cause of death for children and young adults between the ages of 5 and 29. 92% of these fatalities occur in low and middle-income countries [1]. This paper details how an interdisciplinary team of designers and healthcare professionals utilised human-centred design and design thinking [2] to develop and implement an intuitive, low-cost, quality-assured, first-responder pack and training program for use by the Namibian and Windhoek City Police Forces. Working in partnership with these forces, 60 packs were distributed, and 213 police officers were trained in first responder care. 6 of which completed further training to become trainers. A key focus of this paper is on the design and delivery of a new approach to first responder training. Including a memorable sequence of delivery, intuitive layout and contextually appropriate training manual, with illustrations. Observations identified key challenges surrounding the comprehension and engagement with the globally standard C-ABC [9] approach to trauma care. Therefore, an entirely novel approach, intended to be as intuitive as possible, was developed. This was named the FiRST. It was developed through an iterative process of design development, working with police officers in Namibia to ensure effective implementation. The paper concludes with a discussion of the adopted methodology, benefits, challenges and lessons learnt. Providing key insights into an interdisciplinary approach that draws on design thinking and human-centred design. Lessons that hold the potential to impact further public health interventions and social innovation.

Designing for Longevity: Enhancing Safety and Well-being for Active Adults

Mingming Zhao, Student, Graduate, Cornell University, New York, United States

By 2030, one of every five people in the U.S. will be 65 or older, and approximately 47 million individuals will fit into the active adult demographic within the next 20 years (U.S. Census Bureau, 2019). Active adults, individuals aged 55 and older who maintain an engaged and dynamic lifestyle, have more specific needs than the general older adult population (National Investment Center for Seniors Housing & Care, 2022). Addressing their physical and psychological safety is crucial as they navigate life changes such as retirement, health fluctuations, relocation, sensory changes, and the pressure of learning new skills and technologies. This study explores the impact of environmental design on the physical and psychological safety of active adults, to address the question of what key design features can promote safety and well-being of this fast-growing segment. Grounded in the successful ageing framework (Urtamo et al., 2019), this study explores both biomedical and psychosocial factors influencing optimal aging. The methodology encompasses comprehensive secondary research for a market scan of existing technological and design solutions, case studies of active lifestyle design implementations, and a thorough needs and wants analysis via interviews and focus groups. The findings provide evidence-based design recommendations that enhance the quality of life for active adults, thereby contributing to the broader discourse on ageing well.

Community-centred Design for Social Innovation: Bottom-up and Government Initiatives in Shanghai

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Inês Veiga, Invited Professor, Design, Lisbon School of Architecture, Portugal
Antonio Gorgel Pinto, Professor and Researcher, Design, IADE, Faculty of Design, Technology and Communication, Universidade Europeia, Lisboa, Portugal

This paper reports on the findings of a Delphi survey to provide a promising framework for China's community-centred design for social innovation. The survey was conducted in the scope of doctoral research, which studies bottom-up and top-down approaches to achieving long-term sustainability and building a better future in Chinese local communities. The research draws on three case studies in Chinese territory and respective participatory design processes: the Xixi Garden and Shanghai Playscape in Shanghai and the Community Museum in Xiazhu Village, Zhuji City, Zhejiang Province. The research has produced both qualitative and quantitative data, and by using the Delphi technique, a panel of experts of Chinese and European Professors and Designers reached a consensus about priorities for developing China's community-centred design for social innovation. This paper presents the findings and examines the experts' consensus that participatory methodologies and processes are crucial in bottom-up and government initiatives. They rethink the traditional top-down models while giving the bottom-up the right to speak and make decisions, enabling spontaneous participation in activities to achieve sustainable development interventions. It can provide an equal communication platform for in-depth communication between top-down and government initiatives to build a better future. This could be considered detailed guidelines and recommendations to improve the future of China's bottom-up and top-down approaches in social innovation and design.

Contested Memorial/Memory Landscapes: Redesigning Public Space for Improved Inclusion

Matthew Rofe, Research Degree Coordinator, UniSA Creative, The University of South Australia, South Australia, Australia

The human landscape is neither natural nor neutral. Rather, it is the outcome of human decision making thereby reflecting the operation of social, economic and political power. This is particularly true of memorial landscapes and the memories they embody and communicate. Enshrined in stone and steel, such landscapes and the individual artefacts that they contain are often taken to stand for collective memory. However, these memories are selectively curated telling specific narratives considered to be deserving of remembering while ignoring others deemed unworthy. Hence, memorial landscapes are simultaneously inclusionary and exclusionary. Drawing upon a case study of The City of Adelaide's North Terrace Cultural Precinct, this paper teases out these processes. Specifically, the paper reveals how the memories of British Colonisation have and continue to overshadow those of a range of non-hegemonic groups, particularly First Nations People upon whose unceded and stolen land this cultural precinct stands. The paper contends that through more nuanced design and landscape management practices a more inclusive public realm can be created and in doing so curate a more holistic understanding of the past, its lessons in the present and how this may contribute to a more equitable future.

Designing Livelihoods Through Tradition: An Ethnographic Study of Women Artisans in Rural Gujarat

Pragya Sachdeva, Assistant Professor, Fashion Design and Research, United World Institute of Design(UID), NCR, Delhi, India

In the intricate tapestry of traditional crafts in rural India, women artisans play a pivotal role, as torchbearers of cultural heritage and entrepreneurship (Desai, 2020). This case study explores the stories of women practicing traditional artistry in the vibrant region of Kutch, Gujarat, India. Amidst the cultural richness of Kutch, women artisans have seamlessly woven their craft into the fabric of their daily lives. From the confines of their homes, these women adeptly balance familial responsibilities, household chores, and the pursuit of their traditional crafts. The study highlights how these artisans have challenged norms and emerged as entrepreneurs.The case study explores and reveals insights into the women artisan's journey and its impact on livelihood. Through focus group discussions, the study captures the collective experiences, challenges, and aspirations of women artisans of Sumrasar village, Kutch, providing a dynamic and interactive dimension to the research. Ethnographic research immerses the researchers in the cultural context, unveiling subtle influences on women's empowerment and the preservation of traditional crafts. NGO's at Kutch stand as a testament, fostering an environment that nurtures women entrepreneurship and empowerment.Their unique approach lies in encouragement of women artisans to create designs reflective of their personal preferences, thereby empowering them and preserving the authenticity of the craft.This case study paints a vivid portrait of how cultural heritage and a transformative for change have been guarded and inherited, where women-led businesses thrive, traditions endure, and the essence of rural India remains deeply embedded in every stitch, weave, and pattern.

Designing for Disaster: Designing Adaptable Furniture that Aids People During Floods

Sukriti Singh, Student, MA Design, LASALLE College of the Arts, Central Singapore, Singapore

This project examines the issue of floods in metropolitan cities, focusing on their devastating impacts. Flooding is a severe event that leads to loss of life, environmental destruction, and economic disruption. According to the 2021 Global Natural Disaster Report by the National School of Security in Beijing, natural disasters claimed 10,492 lives worldwide that year, with floods accounting for the largest portion–4,393 deaths, or 41.87% of the total. In India, floods annually affect an average of 7.5 million hectares of land, claiming 1,600 lives, and causing damage to crops, homes, and public infrastructure amounting to Rs. 1,805 crores (NDMA). Floods also cause extensive damage to infrastructure, including buildings, transportation systems, and public spaces, exacerbating economic losses. Among this damage is the destruction of furniture and interior products, which often end up as debris, obstructing rescue operations. This project explores whether furniture can be designed into products that help people during disasters, rather than contributing to the debris. The central research question is: "How can we design adaptable furniture that enables people to withstand natural disasters like floods and build resilience?"

Public Health Murals as Practice Based Learning: Design Makes a Positive Impact on Women's Health in Malawi

Martha Sullivan, Associate Professor of Practice and Chair of Industrial Design, Industrial Design, Virginia Tech, Virginia, United States
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Enhancing Romantic Relationships Through Design Thinking: A Design Innovation Toolkit Approach

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In our interconnected yet often isolating world, this project delves into the unique challenges faced in the pursuit of romantic relationships. Leveraging an innovative extension of design thinking principles, we draw from a designer's toolkit–comprising empathy, ideation, experimentation, integrative thinking, and analysis–to enrich reflective practices within the context of romantic relationships and dating. The project builds upon prior work, including an exploration of expectations and media influences on romantic relationships. The toolkit, inspired by design thinking, serves as an extension of various dating events, equipping participants with practical tools to navigate relationship dynamics more intentionally. These tools transcend conventional design thinking methods, incorporating elements specifically tailored for relationship contexts. Participants can use these tools to reflect, ideate, and experiment within their relationships. Notably, societal shifts in how people perceive online dating play a crucial role. The concept of expectations–how individuals view and manage them–emerges as a key component in the toolkit.Furthermore, our process involved user-testing with singles through multiple iterations. The book itself underwent the design thinking process of development, ensuring its effectiveness in fostering meaningful connections. As part of a larger project, 300 printed copies of the journal are being utilised during events and workshops, disseminating these insights and empowering participants to create more intentional, fulfilling connections.

"Tools and Transformations: Navigating Human-AI Interactions Through a Cultural Lens"

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Can technological capabilities coexist with cultural preservation? What role might inclusive datasets and design practitioners play in the future of AI? Human ingenuity and creativity remain fundamental to problem-solving and innovation. As generative AI systems become increasingly integrated into creative processes, their impact on diverse cultural approaches to innovation merits deeper examination. This study explores the intersection and contradiction of human creativity and AI-generated solutions through the lens of Jugaad–an Indian approach to frugal innovation characterized by resourcefulness and adaptability. Jugaad is a grassroots innovation that resists and challenges the capitalist restrictions on our creativity. It demonstrates joy within restrictions, where scarcity leads to innovation. Using jugaad as a critical lens in a conversational format, this session questions whether Anglo-centric AI frameworks developed in the Global North influence creative practices in the Global South. It aims to investigate how contemporary technological tools might shape our understanding of innovation and creativity across cultural perspectives. We consider these questions: How might we preserve human ingenuity and decenter the Anglo-centric technological conversations to include the past, present, and future of the Global South in the conversation of AI? What strategies can we implement to ensure AI development reflects and incorporates diverse technological traditions and knowledge systems?

The Integration of Virtual Materiality in Developing Sentient Experience in Museum

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In the development of digital era, technology has revolutionized our perception of architecture. The elements that constitute architecture are now not only real but also virtual. The virtual environment offers new opportunities to transform objects and phenomena, creating alternative experiences that differ from the real world. This research explores the multisensory experiences generated by the virtual materials. Sentient experience, defines as an experience involving the physical, emotional, and sensory engagement of visitors with space and content, is the primary focus on this study. An experimental method was employed to test multisensory interactions among four participants, using various stimuli of visual, accoustic, heptic, luminious and olfactory. In this multisensory experiment, visual and luminious elements emerged as priority senses in exploring museum content. The results of the movement in architecture approach indicate that the combination of virtual technology and pictorial representation can produce virtual curation in museums. The result of this research suggest that pictorial representation and virtual technology, such as video mapping, can lead to innovation in virtual curation in museum.

Design, Nature and Creativity Confluence: A Case Study of Biomimetic Process for the Development of a Nautilidae-Inspired Art Museum

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In the contemporary context, it is vital to include sustainable, regenerative, and ecological approaches in design education and professional practice. Exploring nature-inspired perspectives and resources, such as biomimicry, offers innovative pathways to address environmental and societal challenges. Biomimicry corresponds to the investigation of biological analogies, transposing them to inspire new products, constructions, and services. This qualitative research employed a case study to assess the use of the biomimicry-thinking problem-based method for developing a Biomimetic-Inspired Art Museum. The design drew inspiration from Nautilidae, cephalopods with an organic logarithmic spiral shape, internal modular chambers, and notable structural resistance. Also, the project included Voronoi tessellation, for optimizing spatial distribution for façade elements. The biomimetic method provided a framework to guide the project while evaluating its alignment with functional and sustainable requirements throughout the creative development. Searching for natural inspiration in biomimetic databases promoted an extensive formal and conceptual exploration, ultimately resulting in a suitable structure that met the established specifications. The need for interdisciplinary collaboration for similar projects was emphasized, particularly concerning the integration of product designers, biologists, biomimeticians, and architects. In conclusion, biomimicry offers an extensive array of resources for designers, stimulating innovative, ethical, and sustainable perspectives. This area has considerable potential to expand the creative toolkit of designers while reconnecting students, practitioners, and communities with nature. Additional studies are required, including other biomimetic tools and methods, and a life cycle analysis of the building proposal. Assessing the application of living and biobased materials in this design approach is recommended.

Collective Immersion - Collaborative Approaches to Multisensory Immersion in Theatre and Installation Art: Exploring How Teamwork and Technology Craft Transformative Artistic Experiences

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As a scenographer, collaboration has always been central to my creative process, particularly when integrating multimedia elements into scenic designs. Over the past decade, I have explored numerous ways to complement my work with technology, culminating in a pivotal moment at Prague Quadrennial 2019 when designing the Hungarian pavilion. This project revealed how tools like LED screens as dynamic light sources and synchronized video projections with acoustic atmospheres could craft immersive 360-degree experiences beyond virtual reality. Inspired, I delved deeper into the role of technology in fostering collective immersion. Currently pursuing my doctorate at MOME, I investigate immersive installations and explore how multisensory engagement can amplify immersive states in both installation art and theatre. My research emphasizes collective experiences, where shared immersion enhances the connection between audience members and the work itself. In my paper, I share insights from my artistic journey, highlighting theatre projects where projection and lighting design were pivotal in achieving immersion. I also discuss installation art projects like Infinite Dune–the Hungarian pavilion at PQ2019–and Waterfields, developed with the same creative team. These projects showcase how technological tools and collaborative processes can intertwine to push artistic boundaries. Through these examples, I aim to illuminate my research findings and future plans for crafting multisensory, immersive experiences driven by collective creativity.

Design for Social Innovation Narratives: From “Smart Cities” to ” Art Cities

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This paper proposes an evolution of the “Smart Cities” concept to the idea of “Art Cities” through the Design for Social Innovation (DSI) perspective. A contemporary DSI framework methodology emerges by combining the dynamics, innovation, and scalability of Augmented Reality (AR) technology with the truthfulness and organic nature of urban art (UA). By describing and discussing four case studies, this study declares the emergence of a new art expression platform led by the convergence of social innovation, art, and technology. “Maua” in Italy, “Priya Shakti” in India, “Lambe Residency” in Brazil, and “Google Street Art” in the United States all provide evidence for the phenomena proposed, each with its particular dynamic combination of characteristics. The study's conclusion endorses the evidence of an emerging urban form of art expression, supporting the idea of “Art Cities” as an evolution of the concept of “Smart Cities”, which is a movement towards a humanized social approach for identifying social phenomena and for research through Design.

Boosting Female Participation in Vocational Programs at Zaatari Camp: Architectural Approaches to Empowerment

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This study investigates the role of architectural design in enhancing female vocational engagement at the Zaatari Refugee Camp in Jordan. The research aims to address entrenched gender inequalities and educational barriers faced by refugee women through culturally sensitive and empowering architectural interventions. By applying feminist design principles, the project seeks to create safe, inclusive spaces tailored to women's needs, fostering participation in vocational programs. A mixed-methods approach, combining surveys, interviews, focus groups, and observational data, evaluates the impact of these interventions on participation rates, mental well-being, and economic empowerment. The anticipated outcomes include increased vocational program enrolment, improved mental and social health, and enhanced community resilience. By providing empirical evidence on the relationship between architectural design and women's empowerment, this study contributes to broader efforts to promote gender equity and sustainable community development in refugee contexts globally.

Observational Methods and Assessment Criteria in Interior Design for Children with Autism Spectrum Disorder in Kindergartens: Developing Interpretative Frameworks for Sensory-Sensitive Educational Environments

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This study investigates the observational methods, interpretative frameworks, and assessment criteria used to evaluate interior design in kindergartens for children with Autism Spectrum Disorder (ASD). Recognizing the unique sensory and spatial needs of these children, the research aims to develop robust methodologies to observe and interpret their interactions within educational spaces. The approach includes a comprehensive literature review, the creation of observation protocols, and the establishment of design assessment criteria. Case studies of kindergartens specifically designed for children with ASD are analyzed using these methods. Expert interviews with child development specialists, psychologists, interior designers, and educators inform the interpretative frameworks. Observations of children's behaviours and interactions within these environments provide empirical data to assess design effectiveness. The findings are expected to contribute to the development of standardized assessment criteria, enhancing the creation of inclusive and supportive learning environments for children with autism.

Evaluation of Arrangement of Sign Systems to Enhance Wayfinding in Complex Spaces

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Complex spaces are various types of spaces that are difficult for wayfinding. If visitors were to get lost in such a space, they are likely to experience stress. Furthermore, this kind of negative experience increases the likelihood that the visitor of the space will avoid returning to it in the future. It is difficult for visitors to recognize a space only by its shape and structure, making signage an effective means of assisting them in finding their destination more easily. However, signboards installed in locations where it may be difficult to recognize them, in addition to unsystematic signboards that are installed excessively, may not properly convey necessary information to visitors, leading to more confusion. The purpose of this study is to verify the utilization of signs when planning a sign system by evaluating their proper arrangement to enhance wayfinding in a complex space. Wayfinding factors can be classified into spatial structure factors and environmental design factors. Spatial structure factors, including plane composition and visual accessibility, were evaluated using space syntax. Furthermore, environmental design factors such as the sign system and spatial heterogeneity were evaluated to assess the appeal of signs using eye tracking analysis. A wayfinding enhancement and degradation model were produced to measure the stress response through heart rate variability (HRV) analysis in virtual reality to verify their suitability. The theories used as existing wayfinding-related analysis methods had fragmentary limitations. However, this study applied bio signal-based methodology and thus, such limitations are expected to be significantly mitigated.

Artificial Intelligence and Hyperreality: Redefining Spatial Perception in Cinematic Dystopias

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This research investigates how artificial intelligence (AI) technologies are reshaping our perception of space, both in the real world and in the hyperreal environments that blur the lines between reality and simulation. As AI advances, concepts like simulations, virtual realities, and hyperreality are becoming more integral to how we experience and interact with our surroundings. By examining these ideas through the lens of Baudrillard's theory of "Simulacra and Simulation," the study looks at how AI-driven technologies create new, hyperreal environments that challenge our traditional understanding of physical space. To explore these ideas in a more tangible way, the research analyzes the dystopian film "The Divergent" (2014), focusing on how it portrays both real and hyperreal spaces and how these spaces relate to the film's social structures and faction identities. Using Baudrillard's theory alongside Montgomery's "Sense of Place Model," the study investigates how the environments of the two main factions, Dauntless and Abnegation, shape the experiences of the characters within those spaces. By focusing on this cinematic example, the research highlights how AI and hyperreality are not just theoretical concepts but are actively transforming how we perceive space and, ultimately, ourselves.

Potential Use of Virtual Reality Created Forms as Initial Input for Conceptual Form Development in Building Information Modelling

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Building Information Modelling (BIM) efficiently produces precise and information rich 3D models. However, there are limited conceptual forms that can be produced using tools within BIM software alone. The workflow for creating the forms in BIM is also counterintuitive. This inhibits designers to fully utilise BIM software as part of an agile conceptualisation process. There have been efforts to use other 3d modelling software as input to be developed further in BIM. However, the potential use of Virtual Reality (VR) models is less explored. This research explores potential advantages of VR models as input for BIM in comparison with other 3D modelling alternatives. Initial focus was on unique forms resulting from VR's immersive processes. This is contrasted with results from less immersive processes of other 3D software. The study also examines the viability of saving VR created forms in file formats common to other 3D software. Focus was on selecting formats that help retain definition of surfaces and curvature of the forms so that it can be further developed in BIM. Current findings demonstrate that VR inputs provide a wider range of forms that can be effectively developed into specific building components in BIM. The paper also documents that when VR inputs are incorporated to the BIM workflow specific improved efficiencies and intuitiveness are achieved. Concurrently, highlighted areas of improvements of the products and processes provide directions of future research needs.

A Study on Spatial and Experiential Elements in O4O Flagship Stores

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This study presents a framework for analyzing the interaction between spatial elements and experiential factors in O4O (Online for Offline) flagship stores. O4O services offer differentiated consumer experiences in offline stores, leveraging technology and data from online platforms. Flagship stores are key spaces for implementing these services. The study defines the spatial components of a flagship store as external space, exhibition and sales space, experience space, brand image space, and rest space, and systematically analyzes their impact on consumer experience and brand loyalty. The research reviews existing studies on O4O services, experiential marketing, and flagship store design, proposing a case analysis framework using text mining techniques, such as sentiment analysis, keyword analysis, and network analysis. It also evaluates spatial elements based on a five-level importance scale to generate data for flagship store design. Data from consumer reviews on Naver Blogs from the past three years (January 1, 2021 – January 1, 2024) is used, focusing on notable changes in consumer experience post-COVID-19. The study aims to understand the interaction between spatial elements and consumer experience in flagship stores, propose strategies for effective O4O service implementation, and provide insights for improving spatial design. The findings offer practical guidelines for brands to optimize consumer experiences, enhance brand loyalty, and maximize brand value.

A Theoretical Study on Restructuring University Lecture and Learning Spaces for Student-Centered Education

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Current university education faces a rapid paradigm shift driven by factors such as demographic changes, technological innovations like the Fourth Industrial Revolution, and the accelerated transformation of the educational environment due to the COVID-19 pandemic. Traditional lecture-based teaching methods and the corresponding spatial designs have proven inadequate in effectively supporting new educational paradigms like learner-centered education. Against this backdrop, this study aims to restructure university lecture and learning spaces to support the implementation of learner-centered education by analyzing teaching and learning methods, activity types, and proposing design guidelines and improvement strategies for learning spaces. The purpose of this study is to suggest directions for designing learning spaces that reflect the characteristics and needs of learner-centered education. To achieve this, the study theoretically examines learner-centered teaching methods and activity types, identifies the spatial characteristics and components necessary for restructuring university learning spaces, and conducts field surveys at lecture rooms and learning support spaces in seven universities located in Seoul. Additionally, it investigates learner requirements to derive practical improvement strategies for spatial design. The findings indicate that the design of spaces supporting learner-centered education requires the reconfiguration of unit spaces based on seven spatial characteristics, including flexibility, adaptability, and connectivity. This study provides cluster-based spatial design guidelines and application cases to support learning activities, serving as foundational resources for improving the environment of university lecture and learning spaces.

The Historical Evolution, Cultural Background and Architectural Form of Overseas Chinese New Villages on Both Sides of the Taiwan Strait

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Overseas Chinese New Villages are residential communities provided by the governments on both sides of the Taiwan Strait for returned overseas Chinese since the mid-20th century. These new villages are not only places for returned overseas Chinese to settle in mainland China and Taiwan, but also carry the overseas Chinese culture, urban planning policies and social recognition needs of a specific period. In today's world of economic globalization and accelerated urban development, the historical value of overseas Chinese villages and their future development direction have become a hot topic of research. The main purpose of this study is to systematically sort out the historical evolution, cultural background, architectural form and residents' life of overseas Chinese villages in mainland China and Taiwan, and to analyze their similarities and differences. By comparing the overseas Chinese villages on both sides of the Taiwan Strait, we can have a more comprehensive understanding of the impact of different social systems, urban development strategies and cultural environments on the lives of returned overseas Chinese. In addition, this study also hopes to explore the possibilities of overseas Chinese villages in modern urban renewal and propose feasible protection and development strategies.

Unlocking the Health and Wellbeing Potential of the NHS Estates through a Co-design Serious Game Methodology

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This research aims to design and test a game that involves a wide range of stakeholders in the complex task of creating healthcare gardens catering to multiple health needs. Healthcare gardens are green spaces designed for patients with specific health requirements, staff, and caregivers. The game, "Mosaic Landscapes," guides the design process to create well-planned outdoor spaces for patients, staff, and visitors. This study presents a board game to engage stakeholders and local communities in the design process. Using personas representing various health conditions, players consider each persona's unique needs and select landscape elements. These elements, derived from literature, describe their potential health benefits. By simulating hospital garden designs, the game promotes empathy, creativity, and collaborative problem-solving, leading to thoughtfully designed gardens. Healthcare gardens have the potential to enhance physical health (through fitness and rehabilitation facilities), cognitive and affective health (by alleviating mental fatigue via natural environments), social health (by creating shared spaces), and innovative healthcare products (like growing materials for staff scrubs or edible plants for patient meals). "Mosaic Landscapes" will be tested with a treatment centre in Scotland. Community members will play the game to foster positive conversations about transforming the grounds to support various users. Participants can add their own personas and landscape elements, with data collected through these additions, photographs, and discussions. The game serves as a practical design tool, educational resource, and facilitation tool, contributing to the field of design-for-health by creating environments that support diverse health and well-being needs.

Optimizing the Spatial Experience of Public Restrooms in India: A Study on Urban Public Spaces Exclusively for Women Working in Outdoor Occupations

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Public restrooms in India are poorly designed, unsanitary, and unsafe, especially for women who work outside. The functional and spatial requirements of restrooms for women employed in street selling, sanitation, and construction are examined in this research. Through primary research, including site analysis and user surveys, the paper identifies serious shortcomings in the present infrastructure. Nirama is a cutting-edge design concept that creates a hygienic and secure atmosphere by fusing rest places with sanitation. In order to enhance functionality while maintaining cultural sensitivity, the research places a strong emphasis on material choices, ergonomics, and accessibility. The final design offers a sustainable, approachable form that may be applied in urban residential settings. Additionally, an implementation plan is included in the paper, which examines potential partnerships with NGOs and municipal corporations for developing this restroom design.

Low-Cost Digitalization for Sustainable Energy Management: A Hybrid Approach for Predicting Occupant Energy Consumption in Different Indoor Layout Configurations

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Xue Cui
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Accurately predicting occupant energy consumption is crucial for optimizing energy management and promoting sustainability in buildings. However, the availability of reliable stochastic data on occupant energy consumption poses significant challenges including cost and privacy considerations. This research proposes a low-cost digitalization approach that integrates Agent-Based Modeling (ABM), System Dynamics (SD), Building Information Modeling (BIM), and Machine Learning (ML) techniques to predict energy consumption in various indoor layout configurations, while prioritizing affordability, privacy, and sustainability. To investigate the effectiveness of the approach, three different geometric shapes representing indoor layouts (rectangular, square, and compound) were selected from a residential building in Chittagong, Bangladesh. An ABM-SD-BIM model was constructed, incorporating occupant data, layout information, and environmental data. The model-generated energy consumption data was calibrated using three months of real data collected from customized sensors installed within the indoor layouts. The calibrated model accurately generated data for the entire summer month period from April to September, which was used to develop the ML prediction model for each layout. Results indicate that Layout 3 (Compound) exhibits consistent and favorable performance across the models, suggesting its suitability for accurate energy consumption prediction. The proposed approach prioritizes affordability, privacy, and sustainability, making it accessible and applicable to various building design, operation, and policy-making scenarios. This research contributes to the broader field of low-cost digitalization, emphasizing the importance of accurate energy prediction for optimizing energy management and promoting sustainable practices.

The Essential Matter: Material Sustainability As a Critical Concept Against Urban Globalization and Climate Change

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In a world shaped by urban homogenization and climate crisis, architecture must redefine its relationship with the environment. In this context, The Essential Matter explores material sustainability as a key strategy against the erosion of territorial identity and environmental degradation. Matter, both substance and language, links tradition and innovation, fostering an architecture that inhabits and dialogues with the landscape. By revisiting vernacular knowledge, this study examines architecture's ability to create spaces that integrate with, rather than dominate, their surroundings. Modular units serve as shelters for inspiration, framing nature as the sixth wall, a dynamic, ever-changing surface that challenges static architectural forms. Each unit's unique configuration prevents repetition, ensuring a harmonious relationship with its environment. Five shelters built only with wood, stone, plant fibers, earth and ceramics form a dispersed but connected community, with Architecture acting as a paradigmatic case study. Material sustainability -defined as responsible resource use and contextual adaptation- is not just a technical solution but an ethical and critical response to urban challenges. In the core of the complex, a cantilevered central structure serves as a social hub, framing the landscape and fostering dialogue between nature and creativity. Ultimately, the project poses two questions: How does Nature shape architectural thought and how can Architecture contribute to preserving and enhancing untamed natural landscapes? In this sense, The Essential Matter envisions an architecture that coexists rather than imposes, transforming space into an experience of knowledge and contemplation.

The Integration of Generative AI in Neuroarchitecture: A Framework for Integrating Neurological Response

Patterns with AI Design Systems to Optimize Built Environments for Human Cognitive Function
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This study examines how generative AI technologies can enhance architectural design processes to create environments that optimize human cognitive function and emotional well-being. This research investigates how architectural elements influence cognitive processes and examines the revolutionary potential of Generative Adversarial Networks (GANs), and other machine learning algorithms in creating spaces that respond to both conscious and unconscious human preferences. The study addresses the critical relationship between environmental factors and human cognitive processes, including memory, perception, and decision-making, while exploring how generative AI models can analyze complex design parameters and architectural precedents to optimize psychological impact. Contributing to the intersecting fields of architecture, neuroscience, and artificial intelligence, this work establishes a comprehensive framework for understanding how AI-generated spatial designs can actively support brain function, particularly through the implementation of advanced GANs for design synthesis and evaluation. Through systematic analysis of neuroimaging data, environmental psychology research, and computational design experiments, the study examines how principles of neuroplasticity and human spatial cognition can be effectively integrated into architectural design processes. The findings demonstrate that AI-generated spatial designs can significantly enhance workspace optimization, cognitive function, and urban development, while revealing important considerations regarding technological implementation and ethical implications. This research establishes that successful integration of generative AI in neuroarchitecture requires sophisticated evaluation metrics, interdisciplinary collaboration, and careful consideration of individual differences in spatial perception, suggesting a future where built environments dynamically adapt to enhance human cognitive capabilities across healthcare, educational, and urban settings.

Refresh: Workspace Environment

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The COVID-19 pandemic created an increased burden on hospitals, creating problems of overcrowding and a shortage of caregivers, which directly increased 23% of the workload of nurses. “Refresh” is a project that enhances the care environment by creating in-between spaces to allow nurses to rest, maximizing the use of break time by boosting their spatial experience. The project ensures that accessibility is prioritized to allow efficiency by taking advantage of physical site strength as the old structure provides more open spaces between the block and windows opening to allow air circulation and natural lighting inside spaces. This created the possibility to integrate the outdoor spaces with indoor spaces. The transaction of space benefits the social factor by making better flexibility and balance that satisfies the time spent of the user between the departments, meets the job demand and gives more control over the environment. Using Bamboo, Jute, and concrete makes the nurse's workplace more interesting and eco-friendly. Jute net panels and bamboo frames add excitement with light and shadows. Jute is good for the environment as it absorbs carbon dioxide and produces oxygen. These materials locally sourced from Singapore not only support the economy but also reduce environmental footprint through minimized transportation. By using them, the workplace feels more connected to nature and more pleasant.

Forging Immersive Experiences within Simulated Nature: On the Spatial Aesthetic Relationship between teamLab's Digital Works and Traditional Japanese Gardens

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From the development of art creation in various regions, it can be suggested that the process of creating artworks is closely related to certain social and cultural context. For example, digital artworks of teamLab are inspired by the philosophy of traditional Japanese paintings. According to Stefan Morawsk's assertion that 'aesthetic phenomena are explored in the context of socio-historical processes', and artworks are interdependent with various cultural activities, this paper thus presupposes that cultural references can enrich spectators' spatial perception in experiencing digital artworks. Hence, this paper explores the aesthetic and spatial relationship between teamLab's artworks and traditional Japanese gardens. That is, what cultural contexts have contributed to the aesthetics of teamLab's works and triggering spectators to immerse in teamLab's digitalized nature. Originating from Japan, teamLab is one of the world's leading digital art teams which combines art, architecture, and animation with interdisciplinary expertise. Their works are based on the Japanese way of experiencing the world in traditional paintings, and translating the spatial relationship among people, nature and place implied in Japanese Edo paintings into contemporary digital expressions. This paper will thus explore the similarity between the artificial nature represented by traditional Japanese garden and the digital nature. At the end of this paper, we clarify the contextual relationship of spatial aesthetics between teamLab's works and some important traditional Japanese gardens and architecture in terms of the use of spatial elements, spatial structure, as well as the cultural implication presented in both physical environment and digital ones.

Designing with Artisans: Leveraging the Ancestral Intelligence of Woven Handcraft

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This paper examines the relationship between designer and artisan, and the benefit of collaboration to leverage the intersections between ancestral craft and contemporary design. Furthermore, it argues that collaboration between designers and craftspeople is essential in its reciprocal advancement of craft and design. There is artistry, skill, and fundamental wisdom embedded in weaving. However, craft has suffered from a lack of innovation and thus, the perception of irrelevance. The value of traditional handcrafts as a unique and environmentally responsible form of making continues to be reduced to decorative objects rather than exploring its potential as a design and architectural material methodology. The research argues that sustainable design and making is embedded in ancestral technologies abandoned, ignored, and forgotten, rather than evolved and adapted to study an environmentally and culturally sensitive, contextually specific, new architectural vernacular. The paper proposes that the artisan can be reintegrated into design and construction practices through advancing and applying weaving techniques. Using a series of material experiments with an indigenous freehand weaver from Upper Egypt, the project explores the application of basket weaving techniques to architectural design. Through documented experiential, auto-ethnographical research and creative production, the project investigates the use of design as a tool to elevate craft in a way that builds on the knowledge of the artisan. As such, the paper analyses the potential of material collaborations between designers and artisans to reimagine the ways in which we live and create, making woven handcraft relevant to contemporary design, culture, and technology.

A Study of Urban Complex Projects Based on the 15-Minute City Concept: Focusing on the Toranomon Hills and Azabudai Hills Projects in Tokyo

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The 15-minute city, as a new urban planning concept, is gradually gaining widespread attention. It is an urban model designed to arrange various functions and facilities within a compact area, enabling urban residents to easily access essential services for daily life within a 15-minute walk or bike ride. This study explores the realization of the 15-minute city concept by analyzing two urban complex development projects in Tokyo, Japan: Toranomon Hills and Azabudai Hills. The analysis focuses on the four fundamental elements of the 15-minute city: Proximity, Density, Mixed Use, and Ubiquity, aiming to identify directions for realizing the 15-minute city within urban complex spaces. The study aims to demonstrate the feasibility of the 15-minute city concept in future urban redevelopment and provide foundational data for optimizing urban complex developments. However, the limitation of this study lies in its reliance on literature reviews and case analyses, lacking empirical data that reflects user experiences.

Bridging the Gap Between Design Practice and Education: A Practical Case Study Method for Design Practitioners

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Case studies are pivotal in architecture and design, offering insights into innovative solutions, challenges, and lessons learned. However, a gap exists between the informal, practice-based case studies commonly found in design media and the rigorous, methodologically driven case studies of academia. This divergence underscores the need for design disciplines to integrate more formal research methods into their practice, especially in the era of evidence-based design. Traditionally, informal case studies prioritize accessibility and practicality, while academic case studies emphasize scholarly rigor and methodological precision. This study addresses the growing need for a case study approach that blends these two paradigms, enabling design practitioners to contribute to the research discourse without compromising the demands of their fast-paced workflows. Research Question: How can design practitioners develop a scientifically rigorous yet practical case study method that aligns with professional workflows? Methodology: Using cross-case analysis, this research identifies features, strengths, and weaknesses of existing case study methods. A qualitative review examines how these features can be adapted to fit design practice while maintaining academic standards. The proposed methodology ensures seamless integration into professional workflows. Findings and Implications: The study introduces a new case study method tailored to design practice, balancing academic rigor with accessibility. This method empowers practitioners to conduct research that is both scientifically robust and practical, fostering evidence-based designs. By bridging academia and practice, the approach promotes deeper collaboration and advances the integration of research into the design profession. This hybrid methodology equips designers to produce impactful, research-informed contributions to both fields.

Exploring the Distribution of Design Capabilities: A Case of Italian Local Governments

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From health services to climate change policies, design professionals are increasingly engaged by central governments to drive transformation and innovation in the public sector, as evidenced in countries like the UK, Australia, and the USA. While a similar pattern has emerged within public administration in Italy, it remains fragmented and poorly understood, especially at the local level. This research employs a mixed-method approach that combines both quantitative and qualitative data to analyze the presence and capabilities of designers and design-trained professionals within Italian local government. The study integrates a survey distributed to key representatives across more than 7,000 municipalities, mapping and assessing designers and design-trained professionals diffusion and expertise offered, required, and needed. The anticipated outcomes of this research include the creation of a comprehensive map and capabilities assessment of design professionals within the most granular level of public administrations (e.g. municipalities), while simultaneously establishing an initial database to support the development of a grassroots network for designers and professionals in the field. The study informs targeted recruitment strategies for public administrations. It further contributes to additional insights in the evolving field of design for the public sector, ultimately addressing the persisting challenges in achieving widespread recognition and implementation in this endeavour. Future research should focus on addressing the identified gaps and exploring the potential of design as a transformative catalyst for the multifaceted challenges faced by local governments.

Bamboo Furniture Eco-friendly Coating: Plasma Ionization and Light Metal Material

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This paper presents the results of a design management study aimed at replacing polyurethane (PU) coatings with titanium dioxide (TiO2) coatings activated through plasma ionization. PU coatings are commonly used in the bamboo furniture industry for surface protection and as part of the luxurizing process. However, their application demands repeated use and large quantities of PU material to achieve the desired surface strength and durability. Furthermore, the aromatic compounds present in most PU sealants pose health risks and create environmental hazards at the end of the furniture's life cycle. Transitioning to eco-friendly materials or reducing harmful compounds is a critical step toward sustainable practices in the industry. In our study, a plasma ionization device and process were developed. The dielectric barrier discharge (DBD) plasma actuator was designed based on specific parameters, including the lengths of exposed and insulated electrodes, dielectric thickness, gaps between dielectric and electrode tips, and applied voltage and power. Plasma ionization, generated by high-voltage electrodes, was used to treat bamboo surfaces, producing positive and negative ions to facilitate TiO2 adhesion during the coating process. This process was conducted under atmospheric pressure and room temperature within a closed system. The findings demonstrate that TiO2 coatings activated by plasma ionization emit lower carbon dioxide and exhibit better eco-efficiency compared to PU coatings. This paper proposes the detailed designs of the plasma ionization device and process tailored for TiO2 application, highlighting their potential for reducing environmental impact while maintaining performance standards.

Augmented Environmental Graphics in Healthcare

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Healthcare employees spend a significant amount of time in the workplace, and their wellbeing is often neglected. An excess of job demands and limited resources can negatively impact their physical and psychological wellbeing, ultimately affecting patient wellbeing. Research has shown that Environmental Graphic Design (EGD) or Augmented Reality (AR) technologies can improve the patient experience in hospitals and other healthcare facilities. However, no existing research has explored how these two elements – EGD and AR – might be used to enhance healthcare employees' wellbeing in this context. To address this gap, this design research has evolved into a multidisciplinary approach. By embracing cross-professional contributions, we explore a series of work recovery interventions (prototypes) that can be effectively implemented to enhance the well-being of healthcare employees in the healthcare context. This research is also relevant during the COVID-19 pandemic, which highlights the urgent need to prioritise our well-being. By focusing on the intersection of environmental design, technology, and employee wellbeing, this study aims to unlock new possibilities for enhancing healthcare employees' well-being. The findings of this study have the potential to shape the design and improvement of healthcare environments, focusing on interventions that promote work recovery and communication platforms and, ultimately create a positive work environment that benefits both employees and patients.

Classifying Usability Testing Methods: A Comparative Study of Real Apps and Prototype Versions

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This study classifies usability testing methods based on their application to real apps versus prototype versions, with a focus on understanding the different contexts in which these methods are most effective. Using a systematic literature review, various usability testing techniques were categorized to highlight their strengths, limitations, and suitability for either real-world applications or prototype-based evaluations. The analysis emphasizes that real app usability testing often serves as an initial data collection phase for identifying user experience issues and guiding subsequent design improvements. In contrast, usability testing with prototype versions is typically applied in the final stages of the user experience design process to validate the proposed solutions before implementation. This classification provides valuable insights for practitioners and researchers, helping them to select appropriate usability methods according to the specific objectives of their usability studies. The findings can enhance the efficiency and effectiveness of usability evaluation processes by aligning testing methods with the design stage and research goals.

Designing Mechanisms for Sustainable Internal Quality Assurance in Basic Education Schools in Thailand: User Experience Research

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The objective of this research is to design mechanisms for driving a sustainable internal quality assurance system for basic education schools in Thailand. The research methodology employed user experience (UX) design. The target group of the research consisted of six primary schools. The key informants included six administrators, twelve teachers, and one district education office. The key informants from the district education office comprised two administrators, three educational supervisors, and five experts who conducted the quality evaluation. The research instruments included semi-structured interviews, field note forms, and quality evaluation forms. Data analysis was conducted through data categorization, data linking, and analytic induction. The research found that the mechanisms for driving a sustainable internal quality assurance system consisted of Smart director, Partnership school, Learning and innovation, Supervision monitoring and evaluation, and Competencies of quality assurance. The quality evaluation by experts found that the developed mechanisms met the evaluation standards of accuracy, propriety, feasibility, utility, and accountability. Feedback from the users indicated a high level of satisfaction with the developed mechanisms, as they aligned with their developmental needs and provided benefits to the schools.

Research on the Design of Museum Cultural Products Based on Experience Design

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This study focuses on the design of museum cultural products, aiming to investigate consumer experiential needs from the perspective of experiential design and explore design strategies tailored for young consumers. With the transformation of museum functions and shifts in the consumer market, examining the experiential elements of cultural products is of significant importance. This research not only provides a theoretical foundation for enhancing the design and dissemination of cultural products but also promotes the inheritance and innovative development of cultural heritage. By employing literature analysis and preliminary research, this study integrates the Experience Design EEI Model and the Kano Model to systematically analyze users' needs and pain points across the three stages of pre-purchase, during purchase, and post-purchase. Surveys and user interviews were conducted to delve deeper into user personas and journey maps. The study classifies and prioritizes user needs, identifying categories such as expected needs, basic needs, and attractive needs. The key findings indicate that young consumers exhibit a strong preference for products with high interactivity, rich cultural connotations, and practical utility. They also expect products to deliver profound experiences related to emotional resonance and cultural identity. This research offers innovative insights into the design of museum cultural products, emphasizing the importance of consumer experience-centered design strategies in future markets.

Integrating Circular Materials and Environmental Impact Awareness into the Design Process

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Today the need for circular manufacturing is widely recognized, and designers are considered responsible for choosing sustainable materials as well as making it desirable to the product's audience. However, the typical designer's education and toolkit do not allow them to think about environmental impact in quantitative terms, while local waste streams and available circular materials are often obscure and mediated through specialists. The overall goal of the presented research is to find ways for effectively channeling locally available circular materials (from pre- or post-consumer waste) into the design process, and therefore back into manufacturing cycle. To tackle such challenge, multiple fields were involved including material experts, computer science and design researchers, with an initial hypothesis that updating the designer's digital toolbox could significantly enhance sustainable design practice. To understand the possibilities of intervention, three categories of stakeholders were identified: designers, furniture manufacturers and waste transformers, investigated through an initially wide mapping, then interviews. These interactions have highlighted several unexpected issues, such as regulatory complexity, lack of trust in environmental declarations, and blurry lines between supposedly different stakeholders. Nonetheless, the interview campaign, together with the analysis of available LCA tools and platforms, has helped define functionalities for an experimental platform, characterized by the integration of georeferenced circular materials with sustainability data, plugged directly into the designer's modelling workflow. Such approach promises to embody sustainability knowledge in design tools, providing a continuous awareness about the environmental impact of choices and helping to develop a sense about it over time.

The Essential Matter: Material Sustainability As a Critical Concept Against Urban Globalization and Climate Change

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In a world shaped by urban homogenization and climate crisis, architecture must redefine its relationship with the environment. In this context, The Essential Matter explores material sustainability as a key strategy against the erosion of territorial identity and environmental degradation. Matter, both substance and language, links tradition and innovation, fostering an architecture that inhabits and dialogues with the landscape. By revisiting vernacular knowledge, this study examines architecture's ability to create spaces that integrate with, rather than dominate, their surroundings. Modular units serve as shelters for inspiration, framing nature as the sixth wall, a dynamic, ever-changing surface that challenges static architectural forms. Each unit's unique configuration prevents repetition, ensuring a harmonious relationship with its environment. Five shelters built only with wood, stone, plant fibers, earth and ceramics form a dispersed but connected community, with Architecture acting as a paradigmatic case study. Material sustainability -defined as responsible resource use and contextual adaptation- is not just a technical solution but an ethical and critical response to urban challenges. In the core of the complex, a cantilevered central structure serves as a social hub, framing the landscape and fostering dialogue between nature and creativity. Ultimately, the project poses two questions: How does Nature shape architectural thought and how can Architecture contribute to preserving and enhancing untamed natural landscapes? In this sense, The Essential Matter envisions an architecture that coexists rather than imposes, transforming space into an experience of knowledge and contemplation.

Crossing the Bridge between the Realms of Innovation Ecosystems and Design Thinking – Driving the Value Co-Creation Tracks: A Literature Review

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Innovation ecosystems and design thinking are both recognized for fostering collaboration, adaptability, and user-cantered innovation. However, their combined potential to enhance value co-creation in business environments remains underexplored. This state-of-the-art literature review examines the interconnections between innovation ecosystem value co-creation and design thinking practices, highlighting the complementary contributions each offers. Through extensive analysis across these domains, this paper argues that integrating design thinking principles into innovation ecosystem frameworks can enhance value co-creation practices. Design thinking's e.g., problem framing, iterative prototyping, and empathy-driven approaches can deepen engagement and co-innovation capabilities among ecosystem actors, strengthening knowledge sharing, strategic alignment, and value co-creation. Conversely, the structured, dynamic networks inherent to innovation ecosystems could offer design thinking a broader context for sustainable, large-scale impact. Integrating design thinking and innovation ecosystem approaches provides organizations with a strategic advantage in developing sustainable, user-cantered, and resilient business models. By identifying design thinking practices that could enrich value co-creation processes within innovation ecosystems, and conversely, by highlighting innovation ecosystem practices that could expand design thinking's applicability, this paper presents a framework that harnesses the strengths of both domains.

Digital Enchantment: Strategies and Challenges for Brand Activations on Roblox

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This study explores how leading brands manage and execute brand activations on Roblox, focusing on strategies that enhance engagement and challenges unique to the virtual environment of the Metaverse. Using a mixed-methods approach, including case studies and interviews with developers and target audiences, the research examines the essential elements that contribute to successful brand activations. The presentation addresses critical project management challenges, such as balancing brand identity with creative possibilities within Roblox's technical constraints and fostering community engagement to build brand loyalty. Key insights reveal how brands navigate the limitations of virtual assets, develop meaningful interactions, and adapt their brand narratives to resonate with digital-native audiences. Findings from this research provide valuable guidance for brands aiming to effectively align their strategic objectives with the dynamic and immersive potential of virtual environments like Roblox, offering practical insights into managing digital activations that support both brand goals and user experience.

Resilient Architectural Education: Integrating Design Management and Community Engagement in Southern Taiwan

I Hsuan Wang, Assistant Professor, Department of Architecture, National Cheng Kung University, Tainan, Taiwan

Post-pandemic educational environments have highlighted the need to rethink architectural pedagogy. At the National Cheng Kung University (NCKU) Department of Architecture, collaboration with student organizations has reshaped the traditional educational model. By adopting design management principles inspired by David Kolb's Experiential Learning Theory, NCKU integrates student-led initiatives that transform spaces and foster a culture of hands-on learning. A space analysis revealed that NCKU offers the most flexible areas compared to other departments, creating opportunities for spontaneous collaboration. Key projects include the Core Space renovation, where students and faculty jointly manage operations, leading to a cost-effective model. An inclusive restroom renovation saw students design the project, with support from the department director and alumni architects, emphasizing practical learning. Additionally, a circular material library recycles unused resources, promoting sustainability and external partnerships. These initiatives embody a decentralized, participatory model aligned with Rudolph H. Weingartner's "Fitting Form to Function," leveraging innovative resource utilization while involving faculty as advisors. By balancing time, cost, and quality–essential aspects of design management–students gain practical experience, preparing them for future professional roles. Despite resource constraints, this bottom-up approach turns challenges into creative learning opportunities. NCKU's framework serves as a pioneering model for design education, illustrating the impact of architectural management on community well-being. By embracing hands-on practice and resource management, NCKU sets a precedent for training architects to lead in a rapidly evolving world.

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Benilde Reis, Lusofona University / CICANT, Portugal
Francesca Riccardo, University of Arkansas Rome Program, Italy
Matthew Rofe, The University of South Australia, Australia
Clare Ross, Municipality of Anchorage - Anchorage Assembly, United States
Cadance Ruth, Missouri State University, United States
Pragya Sachdeva, United World Institute of Design(UID), NCR, India
Sara Saghafi Moghaddam, Virginia Tech, United States
Anjali Saini, Grayed Studio By Anjali Saini and Ar. Abhinav Krishnia, India
Michael Salmond, Florida Gulf Coast University, United States
David Sanchez Ruano, Tecnologico de Monterrey, Mexico
Anika Sarin, California State University Los Angeles, United States
Anastasiia Satarenko, MacPaw, Ukraine
Tomomi Sayuda, The University of Tokyo, Japan
Andreas Schlegel, LASALLE College of the Arts, Singapore
Ingrid Schmidt, University of Kentucky, United States
Miyoung Seo, Burapha University, Thailand
Christie Shin, Fashion Institute of Technology, United States
Angelica Sibrian, California State University at Fresno, United States
Clarice Sim, Singapore Polytechnic, Singapore
Joselyn Sim, LASALLE College of the Arts, Singapore
Abbie Simon, University of Tennessee, Knoxville, United States
Shruti Soharia Singh, National Institute of Fashion Technology, Mumbai, India
Sukriti Singh, LASALLE College of the Arts, Singapore
Nidhi Singh Rathore, The George Washington University, United States

Attendance List

Alexandra Singleton, Queensland University of Technology (QUT), Australia
Ryan Slone, University of Arkansas, United States
Emma Smith, Cardiff Metropolitan University, United Kingdom
Felix Sng, LASALLE College of the Arts, Singapore
Abhishek Srivastava, Indian Institute of Technology Roorkee, India
Johnnie Stark, University of North Texas, United States
Ashley Stewart, University of Port Harcourt, Nigeria
Ira Wati Sukaimi, Ministry of Education, Singapore, Singapore
Martha Sullivan, Virginia Tech, United States
Wei Xiu Sung, Nanyang Polytechnic, Singapore
Anneleen Swillen, PXL-MAD School of Arts and University of Hasselt, Belgium
Sita Syal, University of Michigan, United States
Cellyn Tan, Temasek Polytechnic, Singapore
Pixie Tan, LASALLE College of the Arts, Singapore
Leon Tan, Unitec Institute of Technology, New Zealand
Ida Tarjem, Cornell, Norway
Jo Li Tay, Curtin University, Australia
Elvis Tay, Temasek Polytechnic, Singapore
Brian Taylor, The University of Alabama, United States
Wladimir Tejo, Federal University of Paraíba, Brazil
Amina Tekitek Bouden, Higher School of Sciences and Technologies of Design University of Manouba UrTIiM, Tunisia
Christabel Teng, Nanyang Academy of Fine Arts - University of the Arts Singapore, Singapore
Nicholas Teo, LASALLE College of the Arts, Singapore
Shreya Thakkar, Electrolux Group, United States
Wichanat Tiwasing, Mahasarakham University, Thailand
Shunta Tomimatsu, Kyushu University, Japan
Aggie Toppins, Washington University in St. Louis, United States
Stephanie Travis, The George Washington University, United States
Barbara Trippeer, University of North Texas, United States
Krishna Trivedi, Indian Institute of Technology Hyderabad, India
Wildan Trusaji, Singapore University of Technology and Design, Singapore
Wen Ping Tsai, National Cheng Kung University, Taiwan
Ching-Pin Tseng, National Sun Yat-sen University, Taiwan, Taiwan
Emily Tsiang, NYU Shanghai, China
Abigail Tuggle, New Mexico State University, United States
Gena Mei Tusi, Medilink Network Inc, Philippines
Mohammad Nyme Uddin, The Hong Kong Polytechnic University, Hong Kong
Tania Ursomarzo, American University of Sharjah, United Arab Emirates
Naomi Van Stralen, University of Twente, Netherlands
Ana Thudichum Vasconcelos, Universidade de Lisboa, Faculdade de Belas Artes, Centro de Investigação e de Estudos em Belas Artes, Portugal
Szabolcs Vatány, Moholy-Nagy University of Art and Design, Hungary
Paola Velasco Espín, Universidad Tecnológica Indoamérica, Ecuador
Miguel Vieira, University of Aveiro, Portugal
Maurizio Vrenna, Wenzhou-Kean University, China
Nina Vukadin, Austria
Fengcheng Wan, Universiti Sains Malaysia, Malaysia
Chuxuan Wang, Dongseo University, South Korea
Meiwen Wang, Dongseo University, South Korea

Attendance List

I Hsuan Wang, National Cheng Kung University, Taiwan
Sheeraz Wania, George Brown College - Toronto, Canada
Neil Ward, Drake University, United States
Clara Watkins, Cardiff Metropolitan University, United Kingdom
Timothy Wee, LASALLE College of the Arts, Singapore
Zoe Wee, LASALLE College of the Arts, Singapore
Heshan Weeramanthri, LASALLE College of the Arts, Singapore
Bhawna Welturkar, Center for Study of Science, Technology and Policy, India
Ma Wenjuan, China
Jeffrey Wheatley, Iowa State University, United States
Lisa Winstanley, Nanyang Technological University, Singapore
Su Cheong Wong, UOW University Malaysia, Malaysia
Qi Xiao, Dongseo University, South Korea
Ningfei Xiao, Te Herenga Waka - Victoria University of Wellington, New Zealand
Wenjing Yang, Sichuan University of Media and Communications, China
Ziyuan Yang, Tsinghua University, China
Shuqi Ye, LASALLE College of the Arts, Singapore
Chin-juz Yeh, Fashion Institute of Technology, United States
Basak Yuksel Balakrishnan, Raffles College of Higher Education, Singapore
Cagil Yurdakul, Raffles Design Institute, Singapore
Meg Zalatel, Municipality of Anchorage, United States
Eric Zeigler, University of Toledo, United States
Haocheng Zhang, Victorian College of the Arts, Faculty of Fine Arts and Music, University of Melbourne, Australia
Aoni Zhang, University of Lisbon, Portugal
Mingming Zhao, Cornell University, United States

Common Ground Research Networks

COMMON GROUND

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.

www.cgnetworks.org

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

Supporters & Partners

As they say, "it takes a village." We are thankful for the generous support of:

And to our Research Network members!

www.cgnetworks.org/medialab

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

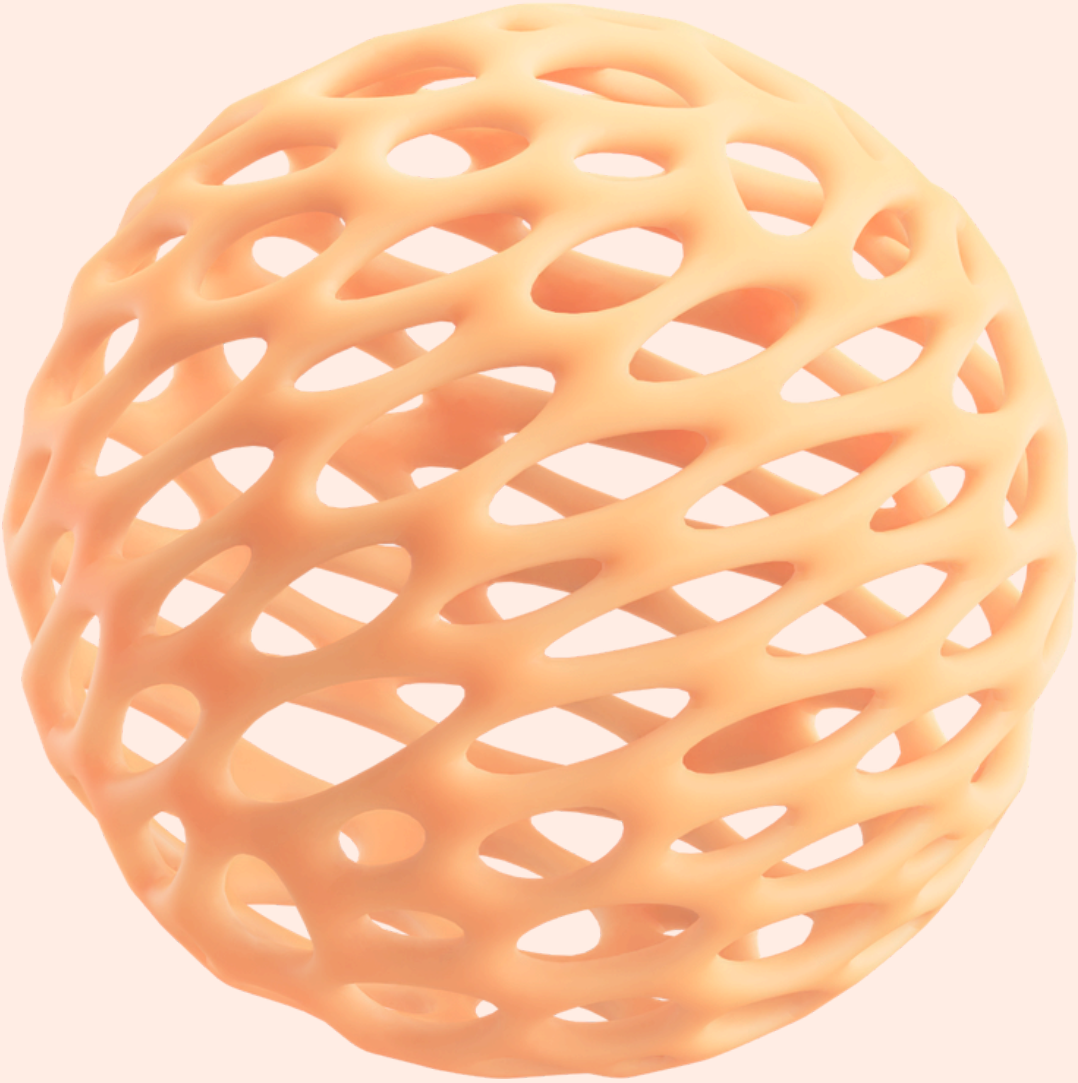
Long Term Goals

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

XIX CONGRESO INTERNACIONAL SOBRE PRINCIPIOS Y PRÁCTICAS DEL DISEÑO

PENSAR, APRENDER, HACER: FORMAS PLURALES DEL DISEÑO



LASALLE College of the Arts, Singapur **25-27 de febrero de 2025**

LASALLE College of the Arts | UAS University of the Arts Singapore | Cumulus Association | Principios y Prácticas del Diseño

Cartas de bienvenida

Queridos asistentes:

Es un gran placer darles la bienvenida al XIX Congreso Internacional sobre Principios y Prácticas del Diseño. Nos sentimos honrados de contar con su presencia este año en el LASALLE College of the Arts, en Singapur.

Como diseñadores, es fundamental que cuestionemos nuestras prácticas y que estén en continua evolución para satisfacer las diversas necesidades de las comunidades a las que servimos. El Congreso de este año nos invita a explorar nuevas perspectivas más allá del diseño centrado en el ser humano, considerando las complejas interconexiones entre el diseño, la sociedad, el medio ambiente y los sistemas ecológicos. Nuestras discusiones harán hincapié en la colaboración transdisciplinar, alentando a todos los participantes a preguntarse "¿Qué pasaría si...?" y a explorar nuevas posibilidades para el futuro. Juntos, examinaremos cómo el diseño puede fomentar un enfoque plural y multispecies para remodelar nuestro mundo.

El tema principal de este Congreso refleja la creciente conciencia dentro de la comunidad del diseño de que nuestro trabajo debe abordar los desafíos complejos e interconectados de hoy en día. ¿Cómo podemos diseñar colectivamente un futuro mejor, incluso a través de pequeñas acciones personales y significativas, mientras navegamos por economías diversas, medios de vida divergentes, sistemas complejos y dilemas sociales y ecológicos multifacéticos? ¿Y cómo podemos garantizar que nuestras prácticas de diseño sean inclusivas? Esperamos que esta conferencia ofrezca un espacio para conversaciones dinámicas, exploración creativa y colaboración significativa mientras trabajamos para dar forma a nuevas agendas para el diseño.

Como alguien que cree firmemente que los congresos están moldeados por las personas que asisten a ellas, estoy emocionado de conocerles y compartir ideas con cada uno de ustedes. Les doy una cálida bienvenida a todos los participantes, mientras nos reunimos bajo el tema "Pensar, Aprender, Hacer: Vías Plurales del Diseño". Les doy las gracias por sus contribuciones y por formar parte de la gran y solidaria familia de Common Ground Research Network.

Gracias por su valiosa participación.

Con un cordial saludo,

Prof. Dr. Cátia Rijo
Profesora asociada en diseño de comunicación
Vicepresidenta en la Escuela Superior de Educación de Lisboa, Politécnico de Lisboa

Estimados congresistas, en nombre de la Red Internacional de Principios y prácticas del Diseño y del mío propio queremos daros la más cálida y acogedora bienvenida un año más a nuestro Congreso, que este año como sabéis se celebra en un marco inigualable como es la Facultad de Diseño LASALLE College of the Arts, Singapore.

Todo proceso creativo requiere de un tiempo de reflexión, de un momento de detenernos a pensar y a investigar. Ese proceso es especialmente interesante en el Diseño. Y este proceso a veces consiste en un instante de inspiración y a veces es algo mucho más complejo, que implica el análisis de muchos puntos de vista. Pero en absolutamente todos los casos implica también un amplio bagaje. Los que diseñáis sabéis bien que diseñar no consiste sólo en "diseñar". El proceso que da lugar a un diseño final es siempre complejo e implica un recorrido anterior difícil de definir: influencias, referentes, conocimientos previos técnicos, artísticos y creativos; experiencias... Este año nuestro Congreso quiere detenerse especialmente en estos procesos. Nuestro lema de 2025 "PENSAR, APRENDER, HACER", tiene como intención poner el foco en el proceso de creación en cualquier tipo y forma de Diseño.

Nuestro lema no se detiene ahí, continúa con el sublema: "Formas plurales del Diseño". Y es que cada diseñador, cada diseñadora, trabaja de un modo único y llega a un resultado final a través de distintos procesos. Tenemos una suerte enorme de trabajar en un campo como éste en el que a un resultado creativo exitoso podemos llegar a través de muy distintos caminos. La pluralidad en el Diseño está también presente en nuestro trabajo investigador. Los Congresos de nuestra Red Internacional de Principios y prácticas del Diseño reúnen cada año a investigadores e investigadoras de muy diversos lugares del mundo y con muy diversos intereses y perfiles académicos, pero a todos nos une un gran ánimo innovador e investigador y un alto carácter de transferencia entre nuestro trabajo diario y nuestra investigación.

En nuestra pluralidad está nuestra riqueza y a nivel personal puedo deciros que mi mejor experiencia como Presidente de la Red Internacional es conocer cada año estos muy diversos perfiles, que enriquecen nuestra profesión de investigadores en diseño. Las contribuciones recibidas este año han sido numerosas, variadas y productivas, destacando el interés por investigar en prácticas del diseño novedosas y de calidad.

Durante estos días nuestro objetivo será compartir y movilizar el conocimiento sobre la investigación en Diseño, pero también fortalecer y ampliar las redes colaborativas para seguir creciendo juntos. Queremos ser un espacio de reunión presencial para compartir ideas y posteriormente que estos lazos se consoliden promoviendo una interacción continua, es nuestra idea como Red de investigación que supera los kilómetros que separan nuestros centros de trabajo.

Expresamos nuestro más sincero agradecimiento a todos aquellos que han participado desde distintas partes del mundo, ya sea de manera presencial o en línea, para compartir sus valiosas contribuciones investigadoras. Gracias también a los organizadores y representantes de Common Ground, a las autoridades y académicos de LaSalle Singapur por brindarnos sus instalaciones y su talento humano.

Bienvenidos y bienvenidas un año más a nuestro Congreso,

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

Estimados participantes del Congreso:

Es un gran placer darles la bienvenida al **XIX Congreso Internacional sobre Principios y Prácticas del Diseño**. 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.

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.

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.

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.

Loredana Di Lucchio

PhD, Full Professor in Design, 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.

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
- **María Begoña Saiz Mauleón,** Universitat Politècnica de València, España

XIX 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
- 2024 - Universitat Politècnica de València, Valencia, España

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

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

Nur Hidayah Bte Abu Bakar

Dean, Faculty of Design, LASALLE College of the Arts, Singapore

- MA (Design for Communication), University of Central England, UK
- BA (Design), Curtin University of Technology, Australia
- Diploma (Graphic Design), Nanyang Academy of Fine Arts, Singapore
-

Nur Hidayah is a design-educator engaged in furthering design thinking and education in Singapore and Southeast Asia. Her expertise lies in design curriculum branding and identity, design for communication strategies and advertising communication.

Prior to joining LASALLE, Nur Hidayah worked in a full portfolio of design communication systems ranging from copywriting, design and art direction projects across major industry segments. This coupled with her extensive teaching experience of more than 15 years, Nur Hidayah has been instrumental to the transformation of the Faculty of Design into a leading faculty for Southeast Asia.

A deep believer of the interconnectedness of design aesthetics, education and industry, Nur Hidayah has initiated several collaborative partnerships with various design institutions. She presented a research paper at the Ubuntu International Design Symposium 2011 in Seoul, which covered The Role of Design Education. With faculty staff members, she is currently developing design capability programmes with communities in Asia and investigating issues around social enterprise for a more inclusive design culture. She has led the research and study of design cultures in contemporary Asian cities between Singapore, Seoul and Shanghai and undertaken the Global Design Initiative involving five international universities looking at design as a research tool.

Over the years, her excellent interpersonal and management skills have enabled her to inspire many students. Her vision and foresight has helped nurture these students into leaders that have contributed to Singapore's creative landscape. Under her leadership, the design programmes have achieved great success at regional and international design competitions and showcases, including D&AD Student Awards, The Crowbar Awards, Furniture Design Awards and Graduate Fashion Week in London.

Today, Nur Hidayah continues to serve as an expert on various boards in Singapore. Her current appointments include the National Gallery Singapore, Singapore Note and Coin Advisory Committee (Monetary Authority of Singapore), and member of the Design Education Review Committee Workgroup, DesignSingapore Council (Ministry of Communications and Information). Her past appointments include the Malay Heritage Foundation (National Heritage Board, 2011), Malay Heritage Centre (National Heritage Board, 2012) and advisory member for MDA's Malay Programmes Advisory Committee (InfoCommMedia Development Authority of Singapore (2016–2018).

Lidya Chrisfens

Docente, Escuela de la Moda, Facultad de Diseño, LASALLE College of the Arts, Singapore

- MA Arts Pedagogy and Practice, Goldsmiths University of London, UK
- Bachelor in Fashion Design & Textiles, Open University, UK
- Diploma in Apparel & Merchandising, Temasek Polytechnic, Singapore

Lidya is a dedicated fashion lecturer with over 15 years of experience in the industry. She has been working in various roles since 2005, gaining a wealth of knowledge and expertise. In 2012, Lidya began her career as a fashion lecturer and has been teaching ever since. She specialises in creative pattern cutting and digital skills for fashion, and her classes are designed to provide students with the skills and knowledge they need to succeed in the fast-paced world of fashion.

Attaining a Masters in Art Pedagogy and Practice drives her to explore interdisciplinary approaches in the various art fields. In 2020, she developed a novel fashion technique, blind-draping. Lidya's passion for fashion is evident in everything she does, and she is committed to helping others pursue their dreams in this exciting field.

Lidya actively participates in conferences and has presented her research papers at several prestigious conferences. One of her most significant achievements is developing the blind-draping fashion technique. Lidya's innovative approach to fashion design challenges traditional notions of visual aesthetics and can potentially revolutionise the way designers think about their craft.

The blind-draping fashion technique earned Lidya an Emerging Scholar award in 2023. In 2022, she was also awarded the Best Poster Presentation at a significant fashion conference. Her research has been well-received in the fashion community and has generated considerable interest from scholars and practitioners alike.

The blind-draping technique is set to be published in a book on radical fashion practice methods. This publication will be a valuable resource for fashion designers and scholars seeking to explore new and innovative approaches to fashion design. Lidya's contribution to this book will cement her position as a thought leader in the fashion industry and a driving force behind the evolution of contemporary fashion practice.

Dawn Lim

Executive Director, DesignSingapore Council (Dsg), Singapore

As Executive Director of DesignSingapore Council (Dsg), Dawn sets the vision and strategy for Singapore's national agency for design. Since taking over the reins in 2022, she has positioned Singapore Design for the future – focusing on design's role in shaping emerging technology, sustainability and systems of care. She also oversaw the relaunch of Singapore Design Week held every September and the debut of Dsg's global showcase, Future Impact, at Milan Design Week 2023 and again in 2024. She is also the Co-Commissioner of the Singapore Pavilion at the Venice Biennale Architecture and leads Singapore's highest design accolade – the President*s Design Award.

She has two decades of experience in public and private sector trade agreements, policymaking, partnership development and industrial strategy in Asia and Europe. She honed her business and commercial acumen in the shipping industry at PSA Corporation, and put that to good use subsequently at the Singapore Economic Development Board attracting the world's top companies to invest in the country to drive economic growth.

She holds a Bachelor of Science in International Relations from Georgetown University and a Master of Science from the Stanford Graduate School of Business. Dawn has presented on the power of design across international platforms such as the UNESCO Creative Cities Network, SXSW, ChangeNow Summit, Intercorp Festival of Innovation, Singapore Design Week, as well as with partners like JLL, Stagwell, Deloitte Centre for the Edge, WGSN. She is a UK Design Ambassador, advisory member to the Seoul Design Award and has been invited as a jury member on a wide range of design platforms.

Jeanette Kwek

Head, Centre for Strategic Futures and Director, Singapore

Jeanette Kwek is the Head of the Centre for Strategic Futures.

Jeanette joined the civil service in 2005, starting her career at the Ministry of Defence, where she worked on Singapore's defence relations with international partners. In 2009, she became one of the founding members of the Centre for Strategic Futures (CSF). Since then, she has worked in roles connecting foresight with geostrategic issues. In her current role, she oversees the Centre's research agenda, its extensive international networking efforts, and work in growing foresight capabilities across the Singapore Public Service.

Jeanette is a political scientist and economist by training, having graduated with honours from the University of Chicago in 2005. She continues to stay current in the field as an alumna of the Munich Young Leaders, International Institute of Strategic Studies' Southeast Asian Young Leaders Program and the Young Strategists Forum. She is married with two young children. In whatever spare time the children leave her with, she nurses a dangerous addiction to caffeine and the written word.

Lilian Chee

Associate Professor, Department of Architecture, National University of Singapore, Singapore

Lilian CHEE is Associate Professor of Architectural Theory and Design at the Department of Architecture in the National University of Singapore, where she co-leads the Research by Design Cluster. She also serves as Academic Director at the NUS Museum, and Assistant Dean at the College of Design and Engineering and holds a joint appointment at the Department of Communications and New Media, NUS Faculty of Arts and Social Sciences. Her work includes Architecture and Affect (2023), Art in Public Space (2022), Remote Practices (2022), Objects for Thriving (2022), and the award-winning essay film 03-FLATS (2014). She leads the Social Sciences Research Council-funded Foundations for Home-based Work (2021-24) and is conducting a limited study on Dementia, care, and public housing (2023-24). She writes on affect, architectural representation, domesticity, and works creatively across the intersections of architecture and visual cultures.

Nur Hidayah Bte Abu Bakar

Dean, Faculty of Design, LASALLE College of the Arts, Singapore

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Wendy Chua

Interdisciplinary Designer and Educator, Singapore

- MA Open Design and Interdisciplinary Practices (magna cum laude), Humboldt University of Berlin, Germany
- BA (Hons) Industrial Design, National University of Singapore, Singapore

Wendy Chua is an interdisciplinary design researcher, curator and educator. As a design anthropologist, her research centres on mediating across disciplines and sectors to negotiate new forms of design and art-science practices in response to social issues and climate-related precarities.

Through her practice Forest & Whale, Wendy has lived and worked in Singapore, Buenos Aires, London and Berlin where she envisages design as an agent of change to create an impact in social and planetary care. She has designed products, services and museum experiences that redefine the way we live, from homeware objects and furniture systems to new models of care in ageing societies.

With accolades like the prestigious P*DA award (Singapore) and the Good Design Award (Japan), her work has been exhibited in the Milan Triennale Museum and the Museum of Craft and Design of San Francisco, among others. Selected as one of Prestige Singapore's 40 Under 40 in 2024, Wendy is recognised for her work in driving game-changing transformation within the arts and social care sector.

Swimming between the fields of the marine sciences, environmental humanities and design, Wendy has been selected for the 2024 EU STARTS artist residency (ReSilence) to envision the future sounds of coastal cities. Her current work with marine microbiologists on marine heatwaves and harmful algal blooms will be exhibited in Berlin and other cities in 2025.

Cátia Rijo

Vicepresidenta de la Escuela de Educación de Lisboa, Coordinadora del Grado en Artes Visuales y Tecnologías, Instituto Politécnico de Lisboa, Lisboa, PortugalFundadora de DesignLab4U

"Pluralidad en el Diseño: Una Invitación a la Cocreación y a un futuro Colectivo"

Cátia Rijo es doctora en Diseño por la Facultad de Arquitectura de la Universidad de Lisboa, máster en Diseño Gráfico y graduada en Diseño Visual, ambos obtenidos por la IADE.

En 2016 fundó DESIGNLAB4U, un laboratorio profesional que implica a sus estudiantes en un auténtico trabajo pedagógico, ofreciéndoles la oportunidad de colaborar con proyectos reales en una comunidad de proyección amplia, generada en un contexto inmersivo de aprendizaje, y que ofrece la oportunidad de desarrollar actividades culturales y sociales enriquecedoras.

En la actualidad es vicepresidenta de la Escuela de Educación del Politécnico de Lisboa, donde coordina e imparte docencia a equipos curriculares relacionados con el Diseño, y es coordinadora del Grado en Artes Visuales y Tecnologías por la misma institución.

Es coordinadora de la línea de investigación de Artes y Diseño en el Centro de Estudios Educativos de la Escuela de Educación de Lisboa, e investigadora en el CIAUD.

Publica regularmente artículos en revistas especializadas, tanto a nivel nacional como internacional, y participa con frecuencia en congresos de ámbito nacional e internacional. Es miembro del comité científico de diversas revistas científicas y congresos, supervisa trabajos de fin de máster, tesis doctorales, y regularmente forma parte de tribunales de máster y doctorado.

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.

Sandra Karime Pérez Castrejón
Universidad de Guanajuato
México

Isabel Seguí Verdú
Universitat Politècnica de València,
España

Efraín Canaán Zurita Mézquita
Universidad Juárez Autónoma de Tabasco
México

Nancy Cristina Gonzalez Lezo
Universidad de Guanajuato
México

Gabriela Mariah Serna-Mendiburu
Universidad de Monterrey
México

Brenda García Rivera
Universidad Veracruzana
México

María Isabel Mazorra Argote
Institución Universitaria Colegio Mayor
de Cauca
Colombia

Pedro Martínez Olivarez
Universidad Veracruzana
México

María Martha Margarita Silva González
Universidad Autónoma de Nuevo León,
Universidad del Valle de México
México

Resúmenes de 2025

Las imágenes como estrategia del marketing digital.

Carmen Castrejón Mata, Profesora- Investigadora, Departamento de Finanzas y Administración, Universidad de Guanajuato, Guanajuato, México
Efraín Zurita, Estudiante, PhD in business and management, Universidad Juárez Autónoma de Tabasco, México
Sandra Karime Pérez Castrejón, Estudiante, Doctoranda, Universidad de Guanajuato, Guanajuato, México

En el marketing digital y en los negocios tradicionales ha resultado importante integrar imágenes que sean atractivas para llegar al target deseado. Por esto, en el dinámico panorama del marketing digital, las redes sociales se han erigido como herramientas poderosas para que las empresas conecten con su público objetivo. Específicamente, plataformas como Facebook e Instagram se han consolidado como líderes en este ámbito, siendo preferidas por numerosos negocios locales para sus estrategias publicitarias. Dada su popularidad y el amplio alcance que poseen, es esencial comprender cómo las empresas pueden aprovechar al máximo estas plataformas para llegar a sus audiencias de manera efectiva. Esto además nos permite entender la importancia que tiene en el marketing digital seleccionar adecuadamente aquellas imágenes que van a hacer que los productos ofrecidos por una empresa o marca determinada logre el engagement que se desea lograr y particularmente el posicionamiento que se busca del producto o servicio. Así mismo, Urango de la Rosa dice que, ciertamente, se está en la era de la hiper conexión, en donde todos padecen la necesidad de estar conectados a internet o redes sociales, que se han convertido en esenciales para el desarrollo de las actividades diarias. Para las empresas en general, es un reto aprovechar este momento frente a los ojos del consumidor, conociendo al detalle sus necesidades, preferencias, gustos, para ofrecerle productos o servicios de su interés.

Diseño de Experiencia bajo metodología ACBD Proyecto Fundación Instituto Profesional Duoc UC-Observatorio Alma (Santiago de Chile)

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El Proyecto corresponde a una iniciativa del curso de Diseño de Experiencia en el marco de Vinculación con el Medio de nuestros estudiantes bajo la metodología de Aprendizaje colaborativo basado en desafíos. Tiene por objetivo coordinar actividades de diseño y desarrollo relacionados con el quehacer científico y divulgación de las ciencias en el marco de la astronomía en Chile, facilitando la visualización de sistemas astronómicos descubiertos en ALMA para su exposición en su sala de visitas, constituyendo un proyecto real a implementar dentro del Observatorio en la sala de descubrimientos ubicado en San Pedro de Atacama, Antofagasta (Chile).

Visualización del patrimonio arquitectónico del movimiento moderno en Cundinamarca con el apoyo de tecnologías digitales 3D.

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En Colombia, el patrimonio arquitectónico se encuentra reconocido por las entidades nacionales y regionales; sin embargo, este reconocimiento no impacta en la ciudadanía. Las expresiones coloniales y republicanas se identifican; sin embargo, para las propuestas que marcan el movimiento moderno en el país, no encuentran una identidad. Al respecto, el Grupo de Investigación de la Universidad Colegio Mayor de Cundinamarca desarrolla un inventario sistemático de las obras de arquitectura asociadas al movimiento moderno en el departamento de Cundinamarca, dotando al conjunto de un vínculo teórico que soporte su calidad patrimonial. La búsqueda se circunscribe a las ciudades intermedias, donde por sus características territoriales puede encontrarse la mayor concentración de obras de importancia pertenecientes al área de estudio. Esto implica configurar un estudio de carácter exploratorio por la ausencia de investigaciones o documentos en el mismo campo temático, debiendo acudir a fuentes primarias como archivos, la obtención directa de imágenes y la elaboración de planimetrías inexistentes. A partir de ello, se establece una metodología para generar herramientas de reconocimiento con el uso de Tecnologías Digitales 3D. Este trabajo se concentró en los inmuebles patrimoniales declarados, y se espera poder continuar con inmuebles que, sin estar declarados, poseen los valores propios de esta etapa de la arquitectura. La ponencia da cuenta de la metodología empleada y desarrolla la dinámica para el reconocimiento a partir de experiencias anteriores del grupo, desarrolladas a nivel urbano con los núcleos fundacionales de Bogotá.

La inteligencia artificial en la práctica del diseño gráfico: Usos y percepciones.

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La incorporación de la Inteligencia Artificial Generativa (IAG) en la profesión del diseño gráfico supone tanto retos como oportunidades, la modificación de sus procesos y cuestiones éticas que están resignificando el ámbito. Los objetivos se centran en explorar el nivel y forma de adopción de la IAG en este sector, comprobar si está alterando y cómo los procesos creativos, la percepción de riesgo reputacional de la profesión, las preocupaciones éticas, su impacto futuro, así como explorar las opiniones sobre su incorporación en la formación académica. También comprender cómo la IA está reconfigurando los procesos creativos puede ayudar a entender el uso actual de esta tecnología, así como descubrir en qué áreas podría aportar más valor y de qué forma. El estudio contribuye con nuevo conocimiento al ámbito del diseño y al uso que este hace de la tecnología. Los métodos de investigación seguidos son mixtos, a partir de una encuesta a 178 profesionales del sector en España, con respuestas cuantitativas y cualitativas. Los resultados obtenidos apuntan a un alto uso de la IAG, integrándola en múltiples fases del proceso creativo, asociado a una aceleración de procesos e incremento de la capacidad de trabajo, pero también a la exploración de nuevas direcciones creativas. La incorporación de la IA se ha integrado a través de procesos autodidactas y la inmensa mayoría piensa que no llevará a la desaparición de la profesión.

Análisis perceptivo del ciudadano en el espacio urbano: Valoración de sus necesidades y exigencias a la hora de definir parámetros y requisitos de diseño en la iluminación exterior

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La ciudad está compuesta por elementos naturales y artificiales, donde se generan espacios que permiten que la gente interactúe. Cuando se busca una solución en el campo del diseño urbano se sigue dando prioridad al uso, a la funcionabilidad, a los costes o a temas medioambientales; sin embargo, estos son factores responden a un abordaje racional y muchas veces pueden descuidar elementos emocionales y afectivos en la solución de iluminación de las ciudades. Los aspectos emocionales van a ser relevantes para la solución de iluminación pues van a influir en que el espacio urbano sea percibido como un espacio atractivo o no. El objetivo de este trabajo fue identificar, mediante la participación ciudadana, la percepción de las personas frente a su espacio urbano nocturno para tenerlas en cuenta en la planificación del diseño de iluminación como un parámetro de diseño. El instrumento empleado fue el informe acerca del proceso de participación ciudadana, en Stralsund (Alemania) donde se plasmaron la interpretación de los vecinos con relación a su espacio urbano Neuer Markt, para tenerlas en cuenta en la "Remodelación del Espacio Urbano Neuer Markt", el cual goza de protección como Patrimonio de la humanidad de la UNESCO. El análisis y los resultados del proceso de participación ciudadana ayudaron a identificar de manera directa las expectativas, posiciones y preocupaciones de los vecinos de la ciudad de Stralsund frente a su espacio urbano nocturno. Estos conocimientos pretenden ayudar a los diseñadores a cumplir sus expectativas

Análisis de escenario de la literatura actual sobre pequeños aerogeneradores urbanos: Perspectiva del diseño centrado en el humano.

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En respuesta a la actual emergencia climática, es imperativa la transformación urgente de las ciudades hacia modelos más sostenibles. El desarrollo de energías renovables adaptadas a entornos urbanos, como la energía eólica a pequeña escala o pequeños aerogeneradores (Small Wind Turbines, SWT), es crucial para reducir la dependencia de los combustibles fósiles y mitigar los efectos del cambio climático. La bibliografía científica sobre los aerogeneradores abarca varias disciplinas, como la ingeniería, la física, la economía, el urbanismo y la política medioambiental. A pesar de la abundancia de investigaciones, hay una falta de cohesión en la literatura, con estudios dispersos en diferentes publicaciones y bases de datos. Esta fragmentación dificulta la comprensión global del tema y limita la transferencia de conocimientos y la identificación de posibles sinergias. Un aspecto preocupante es la escasa atención que se presta a las dimensiones humanas y sociales del SWT. La mayor parte de la investigación se centra predominantemente en los aspectos técnicos y económicos de la tecnología, pasando por alto las dimensiones sociales y políticas cruciales para el éxito de su aplicación. Esta comunicación científica pretende poner de relieve el papel fundamental que las SWT pueden desempeñar en el avance de unas ciudades sostenibles y resilientes en respuesta a la emergencia climática, y se espera que este trabajo contribuya a centrar la atención de su diseño en aspectos y variables más humanos, dando un impulso a la unidad y la conectividad, lo que puede ayudar a lograr un desarrollo integral y sistemático de estas tecnologías.

Casa en 100m2 - Unidad y patrimonio: Desconstrucción en contexto patrimonial

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Casa en 100m2 se establece en un paisaje contrastado por una parroquia, cuyas viviendas nacen de lo informal hasta su consolidación, y un contexto natural rodeado por montañas y ríos. Las edificaciones aledañas presentan tres características esenciales: arquitectura tradicional (reconocida como patrimonio), edificaciones con una formalidad impuesta por la tradición y otra parte que conjuga el orden junto con el crecimiento informal de la vivienda. Dentro de este contexto de crecimiento informal a nivel de urbe se produce (contrario a lo planificado), un lote restante de 100m2 esquinero; el cual pasa en abandono desde la consolidación de la parroquia; debido a sus características morfológicas produce rechazo para la construcción de vivienda. Y es que su forma irregular, junto con su pendiente pronunciada y su contexto aledaño patrimonial sugiere canalizar todas las variables para consolidar una estrategia proyectual que contextualice una vivienda contemporánea en el sitio. Por lo tanto, son estas mismas condicionantes las que condujeron al diseño hacia la desconstrucción de la forma. Es decir, la irregularidad del terreno es la condición a la que se sujeta la figura, caso contrario ingresar una regularidad sería descontextualizar el objeto arquitectónico. De esta manera se levanta un solo volumen (unidad) y se abstraen las partes necesarias relacionando los ámbitos funcionales, estructurales, de figura, climáticos, de experiencia, entre otros.

Dinámicas de apropiación y transformaciones físicas del espacio público: Evaluando la habitabilidad vecinal

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La reproducción y transformación del espacio público a través de la apropiación territorial por parte de la comunidad, como respuesta a la exclusión institucional, evidencia el rol crucial de estos espacios para fomentar la identidad, solidaridad y cohesión social en el entorno barrial. Este artículo tiene como objetivo explorar cómo las intervenciones vecinales en el espacio público, a través de prácticas informales de apropiación, generan nuevas dinámicas de uso y percepción del territorio, contribuyendo a la creación de un sentido de comunidad y empoderamiento frente a las estructuras de poder institucionales. La investigación se basa en las teorías de David Harvey, quien sostiene que la apropiación del espacio público es clave para fortalecer el tejido social y resistir políticas urbanas excluyentes, y Michel de Certeau, quien destaca que las prácticas cotidianas en el espacio público permiten a los individuos construir un sentido de pertenencia y cohesión social. A través de un enfoque cualitativo y un análisis documental, se investigó el contexto de diversos espacios públicos en barrios urbanos, mediante observación participante, lo que permitió profundizar en las dinámicas de apropiación y las formas de resistencia social en estos entornos. Los resultados muestran que los habitantes, mediante prácticas informales, transforman y reconfiguran sus entornos, creando comunidades más cohesionadas y empoderadas. Resalta la importancia del espacio público como clave para mejorar la habitabilidad a nivel vecinal, fortalecer el tejido social. La apropiación territorial emerge, así como una forma de resistencia social que promueve la construcción de comunidades más inclusivas y resilientes.

La animación como herramienta de memoria: Representando el reclutamiento infantil en el conflicto armado colombiano a través de Operación Berlín.

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Esta ponencia presenta un análisis del proyecto de animación documental "Operación Berlín: La niñez que luchó en la guerra de Colombia", una obra que aborda las memorias traumáticas del reclutamiento infantil durante el conflicto armado en Colombia. A través de la animación, Operación Berlín utiliza estrategias estéticas que reconstruyen y resignifican el trauma, creando una representación visual de la memoria individual y colectiva sobre este fenómeno doloroso. La operación militar conocida como Operación Berlín tuvo lugar entre noviembre de 2000 y enero de 2001 en el Páramo de Berlín, y fue llevada a cabo por el Ejército Nacional de Colombia contra la columna móvil Arturo Ruiz de las FARC-EP, compuesta por 362 guerrilleros, de los cuales 141 eran menores. Este proyecto de animación no solo narra los eventos históricos, sino que lo hace desde múltiples perspectivas, incluyendo las voces de los sobrevivientes y de los militares implicados, generando una experiencia visual y emocional que profundiza la comprensión del espectador. La animación en Operación Berlín actúa como un potente vehículo de empatía, permitiendo al espectador conectar profundamente con las experiencias de las víctimas. La elección de texturas, formas y materiales cuidadosamente elaborados facilita una mediación visual que no solo documenta, sino que también invita a la reflexión y al reconocimiento de las vivencias de estos jóvenes. Este proyecto demuestra cómo la animación, al representar recuerdos fragmentados y complejos, puede trascender las limitaciones de los métodos convencionales de documentación y abrir un espacio para una conexión humana más profunda y significativa.

Diseño de experiencias sociales en los jardines terapéuticos: Valoración para su desarrollo en entornos urbanos

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Leonor Morales, Estudiante, Diseño industrial, Universidad Nacional de Colombia sede Palmira, Valle del Cauca, Colombia

Desde la reciente pandemia la interacción social ha cambiado significativamente, si bien ya no hay distanciamiento social por la emergencia sanitaria, existe por las nuevas modalidades de trabajo, de comunicación y de relaciones interpersonales. Las redes consumen cada vez más tiempo de las personas y el trabajo se convirtió en un separador entre el mundo remoto y el presente. La escasa interacción trae consigo problemas de relacionamiento donde al ser humano se le dificulta entablar o mantener relaciones sociales y, adicionalmente, las ciudades agitadas y sin espacios para la dispersión, empeoran esta situación. En tal sentido, desde el ejercicio del diseño, se reconoce una oportunidad para abordar esta problemática aplicando el concepto de jardín terapéutico, desarrollado por varios autores, como un espacio que permite una relación con la naturaleza para promover la salud y el bienestar de sus usuarios, considerando parámetros de diseño que van más allá de la concepción estética de dicho espacio. Así, en desarrollo del curso Proyecto Especial del programa de Diseño Industrial de la Universidad Nacional de Colombia - sede Palmira, durante el primer periodo académico del 2024, se avanzó en un proceso investigativo que permitió profundizar en las implicaciones de los jardines terapéuticos, abordar principios del diseño emocional y aplicar el método de Investigación acción participativa (IAP) para formular una guía metodológica que establece parámetros de diseño y promueve su integración en entornos donde aún no han sido implementados, de manera que apoye el ejercicio profesional de los diseñadores interesados en este campo.

Innovación en el diseño de una ruta de afroturismo en comunidades rurales con Google Maps: Caso de Cruz Pampa - Yapatera

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A nivel internacional se viene gestando el activismo y el desarrollo de políticas y planes institucionalizados que promueven el desarrollo de la población afrodescendiente en el mundo, Latinoamérica y El Caribe. El afroturismo nace como una nueva modalidad de turismo que propone itinerarios afro-céntricos. Ello motivó a plantearse como objetivo de investigación proponer una ruta turística innovadora de afroturismo en Cruz Pampa - Yapatera, pueblo de la región Piura en el marco del turismo entendido como hecho cultural. El estudio se basó en el paradigma socio crítico, el enfoque cualitativo y el diseño de investigación acción participante. En base a los datos e información obtenidos se hizo la prueba piloto. Luego se aplicó una encuesta con preguntas abiertas a anfitriones y visitantes. Luego se realizó un análisis fenomenológico reflexivo sobre las perspectivas de desarrollo de la misma. Como resultado se generó una propuesta de ruta turística en el pueblo con mayor diversidad de elementos que en las visitas turísticas preexistentes en el poblado, que configuró la posibilidad de mostrar el patrimonio local afroyapaterano de manera holística y participativa. En los anfitriones y visitantes genero un entendimiento del valor de la diversidad patrimonial que se tiene en la localidad para su aprovechamiento turístico. Por lo tanto, se concluye que el diseño e innovación de una ruta turística implica investigación rigurosa en cooperación con los participantes parte del entorno de estudio como colaboradores en el proceso. Además, se plasmó en la herramienta Google Maps para evidenciar la ruta proyectada.

Construir, probar, decidir lo público: Posibilidades del prototipado en el sector público colombiano

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Prototipar es una de las fases centrales en los procesos de diseño. En esta fase, traducimos los principales componentes de la investigación y las ideas que hemos generado a elementos tangibles o intangibles, que ponemos a prueba y examinamos para entender sus implicaciones en los contextos donde esperamos generar impacto. Es a través de los prototipos que podemos determinar si estamos cumpliendo con los objetivos del proyecto y, especialmente, si estamos generando valor para las personas o comunidades para quienes diseñamos. ¿Qué sucede cuando se llevan los procesos de prototipado al sector público? ¿Qué impacto tienen en las decisiones sobre los proyectos públicos? Y, especialmente, ¿cómo estos procesos, propios del diseño, agregan valor a los proyectos públicos? En esta conferencia se abarcarán tres temas principales: i) el impacto positivo que tiene el prototipado en los proyectos y programas públicos; ii) las posibilidades que ofrece para las dinámicas de los equipos de funcionarios y la toma de mejores decisiones públicas; y iii) algunos pasos metodológicos para el desarrollo de ejercicios de prototipado en el sector público. Estos pasos son una serie de conclusiones basadas en el aprendizaje propio y en la experiencia de funcionarios públicos colombianos que han prototipado. El contenido de esta conferencia forma parte de un proyecto de investigación llamado "Prototipar lo Público", que busca generar herramientas para que los funcionarios públicos de Colombia incorporen procesos de prototipado en su labor, especialmente cuando deben proponer o rediseñar programas con impacto social.

Identificación de necesidades ergonómicas y accesibilidad para personas con discapacidad visual y auditive dentro de los museos de arte de la ciudad de Guanajuato: Caso de estudio

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De acuerdo con el Censo de Población y Vivienda por parte del INEGI en el año 2020, se midió la prevalencia de la población con discapacidad en México, lo cual se arrojó que en México hay 6,179,890 personas con algún tipo de discapacidad, lo que representa 4.9 % de la población total del país. De ellas, 53 % son mujeres y 47 % son hombres. Estos datos son relevantes para el turismo inclusivo ya que no todos los destinos anteponen a las personas con discapacidad para la elaboración de productos, atractivos o destinos turísticos, como en este caso de estudio los museos de arte de Guanajuato Capital. Por lo anterior es importante que los museos sean ergonómicos y accesibles ya que todos tienen derecho a acceder y disfrutar de la cultura y el arte, independientemente de sus habilidades sensoriales. El objetivo de este proyecto es evaluar los elementos ergonómicos y accesibilidad de los museos de arte del centro de la Ciudad de Guanajuato para saber si son aptos para llevar a cabo programas incluyentes, así como las medidas de acción y gestión. El tipo de investigación es mixta, aplicando el muestreo no probabilístico. Los instrumentos son la encuesta que se orienta a la evaluación de la satisfacción de los visitantes dentro de los museos con discapacidad auditiva y visual, así como una entrevista a trabajadores de los museos para conocer cuáles son las acciones que se están tomando para poner en marcha los museos accesibles en la ciudad.

Protocolo LDAP: Una herramienta para la investigación académica de marcas visuales

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El Protocolo LDAP (Logo Design Analysis Protocol) es una herramienta diseñada para objetivar el análisis de marcas gráficas, facilitando a estudiantes de grado y máster la delimitación de variables y unidades de análisis en sus trabajos académicos. Este protocolo de análisis se organiza en tres fases: selección, análisis y comparación, permitiendo una estructura clara y sistemática. El protocolo permite el análisis de 62 variables en tres dimensiones: marca global, elemento textual y elemento icónico. Además, incluye un protocolo de uso para garantizar la estandarización y objetividad en la recopilación de datos. LDAP busca ser una herramienta de apoyo fundamental para el desarrollo de trabajos académicos en diseño gráfico, promoviendo investigaciones rigurosas y sistematizadas sobre marcas visuales.

Implementando una estrategia pedagógica para incrementar el nivel de aprendizaje del diseño sustentable en la Licenciatura en Arquitectura.

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El presente trabajo está fundamentado en una intervención educativa que se realizó en estudiantes de la Licenciatura en Arquitectura de la Facultad de Arquitectura Región Poza Rica -Tuxpan de la Universidad Veracruzana en Veracruz, México. El objetivo general de la intervención fue diseñar la cimentación de vivienda urbana sustentable mediante la estrategia pedagógica Aprendizaje Basado en Proyectos (ABP), para adquirir la capacidad de tomar decisiones relacionadas con el diseño de cimentaciones que beneficien el entorno. La metodología utilizada fue la investigación-acción. Los resultados mostraron que los estudiantes incrementaron el nivel inicial de aprendizajes que tenían antes de la Intervención Educativa cuando implementaron el ABP. Los proyectos que realizaron los estudiantes son la evidencia de que el aprendizaje del diseño es más fácil contando con el soporte que da el ABP.

El tecno determinismo: Ciencia, tecnología e inteligencia artificial en el diseño industrial

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En un mundo en el que la Inteligencia artificial cobra importancia inusitada para amplios sectores de la actividad humana es importante analizar el fenómeno cultural del tecno determinismo que cuenta con gurúes y visionarios de la tecnología que preconizan, en esta hipermediatizada sociedad globalizada, al progreso como camino a recorrer por la humanidad. Nos hemos propuesto examinar esta mentalidad tecnocrática que ha pretendido sumergir la condición humana como superable y banal. La creatividad humana, derivada de su inteligencia, han producido la misma ciencia y la técnica, a las máquinas inteligentes; de ahí la importancia de contar con un arsenal de conceptos que nos permitan lograr la sinergia entre las humanidades y la tecnología. Partiremos desde luego del mismo concepto de diseño.

Diseño y creación de avatares interactivos para la representación en el metaverso institucional de la Institución Universitaria Pascual Bravo

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La tecnología ha venido revolucionando todos los contextos de interacción humana, de esta manera el metaverso es una herramienta importante que posibilita la interacción de una comunidad académica como la de la Institución Universitaria Pascual Bravo. Por esto es importante proponer el diseño de avatares interactivos por medio de la conceptualización y ejecución proyectual para permitir a la comunidad académica de la Institución Universitaria Pascual Bravo representarse en el metaverso institucional. Esto es relevante por que posibilita indagar sobre la forma en la que una comunidad académica se autorepresenta e interactúa en un entorno virtual. De esta manera la forma más eficiente de lograrlo es por medio de la metodología proyectual, ya que se pueden asumir desafíos como la creación de personajes y a su vez posibilitar una cohesión identitaria institucional. Este ejercicio empírico permite plasmar el proceso proyectual en sí mismo y sentar las bases para la integración exitosa de la comunidad en el entorno virtual, fomentando así la participación activa y la identificación con el espacio digital institucional. Además, los avatares han evolucionado más allá de su función original como simples representaciones virtuales para convertirse en elementos fundamentales de la interacción humana en el ciberespacio. Su transformación desde herramientas de identidad hasta mediadores de experiencias digitales inmersivas y personalizadas ha redefinido la forma en que las personas se relacionan con la tecnología.

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Common Ground Research Networks

COMMON GROUND

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.

www.cgnetworks.org

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

Supporters & Partners

As they say, "it takes a village." We are thankful for the generous support of:

And to our Research Network members!

www.cgnetworks.org/medialab

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 Nineteenth International Conference on Design Principles & Practices hosted by LASALLE College of the Arts, Singapore, 25-27 February 2025. The conference featured research addressing the following special focus: "Thinking, Learning, Doing: Plural Ways of 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