Design Practices

Design Practices Research Group
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A scientist's inventions assist him in two ways: they tell him what to expect and they help him to see it when it happens. Those that tell him what to expect are theoretical inventions and those that enable him to observe outcomes are instrumental inventions. The two types are never wholly independent of each other, and they usually stem from the same assumptions. This is unavoidable. Moreover, without his inventions, both theoretical and instrumental, man would be both disoriented and blind. He would not know where to look or how to see.

G. A. Kelly 1969

As the first published work of the Design Practices Research Group we are presenting a catalogue of the group. The catalogue includes a brief biography of group members as well as short statement that highlights individual research and knowledge exchange ambitions. As a part of the catalogue, we have included a photograph of each researcher pictured in their research environment. The appropriate research environment is determined by the individual researchers and they variously include the design studio, offices, the fabrication lab, a building site, a library and a forest. Urna Sodnomjamts, one of our new colleagues and an early career researcher has kindly agreed to be official photographer for this project. Her own profile is featured in the catalogue as is her (self) portrait.

This publication and its presentation is an opportunity to highlight and celebrate the fascinating and diverse activities of the group for students and staff alike. We hope that this will be the first of many such projects that promote the work of group members whilst encouraging a larger discussion around the research and knowledge exchange activities of the school as a whole.

Victoria Watson + Will McLean

Alessandro Ayuso

At the heart of Alessandro Ayuso's work is an exploration of the figure: the limits of the body's intelligibility, its (in)capabilities as a container of both viscera and subjectivity, its propensity to be framed and - in some cases - become architecture. Alessandro's research is the subject of his book, *Experiments with Body Agent Architecture: The 586-year-old Spiritello in Il Regno Digitale*, published by UCL Press. Alessandro's drawings and constructions have been exhibited in the UK, Italy and the US, and were included in *Drawing Futures*, published by UCL Press. His writing on 'body agents' in Baroque architecture has also been included as part of the anthology *The Material Imagination: Reveries on Architecture and Matter* published by Routledge. Alessandro is a Senior Lecturer at the University of Westminster, where he leads DS25 as part of the MArch course, teaches on the BA Interior Architecture course, and acts as a PhD Supervisor. He is also an MArch Thesis Supervisor at the Bartlett, UCL.

Research

Alessandro's research stems from an exploration of how bodies can be envisioned as part of architectural design. His work challenges ideal and instrumentalised notions of embodiment, particularly those ingrained from the legacy of humanist and modernist practices of representing supposedly universal and normative bodies. Contrary to the Vitruvian body's vaunted status at the pinnacle of an assumed hierarchy, and the sanctity of the body proper that accompanies it, embodiment becomes leaky and distributed, giving way to conditions that open corporeality to extreme encounters with alterity. This radically relational mode both profoundly deepens the subject's entwinement with the world and intensifies the body's propensity to manifest as an uncanny stranger.

Picking up on this inherent and intensified otherness of the body, Alessandro envisions bodies that interact with, and in some cases, become architecture. An example are Alessandro's Leaky Embodiment Alter-ego Personas, visions of tragicomic actors with bodies comprised of bulbous, mismatched, and ever-changing parts. LEAPs express ruptures between desire and empirical reality with respect to an 'owner's' body. In portraits, relief sculptures, and design project drawings, they appear astounded at the unwieldy contingencies of their anatomies. Represented through installations and camera-tracked animations, LEAPs emerged from specific places, sometimes constructed amidst that context, absorbing and reflecting it, but also sometimes transposed to other sites, intimating narratives of jarring contrasts and unexpected kinships between humans, aliens, and things. The creation of LEAPs engage the versioning of the self as a methodology, asking: How could drawing the alter ego body intensify encounters with alterity? Could this expression broaden the capacity for relationality and intersubjective exchange?

Alessandro Ayuso, Exploration of the figure works, Hackney Wick, May 2024

Ana Gatóo

Ana Gatóo is a Lecturer in Regenerative Design at the University of Westminster, where she specialises in researching affordable housing solutions for low-income populations using natural materials and digital tools. Ana holds a PhD on this subject from the Centre for Natural Material Innovation (CNMI) at Cambridge University, where she spent over seven years working, developing innovative housing solutions addressing social and environmental challenges. In addition to her academic role, Ana is a partner at Light Earth Designs, a renowned architectural practice known for its commitment to environmentally sensitive architecture and innovative engineering. Ana is also a Committee Advisor for REDER Journal and a Board Advisor for Prospectives Journal. Her undergraduate studies in engineering culminated in investigating earth as a building material. Her graduate studies in architecture focused on timber and bamboo. Outside academia, Ana has dedicated several years to working with international NGOs on development, disaster response, and community engagement in various countries.

Research

There is a pressing need to change how we design and construct our built environment. We know that at least 1.6 billion people are inadequately housed worldwide, millions of evictions happen every year, and the built environment accounts for almost 40% of global carbon emissions. Ana's current research lies in developing flexible and affordable housing solutions with natural materials and digital tools for future cities. Digital design and fabrication are changing the relationship between design and construction. New methods are giving rise to innovative ways of thinking about architecture. Ana's research aims to expand timber and other bio-based material applications through digital design for future cities that are sustainable, inclusive, and affordable.

The overarching themes of Ana's research broadly attempts to answer four questions:

How can architecture be affordable, inclusive, and adaptable?
How can construction with sustainable materials reduce the impact of the built environment in a worldwide context?
How can digital design and fabrication tools enable better construction of buildings for the broadest possible segment of society?
How can we merge the best of traditional, conventional, and vernacular architecture with contemporary technologies to design future cities that care for both people and the environment?

Gatóo's research explores the evolving relationship between nature and the city, natural materials and buildings, and a flexible, adaptable, and responsible future balanced between people and the planet.

Ana Gatóo, Marylebone, April 2024

Anastasios Maragiannis

Professor Maragiannis has experience in senior academic leadership roles ranging from product design engineering, sustainable and digital cities, design anthropology and interdisciplinary participatory and co-design methods. He was one of the five facilitators leading the international research project titled “Design in Space for Life on Earth”, funded by the World Design Organization (WDO®) and the International Space Station (ISS) U.S. National Laboratory, where he led a diverse team of engineers, scientists, designers, and business innovators, working together to explore co-design solutions that can improve our planet and foster inclusivity in our lives on Earth. In addition, he was the principal investigator of NWE INTERREG (an EU-funded project with a total €4.2M funding) to support under-represented young people communities through co-design practices.

Professor Maragiannis’s practice-research outputs have been showcased in international venues, including the V&A Museum (London), the Serafio Cultural Centre (Athens), the London Design Festival (UK), Exhibition Centre (Hanoi). These outputs played a vital role in his recent multicomponent REF21 submission, accompanied by his Impact Case Study (UoA32) titled “Diversity and Inclusivity by Design: Transforming Co-design Methods to Shape Diversity and Inclusion Policy for Humanitarian and Cultural Organisations in Europe and Africa, and increase inclusion, skills, and confidence for vulnerable young people.” Maragiannis has also held visiting professorships at esteemed institutions such as the School of Design at Polytechnico di Milano (Italy), the University of Advancing Technology (USA), and the World University of Design (India). He is a Fellow of the Royal Society of the Arts (FRSA), Principal Fellow of the Higher Education Academy (PFHEA); Deputy Chair of Digital Research in the Humanities and Arts (DRHA); and author of the book *Design in Action: Reflections on Social and Inclusive Practices* (INTELLECT Autumn 2024).

Research

Maragiannis is currently working on a new book proposal *Inclusive Design for Peace: Cultural Diplomacy in Conflict Zones through Architecture / Cities /Info-structure / Communication*.

Anastasios Maragiannis, Marylebone campus walk, University of Westminster, April 2024.

Anthony Boulanger

Anthony is a Senior Lecturer and co-founding partner of the London-based design and research-led practice AY Architects. He has taught MArch Design Studio 16 [DS16] since 2007, as lead tutor since 2011.

Anthony first trained as an architect in the USA, obtaining a Bachelors of Architecture from Roger Williams University in Rhode Island in 1990. He practiced in Austria from 1990 to 1996, most notably with the Viennese Atelier Auboeck and Karasz. After finishing the MArch course at the Bartlett in 1997, he worked with Ian Ritchie Architects until 2005 and then went on to co-found AY Architects in 2006.

AY Architects' work has been widely recognized for design excellence. The practice has received a number of awards for small educational projects situated in the London Borough of Camden. In 2013 the Montpelier Community Nursery, a project initiated by the practice was awarded the Stephen Lawrence Prize and was mid-listed for the coveted RIBA Stirling Prize. Eleanor Palmer Primary School Science Lab, completed in 2018, won a RIBA National Award, Wood Award, Civic Trust Award and Camden Design Award.

Research

Following nearly 10 years of generating practice-based design research through AY Architect's built projects, Anthony's design research highlights his collaborative work in both teaching and practice with a focus on material testing and innovative techniques of physical making. Key to this is his relationship with Grymsdyke Farm, a research facility in Buckinghamshire set up by Dr Guan Lee (DS16 tutor from 2011-2014) to develop innovative materials, installations, products and prototypes derived from digital, traditional and hybrid techniques. The "farm" has played a unique role in DS16 teaching and learning and in collaboration with AY Architects for many years.

DS16 has established itself as a platform to interrogate experimental architectural constructs initiated through material explorations and techniques of making. Students in groups ranging in size create 1-to-1 artefacts and installations on and off-site whilst engaging with a range of materials; earth, glass, clay, metal, concrete, timber, paper, fabric etc. The processes involved are just as important as the final outcomes. This preoccupation of the studio combined with a scrutiny of material cultures critically informed by their social, cultural, political, environmental and economic contexts, is a method in deriving meaningful concepts to generate new building typologies in both urban and rural settings.

Anthony is co-editing (with DS16 teaching partner Stuart Piercy) a Studio as Book publication entitled *Material Cultures & Material Constructs* as a presentation of DS16 studio teaching, research, student work, knowledge exchange and collaborations with practice covering the period from 2011 till 2024.

Anthony Boulanger, House of Flags upcycled into stairs, Grymsdyke Farm, August 2024

Eric Guibert

Dr Eric Guibert is a gardener of landscapes, architect, educator and researcher. Eric is senior lecturer at the University of Westminster where he leads the undergraduate design studio Architectural Animism (DS[3]2) that investigates regenerative design methods and pedagogies, as well as the overlap between building and landscape architecture. His students have won a number of awards including Kacper Sehnke who won the RIBA President's Bronze Medal in 2023, which is the highest accolade for an undergraduate student in the UK. He is lecturer in design and theory in the Masters in Landscape Architecture at the Bartlett, UCL, where he leads the Feral Landscapes Design Studio (Studio 1) with Emma Colthurst. In the same course, he created and runs the theory and practice seminar Designing with Feral Natures, as well as supervises final year thesis. A few of his students have won the school's Landscape Thesis Prize or been nominated for the World Architecture Student Award for Research. He has decades of experience as both a practicing – building – architect and a hands-on gardener of a feral landscape in Western rural France. You can often find him there mowing paths, pollarding trees, or scything a meadow.

Research

Eric's research investigates how the design of built and grown architectures can nurture and express dynamic, and more equal, relations between humans and ecosystems, and ways of creating architecture with their emergence while nurturing their resilience. This "architectural animism", is a way of designing buildings and landscapes with the agency of ecosystems, other-than-human and human beings combined. The enquiry takes a new materialist and ontopolitical stance and aligns with regenerative design practices. The research is developed through a reflective practice methodology. The methods are varied and mesh the design and realisation of built and grown architectures, theoretical and literary writing, and reflective drawings and photographs. The first phase of practice research was extracted in the PhD thesis The gardener architect: designing with the emergent natures of places, which was completed at KU Leuven, as an EU funded Marie Skolodowska Curie doctoral research fellow as part of the ADAPT-r project following the reflective practice methodology developed by Leon van Schaik at RMIT. The current enquiry is on "modern animism", an ontology and practice model that combines both the control of modernist knowledge and the creativity of a vibrant world. The research aims to clarify the possible productive relations between the efficiency of top-down mainstream design practices and those of dynamic and bottom-up "regenerative" processes. The current locations are Feral Landscape practices, more commonly known as wilding, rewilding, and ecological landscape practices. A few upcoming book chapters have been clarifying their definition, ontology, methods and tools. In parallel to this more theoretical analysis, various actors – human and other – found in feral landscape practices are being analysed through a combination of literary and academic writing, including a series of speculative letters between these actors (soil, trees, water…) and the researcher. The key case study is a 3 hectare property in France where both landscape and building architecture have been designed over the last decades to speculate on dynamic relations with the various actants – living beings, and ecosystems – of various scales including meadows, woodland, trees, climate, and other human beings. The project has won an award for its ecological approach.

Eric Guibert, Nature, Hampstead Heath, April 2024

German Nieva

German Nieva is a London-based architect, originally from Argentina, where he graduated with honours in Architecture and Urbanism at the UNC. He is currently Associate Architect at the London-based practice Delvendahl Martin Architects, tutor at Some Kind of Nature Atelier at the Manchester School of Architecture and PhD Candidate within the school of Architecture + Cities at the University of Westminster in London. German is the founder of Tropisms, an emerging studio collaborating with specialists, artists and colleagues in projects that seek to positively impact communities and the environment. Tropisms was recently long-listed for the Davidson Prize 2023 for Re-Focus E15 project working in collaboration with homeless women and lone-mothers in Newham. German's research at the University of Westminster follows his recent work developing and implementing socio-economic projects for rural communities within the Amazon rainforest. His work on babassu fibre reinforced natural rubber biocomposite has been published by Springer Nature as part of the book series *Proceedings of the UIA World Congress of Architects Copenhagen 2023.*

Research

German's research concentrates on how to develop alternative architectural strategies to build in rural locations in Brazil. With an initial focus in the Cerrado biosphere, the study aims to identify territorial, regional, and local opportunities to develop in-situ sustainable construction systems and materials. This decentralised strategy, contrasting with industrialised capitalist models of production, could pave the way for the future of construction in rural and remote locations, minimising transportation, enhancing interregional cooperation, and adding socio-environmental value to innovations. The key objective is to create a resilient approach to building in remote locations, taking into consideration the future landscapes resulting from climate change, the growing economic challenges of access to construction materials and consolidating local and regional networks of collaboration with core communities in this process. Local and traditional techniques and skills will be central to the research, whilst also identifying new methods making use of the latest and increasingly more accessible technologies when appropriate.

Successful ecological architectural practices should be evaluated based on a two-criteria system: first, how and how much they lower the carbon-emissions produced in the construction industry, and second, what social-economic and environmental impact they bring to the local communities and landscapes in the logistical space of extraction. Within this context, Hyper-Local architecture is seen as a valid solution addressing the aforementioned criteria for a successful alternative. Regionally specific materials for local oriented construction can reduce or eliminate the dependency on transnational supply chains, often with origins in imperial trade routes. Localising and joining up the parts of the construction process have the potential to reduce carbon emissions with the use of locally sourced and manufactured sustainable materials. As well as encountering challenges, engaging with the local communities highlighted opportunities for the development of materials, such as the potential use of the by-products from the babassu industry. The babassu (Attalea speciosa Mart.) is a palm tree that occurs naturally within the Cerrado biome in Brazil and plays a central socio-cultural, economic and environmental role in indigenous and traditional communities. Can the ruderal babassu palm tree provide an answer to the current and future challenges of building in remote locations by creating hyper-local opportunities of resilient and sustainable architecture?

German Nieva Mesas, Hackney Wick, April 2024.

John Zhang

John is a researcher, educator and Architect, he studied architecture at Cambridge University and the Royal College of Art, where he completed his PhD. His research interests are focused on museums as spaces of climate action, mixed reality technologies as experimental representation, and housing in a global context. He is the co-founder of Datascape Realities, a cross disciplinary research collective visualising research data for the purposes of research, exhibition, and outreach. His practice has taken part in the London Festival of Architecture, Hong Kong Architecture Biennial, the Planet Summer programme at the Southbank Centre, the Collective Rebellion workshop at the Grant Museum, and exhibitions at both COP26 and the Royal Academy. John has published articles on housing design and practice-based research in contemporary China, in both English and Chinese. He teaches design across the BA Architecture and BSc in Architecture and Environmental Design programmes and is the director of Studio JZ, a London based architecture and interiors practice.

Research

Datascape Realities, is a cross disciplinary research collective exploring the use of mixed reality technologies to virtually visualise and spatialise critical data that are otherwise inaccessible, intangible, or fictional. John collaborates with zoologists, biologists, materials scientists, and film scholars on the design and development of exhibitions, events, and research tools, which are the primary output of his practice based research. His work with marine biologists at ZSL, which re-constructs and reimagines real world coral reef environments, has been funded by the Quintin Hogg Trust (QHT), and has been separately funded and commissioned as a 6-month long installation at the Grant Museum. His collaboration with biologists at King's College and UCL to visualise cellular level structures and spaces to assist scientists in re-conceptualising the spatial quality of their experimental data, is funded by UCL Laboratory for Molecular Cell biology. He is currently collaborating with scientists on a funded community engagement and outreach programme aimed at introducing VR spatial technologies to schools in the East London. John is also developing a one-off Science Museum Lates event in May 2024 showcasing a compendium of his recent range of VR related work.

John is interested in museums as a space for climate action. With their roots in western imperialism and colonialism, museums contribute to a regime 'not limited to the governing of peoples but also the structuring of nature.' (Demos, 2016). Modern museums are machines that feed the process of ontological objectification and reification. They reinforce the false Cartesian dichotomy of human and non-human worlds. This destructive status quo could mean the extinction of museums themselves. John is interested in how existing museums can be made into new institutions for the decolonisation of nature, and spaces of not just knowledge, but also places for climate justice. John's speculative work the 'British Museum of Decolonized Nature', which uses visualisation and collaging techniques to reimagine established museum institutions as ruins devoid of their colonial content and returned to nature, has been exhibited at COP26 and the Royal Academy Summer Show. He is currently developing and testing this experimental representational method in the context of a range of museum spaces, beginning with a commission for the Grant Museum of Zoology. Separately, through his professional practice in housing, his PhD research on Chinese architecture, and experimental pedagogy in comparative urbanism, John is interested in housing design through a global perspective, particularly through a comparative approach between China and the West.

John Zhang, Grant Museum of Zoology, Euston, August 2024.

Kirti Durelle

Kirti Durelle is an architect and historian of architecture with a diverse background in both practice and academia. He holds degrees in structural engineering (MEng) and architecture (MArch) from the University of Sheffield and an MA in architectural history from University College London (UCL). He is currently a PhD candidate in history and theory of architecture at the Bartlett School of Architecture. Kirti teaches design, history, theory, and architectural research at the University of Westminster and the Bartlett, across undergraduate and postgraduate programmes. He has also taught Critical Practice at the London School of Architecture, and is a regular guest at Central Saint Martins, Syracuse University, and the Architectural Association. With professional experience both as an engineer and architect, Kirti has worked in Paris and London on a range of significant projects, including the Turner Contemporary in Margate and Birmingham New Street Station. Kirti is a founding member of the Historical Materialism and Architecture Research Group (HMARG) and serves as a long-standing trustee of Architecture for All, an organization dedicated to public outreach in the field of architecture.

Research

Kirti's research focuses on historical materialism and the history of architecture and landscape, aiming to understand how varying historical modes of production have affected the organisation of space. He is a founding member of the Historical Materialism and Architecture Research Group (HMARG), which is dedicated to developing a historical materialist understanding of architecture. HMARG explores how economic and social structures have influenced the past and present development of the discipline, and its historiography. The group's research elaborates a critique of architecture in relation to capitalism which is absent from current academic and professional debates.

Kirti's doctoral research specifically examines the landscapes of the island of La Réunion during the long eighteenth century from a historical materialist perspective. As one of the oldest French colonies, Réunion's very existence and organisation are the results of European mercantilist expansion into the Indian Ocean. Inhabited by an evolving slave society where class and racial distinctions closely aligned, the island landscapes were governed by the logic of a slave-labour-driven agricultural production and the class struggles that it engendered.

As a trustee of Architecture for All (AfA), Kirti collaborates with architects, historians, arts education professionals, and teachers, to make the history, knowledge, and practice of architecture accessible to a wider public. Through school and family workshops, talks, screenings, exhibitions, and public events, the organisation disseminates historical research and engages in community outreach. AfA's work creates opportunities for non-experts to interact with the built environment in new ways and highlights career pathways for young people.

Kirti Durelle , University of Westminster, April 2024

Maria Kramer

Maria Kramer is a Senior Lecturer at the University of Westminster, where she directs the MArch Live Studio DS20. She established the Live Design Practice, a platform that fosters the development of diverse live projects. These initiatives are dedicated to action research, knowledge exchange, social value creation, and the exploration of innovative and alternative design practices. The culmination of these efforts is evident in the successful completion of projects such as 'The Growing Space Community Live Project' at Cody Dock (2022). In addition, Maria contributes to the Professional Practice Part III Course and holds the position of director at design practice Room 102 ltd. where she leads the company's focus on regenerative and community-driven projects. Maria's professional journey spans over twenty years, during which she has accumulated extensive experience in master planning and project management. She has held positions at architectural firms such as Coop Himmelb(l)au and Hopkins & Partners and Maria co-managed the architecture office Leit-werk as a partner and director for more than a decade, demonstrating exceptional leadership and expertise in the field.

Research

Maria's research explores the architect's role as social value creator as well as promoting and enhancing ecological thinking in the built environment. Community and student-led initiatives serve to embed collective power within ecological localism and demonstrate that design ambition can effectively align with collaborative working through participatory design. Maria's research explores how through live projects, new ideas are tested, questioning existing processes and structures, and allowing experimentation to thrive, whilst helping instigate and promote change, equity and local ecology within communities. Maria has been engaged in more than eight Live Projects since 2017, as part of the Live Design Practice, using these projects as case studies for interrogation, analysis, and reflection.

Being exposed to the entire briefing, design and construction process within academia, engaging with stakeholders, consultants, makers and local communities, yields valuable study and promotes in-depth knowledge exchange. The concept of live projects is rooted in developing design briefs directly embedded in society, that encompass political, economic, social, and ecological systems in relation to lived experience. When design briefs are tested in the 'real world,' the complexity of decision-making (including powerful but invisible factors within the built environment), is experienced first-hand.

Maria is attempting to contextualise live projects within learning theories, illustrating how 'live exposure' transforms into learning through a continuous cycle of experiencing, reflecting, thinking, and acting. Reflecting on methodologies for development and making, exploring their impact on processes and outcomes, while developing an understanding of complex dynamics within group work and external stakeholder relationships is part of live research. Pedagogically, live projects are situated in the context of experiential learning and experiential knowledge creation, drawing on theories like constructivism and embodied knowing.

Maria Kramer, University of Westminster, May 2024.

Paolo Cascone

Born in Italy and growing up between the West Indies and East Africa, Paolo Cascone studied architecture at the University of Naples and environmental design at the Architectural Association. Paolo began to develop his research by design agenda at the intersection of ecological design and sustainable constructions during his masters at the AA and then with a PhD at the CIRPS / University of Rome. Paolo is Senior Lecturer in both the BSc and MSc in Architecture and Environmental Design. In 2007 Paolo founded CODESIGNLAB, an experimental design laboratory which has realised multiple community-oriented projects between Europe and Africa. The African Fabbers (AF) project was recently displayed at the Venice Biennale of Architecture (2021) and the *AF Atlas* will be published by Actar in 2025.

Research

Cascone's research agenda focuses on design and build processes for climate sensitive and performative architectures. Such an interdisciplinary approach investigates information-based design methodologies, bridging high and low technologies with natural and recycled materials towards community-oriented projects. In previous years Paolo has been principal investigator in several applied research projects on urban ecologies and eco-digital construction in partnership with international institutions and construction stakeholders with many realised full-scale architectural prototypes. More recently, at the University of Westminster Paolo has contributed to different research projects, including the 'Globally-informed City, Climate, Pedagogy and Practice' (UOW SCUE) as well as leading the 'African Off-grid Housing project' (GCRF-UKRI). The Off-grid Housing Prototypes project has recently received funding from the Quintin Hogg Trust (QHT) and will be developed in the 2024-25 academic year. Paolo is currently assessor of several PhD projects and welcomes PhD applications from students who have interests in the following topics: ecological design, eco-digital manufacturing, sustainable constructions, community oriented architecture and off-grid housing.

Paolo Cascone, The Fabrication Lab, University of Westminster, April 2024

Paolo Zaide

Paolo is an architect, academic and curator, and the Course Leader of the BA Architecture Programme at the University of Westminster. Paolo has taught at several institutions since 2002 including London Metropolitan University, Central Saint Martins, the London School of Architecture and the Bartlett, UCL. Paolo holds a PhD in Architecture and Urban Design from the Royal College of Art (2018), and his research, teaching and design practice focus on climate change and specifically the problem of sea level change in densely crowded cities.

Research

Paolo's research and design practice interests focus on the impact of future trends on contemporary cities. He explores the role of design to address challenges that our increasingly urbanised societies are facing through 'ecological urbanism' – urban design through an environmental lens. Paolo's research practice argues for the importance of urban design as a key driver to integrate environmental and social concerns of the city in a holistic, critical and creative way. 'Ecological urbanism' can be understood as a potential bridge between urbanism and ecological cycles, with design providing a crucial framework to think and act on environmental, technical, economic and socio-cultural challenges at hand. His recent research projects explore the impact of more general future trends on the design of the 21st Century City, through the staging of public events and small-scale built installations. Paolo has been responsible for co-curating exhibitions in London and Hong Kong around the themes of ecologies in the city, including City Garden Follies in Camden Council (2010-13) and Visions 2050 at the Hong Kong Architecture and Urbanism Biennale (2015).

Paolo Zaide, University of Westminster, June 2024

Pete Silver

Silver is an architect with experience of the construction industry, public sector housing, teaching, research and private practice. During the 1970s, he worked as development manager for Solon Housing Association where he was responsible both for the rehabilitation of pre-war housing stock and the development of new-build projects in the outer-London boroughs, including collaboration with the Swiss architect Walter Segal on the development of self-build, timber-framed housing. During the 1980s, Silver trained at the Architectural Association under John and Julia Frazer and the cybernetician Gordon Pask. He subsequently completed four years as a Research Associate in the Land Use Research Unit at King's College London under Professor Alice Coleman. The research sought to correlate the design of post-war planned housing with long-term environmental and social breakdown and resulted in a £50m DoE grant to re-design some of the most run-down housing estates in Britain. Silver has been joint co-ordinator of Technical Studies – with his colleague, Dr Will McLean – at the University of Westminster, School of Architecture for 20+ years, and has instigated a number of initiatives with respect to the organisation and delivery of technical courses. He is the co-author of six architectural textbooks, which together are published in nine languages and have sold over 10,000 copies worldwide.

Research

There is a continuing need to develop lightweight but strong structures, thereby minimising their embodied energy and use of natural resources. For example, diagrid structures, such as Lamella domes, use less material than conventional frames when deployed for buildings and roofs. Similarly, cable-stayed, suspension and 'tensegrity' structures demonstrate a high strength-to-weight ratio by employing elements that are in pure tension, i.e., incorporating wire or rope.

Silver's research into lightweight tensile structures led him into experimenting with firstly linear and subsequently helical splines. These experiments culminated in a UK Patent no. 2594037 being granted in 2021, under the title: Helical structural framework with torsional integrity. As with archery bows or vaulting poles, this invention provides a structure based on the principle of stiffening linear elements with a low elastic modulus (employing their kinetic or potential energy) to form arcs. When such elements, also known as splines, are held in torsion they develop a helical form, and the forces exerted by pairs of splines - similar in shape to chains of DNA - which are twisted in opposite directions, cancel each other out to generate structural integrity in the form of a diagrid. Either natural or synthetic materials with the capacity to undergo elastic deformation can be employed, and the overall system – which Silver describes as 'torsegrity' – can be applied either as components within a building such as columns, beams, or trusses or to form entire structures such as domes or bridges. With sponsorship from the School of Architecture + Cities and assistance from the Fabrication Lab, Silver developed a number of large-scale prototypes during the 2022-3 academic year. These are made from 8mm dia. carbon fibre rods held in torsion by rigid elements made from 118mm dia, carbon fibre tubes with reinforced polyamide connecting components. Carbon fibre products were supplied by Easy Composites Ltd and the connecting components by RK Rose + Kreiger. Silver is continuing to develop these prototypes while at the same time collaborating with former University of Westminster Part III student, Jennifer Asiedu, to develop executable 3D computer models and with the composite materials specialist, David Kendall (Optima Projects), who is to assist with finite element analysis and in the development of potential applications.

Peter Silver, 'Torsegrity', Royal Academy of Arts Summer Show, August 2024

Scott Batty

Scott Batty has 30 years' experience making, building, designing, and shaping the profession of architecture. In architectural practice Scott has worked as an employee, a sole practitioner, a partner, a freelancer and as the director of his own company. During this time Scott has mentored many young architects in the transition from academia to practice. Scott's numerous built projects have won prizes, including an RIBA award. His work has been published and featured on television in the UK and North America. Scott worked internationally as a construction volunteer, including time in Canada building timber framed homes with the indigenous people of Northern Ontario. Scott self-built the house for his own family which has been published, won a Civic Society Award, and is the case study project for two academic research papers. Batty has taught for 15 years in the School of Architecture and Cities, University of Westminster, where he interviews school leavers interested in studying architecture, Part 3 students in their final stage of architectural education and has taught at every stage in-between. As part of The Technical Studies team, Batty developed the curriculum including initiatives for students to monitor live building sites and to implement sustainable design principles. No longer a practising architect himself – in the conventional sense – he now operates in the field that exists between practice and academia, designing, building, and making.

Research

Sites of Learning, Sites of Meaning: The Construction Site within Architectural Education.
The research explores the role of the construction site as an essential component within architectural education. What defines, and is unique to, the (Building) Construction Site as an in-situ classroom for learning and experience? How should the experience of, engagement with, and reflection on (Building) Construction Sites be a vital part in the education of architecture students? How can this experience help bring modern (Building) Designers and Constructors closer, improving professional understanding and process? What wider experiential role do Construction Sites play in the theatre of the modern city and how does this form part of the wider learning and enjoyment of architecture students? Visits to construction sites and the active monitoring of a project under construction are interactive experiences that develop students' understanding of real construction practices. The author draws on the work of over 800 students, representing a cross section through architectural education, architectural practice and the construction industry in London. The research was presented as part of CREATECH '23 International Conference and Exhibition, Nurturing Future Talent in the Built Environment 2023 Event + Workshop, and the Production Studies International Conference 2024 at Newcastle University.

The Retrofit of 1960s and 70s UK Housing.
The UK built more houses in the 1960s and 70s than in any other time since WW2. Many houses of this period, an estimated 1.7 million, have a common design typology and common method of construction. The research explores a design language of Retrofit for houses of this period. The principle case study is a detached 1970s house belonging to the researcher that was Retrofitted 2018-23 with energy monitoring compared before and after Retrofit. The research concludes with a generic and widely applicable design proposal for the mass Retrofit of houses of this typology. The Research was referenced by the RIBA Practice Bulletin, presented to the Architects Climate Action Group (ACAN), received a Civic Award (St. Albans), and was featured in the RIBA publication, *Environmental Design Sourcebook* (McLean & Silver, 2021).

Scott Batty, On-site, Baker Street, May 2024

Urna Sodnomjamts

Urna Sodnomjamts is a recently qualified Architect with three years' experience as a Part II architectural assistant working for firms such as dMFK, HUT Architecture and Matthew Lloyd Architects. In practice, Urna has worked on retrofit schemes using design & build and traditional procurement with particular sensitivity in understanding commercial requirements, client quality and construction viability. As a design manager at the Thornton Partnership, she specialises in commercial retrofit schemes in central London, interested in implementing low-carbon construction methods within the construction industry together with sustainable waste and strip-out processes. As well as bridging the gap between RIBA Stages 0-3 and stages 4-6 as a practising young architect, Urna is an active researcher in innovative, sustainable construction methods informed by low-tech, environmentally conscious communities. In 2018 Urna co-founded the Association of Mongol Architects (AMA) a non-profit organisation for architects and architecture students. Urna published some of her research on the vernacular tradition of the Mongolian 'Ger' or 'Yurt' in *Environmental Design Sourcebook* by Will McLean and Pete Silver, RIBA Publications 2021 and she has written for Building Design. For several years Urna was a visiting lecturer to the School of Architecture and Cities at the University of Westminster, where she taught with the technical studies team. The University has recently appointed her as a Lecturer in Regenerative and Technical Environmental Design and she teaches these subjects across all the architecture courses, she also contributes to the teaching of history and theory on the undergraduate courses.

Research

As part of the Design and Practice group, Urna plans to develop her research on the metamorphosis of nomadic herders of the Mongol Steppe into urban dwellers of Ulaanbaatar city, the capital of Mongolia. She will study and redefine the circular economy that has sustained the ancient communities and its current challenges of continuation. The study will focus on the land-use of Mongolia, informed by the political evolution, environmental realities and economic challenges over the last two centuries. She will deconstruct the history and theories behind land-use and the interpretations of custodial vs settler to find understanding in the complexities of ancestorial intuition and human need to migrate seasonally. The study will be further supported by deconstructing the traditional Mongolian ger (yurt) and the fragments that make up the ancient structure and its adaptations. As a strategy for realising this research, she plans to expand AMA into a platform for Mongolians (& friends) working in the built environment of the capital city including but not exclusively of the following industries; construction, infrastructure, sanitation and sewage, sanitation, education, place making, medicine, tourism, architecture, urban design, city planning, landscape, NGOs and researchers. The project will also include Mongolians working internationally with an interest in knowledge exchange to contribute to the development of the capital.

Urna Sodnomjamts, Nomad's horse in Sukhbaatar, Mongolia 2018

Victoria Watson

Doctor Watson trained as an architect and she has a specialist degree in the History of Modern Architecture and a PhD in Architecture. She studied at the Bartlett School UCL and in the Department of Architecture at the Polytechnic of Central London. Doctor Watson is a Senior Lecturer at the University of Westminster and she directs her own practice: Doctor Watson Architecture that conducts research encompassing the invention of architectonic models and the publication of academic and scholarly papers and articles. In 2010 she won a Rome scholarship and in 2011 her book, *Utopian Adventure: The Corviale Void* was published. Since then, she has launched her own self-publishing venture as a fast and efficient means of cataloging her architectural experiments.

Research

Doctor Watson's research combines architectural design with academic writing for journals and books. She devises and makes architectonic models (generically known as air grid) that are integral to her thought processes, they explore space, materiality and colour but most importantly, by making them, the Doctor can clarify organisational and structural aspects of her research.

Doctor Watson's research is about the dialectic of imagination and reality. She is especially interested in the phenomenon of utopian imagining in architecture and how that impacts upon the production of actual places in city, town and countryside.

Toward the end of the 20th century, the Doctor became intrigued by remarks made by Rosalind Krauss and Robin Evans that connected Mies van der Rohe's buildings to ideas about painting and installation art. Her investigation led to the discovery of a utopia of mobility that underlies the Miesian concept of space and establishes the continuity between his pre and post emigration work.

A closely related area of investigation is the modern art museum. The Doctor has just completed a study of Tate Modern, where her inquiry linked the 'gardenisation' of the art space in London to Herzog & de Meuron's proposal for a Museum of the Twentieth Century, which extends Mies' New National Gallery on Berlin's culture forum and is currently under construction.

Leading on from her inquiry into Miesian architecture and modern art museums and linked to her preoccupation with utopia, the Doctor is currently drawn towards the Many-Worlds hypothesis within quantum mechanics. The attraction is leading somewhere, although it is still to soon to call it a project. The thinking is still vague and lacks structure, but there is a consistent output of new air grid artefacts, which, unlike previous models are based on tetrahedral geometries. As with previous projects, the new work is located in an imaginary space, this time a fictitious hypostyle hall at the centre of London's financial district (The City), diagonally opposite the Bank of England and occupying the site of Bloomberg London, No 1 Poultry and The Walbrook Building.

Victoria Watson, Air grids, Clerkenwell, July 2024

Wilfred Achille

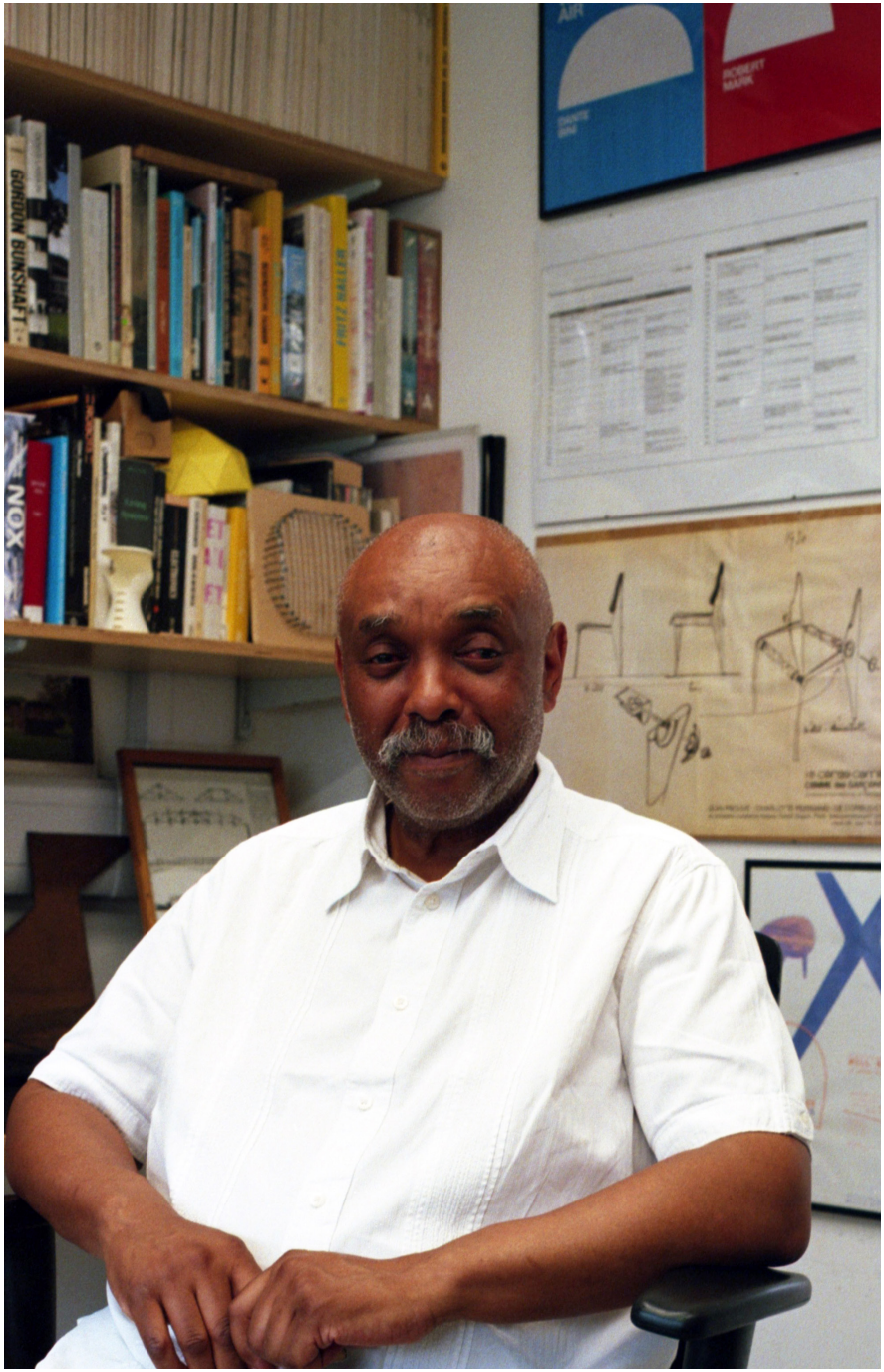
Wilfred Achille is co-course leader at RIBA Part III level at the University of Westminster, and external examiner for Oxford Brookes, RIBA North West and Leeds Beckett University. Wilfred completed a major study on Broadwater Farm, Tottenham after the riots of the 1980s. Wilfred founded Mode 1 Architects, who specialise in estate remodelling and urban regeneration projects, including Angell Town Estate Brixton & Stonebridge HAT Estate, Wembley. Achille is a director of a new 'turn-key solutions' business model for architecture and development company 2 PM LONDON LTD. Mode 1 Architects were formed through a Black British and Chinese architect's belief that their combined diverse culture and architectural philosophy could impact the institutional architectural scene. Mode 1 Architects represents a new kind of British architect who deals head-on with our urban cities' regeneration issues by identifying people's needs and through the introduction of art and architectural debate.

MODE 1 Architects' specialist knowledge & experience of inner-city regeneration has led to working in key regions in North, South, East and West London, Oxford, Bristol and internationally in Trinidad. Mode 1 have worked alongside mainstream practices to develop employment & training strategies, estate-wide communication, developing communities, involving communities and artists in the design process, master-planning, sustainable and environmental issues, access for all, and a sensitive approach to resident consultation. Their past projects are a testament to the progressive and innovative approach of the practice.

Research

Achille's research and knowledge exchange work explores why the profession of architecture remains a largely white domain and the positive actions that could change this narrative. Wilfred has developed a series of initiatives that are designed around improving employability opportunities and upskilling young designers with an EDI focus on under-represented groups to increase social mobility. Wilfred established the Part III 'Champions' programme to enhance Part III tutor groups and provide employment opportunities and continued professional development for our alumni.

Wilfred has since further extended the Part III 'Champions' initiative for undergraduate students of architecture to provide employment and mentoring opportunities. In tandem he has also created an online 'Practice Zone' chat room for the School of Architecture and Cities which is run by the 'Champions' and extends a professional network and associated employment and professional development opportunities. Wilfred continues to develop new collaborative working practices and funding opportunities through industry sponsorship.



Wilfred Achille, University of Westminster, June 2024

Will McLean

Will McLean is Reader in Regenerative Structures and Materials in the School of Architecture and Cities, University of Westminster and teaches across the school from foundation level to PhD supervision. His research interests include the history of construction innovation and the technologies of architecture. McLean has co-authored six books with colleague Pete Silver including *Structural Engineering for Architects: A Handbook*, Laurence King (2014), *Introduction to Architectural Technology* (3rd ed), Laurence King, (2021) and *Environmental Design Sourcebook: Innovative Design Ideas for a Sustainable Built Environment*, RIBA Publishing (2021). He has recently co-authored *Sustainable and Regenerative Materials for Architecture: A Handbook* which will be published by Laurence King in 2025. McLean was a co-editor of Construction History: International Journal of the Construction History Society (2016-2021). Between 2005 and 2010 he wrote a column for Architectural Design (AD) entitled 'McLean's Nuggets', which appeared in over 30 issues of the magazine. In 2008 he established the architectural imprint Bibliotheque McLean, publishing new titles including *Sabbioneta: Cryptic City* by James Madge (2011), which was awarded a commendation in the RIBA presidents medals for research and the first English language book on the work of Italian architect and inventor Dante Bini entitled *Building with Air* (2014). McLean has recently contributed a chapter on building and construction for *A Cultural History of Craft in the Modern Age* edited by Clive Edwards and which will be published by Bloomsbury Academic in 2025.

Research

Will McLean's research is concerned with technological innovation in architecture and construction. He explores how is it possible to innovate in a discipline which Cedric Price described as too slow and ill-suited to problem solving. McLean explores the unique contribution to architecture of the 'innovative entrepreneur' who enable change through invention, innovation and different thinking – McLean continues to explore the work of architect Dante Bini the inventor of the Binishell and is part of an international group of researchers and critics working to establish an archive of his work and co-curate an exhibition at the ADI Design Museum in Milan, winter 2025. McLean is also working on a future publication of the work of Scottish architectural practice Gratton and McLean, the architects of the Barrowland Ballroom in Glasgow (1960), Castlemilk West Church (1957) and works for the North of Scotland Hydro-Electric Board.

William Mclean, Materials Library, University of Westminster, June 2024

Yara Sharif

Yara Sharif is a practicing architect and academic interested in design as a tool to rethink contested landscape and evolve new forms of architectural practice. Her aim is to shed light on 'forgotten' communities, while also interrogating the relationship between politics and architecture. Sharif's professional and academic endeavors span her practice at NG Architects in London and her role as a design studio leader at the University of Westminster. She is also a co-founder of the Palestine Regeneration Team (PART), a design-led research collective. Through PART, Sharif engages in speculative and live projects that explore creative and responsive spatial solutions within fragmented landscapes. Her research and design work challenge colonial power structures, rejecting their dominance and hierarchical modes of knowledge production. Instead, Sharif advocates for alternative narratives and expressions in architectural and spatial practices that prioritize inclusivity and representation for all communities.

Yara Sharif's PhD, her book *Architecture of Resistance*, and her collaborative research with the Palestine Regeneration Team (PART) on re-imagining spatial possibilities in Palestine have received significant recognition, including the RIBA President's Award for Research in 2013 and 2016, as well as the Holcim Award for Sustainable Construction for the MENA Region. Currently, she is involved in research focused on self-build and the reconstruction of Gaza, in partnership with Nasser Golzari. Together, they co-founded Architects for Gaza (AFG), a platform dedicated to fostering hope by providing insights for reconstruction and education aimed at rebuilding Gaza. As architects, educators, planners, environmentalists, and designers, the AFG team collaborates closely with displaced families to rethink reconstruction efforts in Gaza, while also exploring critical concepts such as home, memory, and collective action.

Research

Yara's approach to research-by-design in architecture focuses on generating new insights and forms of knowledge production through the design process itself. Her work explores contested landscapes and uncertain geographies. It employs design, conceptual drawings, mapping, and making as powerful tools to document, narrate, and reimagine alternative realities that cultivate hope. Through these methods, she seeks to challenge conventional narratives and propose new ways of understanding and engaging with complex spatial and social contexts.

Triangulated between architectural practice, academic studio and research, Yara's work blurs the boundaries between architecture, art, and spatial design. This results in a diverse range of outcomes including built and speculative projects. Buildings, design, drawing, fabrication, all are viewed as complementary parts of a cohesive whole contributing to a alternative exploration of architectural and spatial concepts. Recent and ongoing research projects include: Modernism as a Colonial Project (https://universes.art/en/specials/qattan-foundation/instant-modernism/artworks/nasser-golzari-yara-sharif); The Garden as a Space of Production; The Experimental Lab: A self-help typology; Architecture of Hope, Architects for Gaza (AFG - www.architectsforgaza.com); Gaza Global University.

Yara Sharif, Golzari NG Architects Studio, August 2024

Nasser Golzari

Nasser Golzari is an architect and academic dedicated to social architecture and the creation of inclusive cities that advance socio-environmental ecologies within post-colonial contexts. As the founder of GOLZARI (NG) Architects in London and co-founder of the Palestine Regeneration Team (PART), Golzari is deeply committed to rethinking scarred and contested landscapes through both speculative and live projects, in line with his passion for socially responsive architecture. Golzari's work challenges the dominance of Western, market-driven architectural practices by drawing inspiration from the daily rituals, narratives, and passive ecological practices of the Global South. His approach seeks to reclaim and celebrate socially driven architecture, with a particular emphasis on celebrating "the invisible other," those marginalized or overlooked within conventional architectural discourse. His work has received numerous awards including the RIBA President's Award for Research and the Holcim Award for Sustainable Construction. Recently, he co-founded Architects for Gaza and Gaza Global University to support displaced students and assist in the self-help reconstruction of homes.

Golzari's work has been published widely and featured in several exhibitions, including Palestine Sunbird Pavilion (London 2012), Open Gaza (University of Westminster, 2016), and The Digital Garden (Chicago Architecture Biennial, 2019; Berlinale 2020). Over the years he has been invited to give numerous keynote lectures and workshops on architectural design, including a major conference on Architecture & Globalisation in the Persian Gulf in collaboration with UN Habitat and the University of Westminster at the RIBA.

Research

Golzari's research and built project work spans across the UK and internationally, with a focus on socio-ecological principles. He is committed to creating contextually responsive, inclusive spaces that contribute to a more just and equitable society. As the editor of A3 Times magazine, and through close associations with Florian Beigel and Peter Blundell Jones, he has developed a deep interest in an alternative strand of European Modernism—architecture that is socially informed and responsive to specific contexts and communities. This includes extensive research on architects like Hans Scharoun, Erich Mendelsohn, Hugo Häring, and Alvar Aalto. His work in this area has culminated in traveling exhibitions, lectures, publications, and symposiums. In collaboration with Yara Sharif, Golzari has explored the colonial traces within modernism through their joint research on re-reading the White City of Tel Aviv while reflecting on the concept of the 'local vernacular.' This collaboration resulted in a 1:1 installation and public exhibition, showcasing their findings.

Building on his interest in socially responsive architecture, Golzari has developed self-build homes utilizing green, affordable technologies. In London, in collaboration with various local authorites, he designed an extended family home based on Walter Segal's self-build method and, with Yara Sharif, has adapted this approach into an Experimental Green Lab., developed in partnership with UN-Habitat. This lab was integrated into the self-help reconstruction program in Gaza, incorporating affordable passive techniques that address local needs. His interest in affordable passive technologies, rooted in local vernacular practices and challenging market-driven 'greenwash' solutions, formed the foundation of his PhD research. This research by design was tested and applied in two projects in Tehran—the Climate House and the Green Office—both undertaken in collaboration with the Tehran Municipality.

Nasser Golzari, Golzari NG Architects Studio, August 2024

Camilla Wilkinson

Camilla Wilkinson is an experienced architect and leads an undergraduate architecture studio in the School of Architecture and Cities at the University of Westminster. Camilla undertakes research and lectures on 1914-18 War marine camouflage system Dazzle Painting and has contributed to television and radio features. She is the granddaughter of marine artist and Dazzle camoufleur Norman Wilkinson. Camilla has presented and tested her work through presentations at the University of Westminster, as keynote speaker at Southampton Universities Great War: Unknown War Dazzle Study Day, contributed to television, Inside the Factory, BBC 2, 2024, film for 14-18 NOW Dazzle Ship London 2015, Dazzle Doughboys and Daring at the Royal Society 2017 and has been invited to present in New York. Her paper Distortion, illusion and transformation: the evolution of Dazzle Painting, a camouflage system to protect Allied shipping from Unrestricted Submarine Warfare, 1917–1918 has been published in Make No Mistake no.14, Journal of the Faculty of Art, Pedagogical University Krakow. Her animation Dazzle Camouflage: war and space has been exhibited and featured in the HENI film Dazzled! How a British Artist Transformed the Seas of WW1, LDF, V&A, 2018 and Dazzle + Disrupt, Quay Arts, IW 2021.

Research

The aim of this research project entitled ‘Dazzle Camouflage Practise: design method and devices’ is to present the 1914-18 War Dazzle Camouflage system, for protecting ships from submarine attack, as a design practice demonstrating the function of optical design devices. Previous exhibitions in the United Kingdom have included Dazzle Camouflage in reference to contemporaneous, modernist or contemporary art works and installations or within wider camouflage displays. This cross-disciplinary research project combines design-based research methodologies with archival and literature research to offer a new analysis and understanding of the development of Dazzle camouflage, and the creative methods through which it was conceived, produced, tested and deployed. Dazzle Camouflage was first applied to ships during WW1. It continues to attract public attention and excite imaginations. From 1919 onwards parallels have been drawn between Dazzle Painting’s quasi-technical, abstract designs and the spatial concepts in modernist artworks that characterise Cubism, Futurism and Vorticism. The assumption that modernist artworks were a major influence on the inception of Dazzle Camouflage is commonly made but cannot be substantiated. This assumption is at odds with the concept for Dazzle Camouflage, conceived by marine artist Norman Wilkinson, which was derived from maritime references. This creates an awkward disjuncture in an otherwise engaging narrative, where avant-garde meets establishment in the saving of ships, resources and lives. My research originates from this problematic and proposes that the stronger influence on the origin of Dazzle Painting was Norman Wilkinson’s exposure to modern shipping technologies, including camouflage, but in particular his exposure and observation (through drawing) of the mass destruction of shipping following the German declaration of Unrestricted Submarine Warfare.

The use of drawing as an analytical and communication tool within this research, developing a series of drawings recreate the development of the Dazzle patterns by the artists of the Dazzle Section. The drawings, in animation sequence, explore and describe how the varied forms of the sinking ship set out to confuse the enemy U-boats, which has been exhibited at St Barbe’s Museum and Art Gallery exhibition, Dazzle: Disguise and Disruption in War and Art and argues that present scholarship has been limited by its context within art history.

Camilla Wilkinson, Dazzle Camouflage, University of Westminster, July 2024

Ben Pollock

Ben Pollock is an architect, researcher, and architectural educator based in London. He has previous architectural experience working at Hopkins, Fletcher Priest, and Jestico + Whiles Architects, where he predominantly worked on projects in the educational sector alongside large-scale commercial retrofits. Since 2019, he has taught in MArch Design Studio 18 at the University of Westminster and has been a member of ACAN Education Group since 2020.

In 2020, he co-founded 4D Island, a global south and community-focused design studio focused on developing computational design tools alongside material and cultural understandings to assist in bottom-up climate adaptation strategies with front-line communities. Past projects include the SSRC-funded Sounding the Monsoon and a Prince Claus Fund and Goethe-Institut's project on cultural and artistic responses to environmental change, Weaving the Nakaiy in the Maldives.

Following completing a UKRI-funded Research Fellow position in 2023, Ben co-founded Climate Cartographics CIC, a non-profit design research studio focusing on developing impactful visualisations and communication tools to address environmental concerns through data, mapping and visual storytelling.

Research

With a background steeped in the transformative power of design, Ben is deeply committed to bridging the gap between research and practical application, a shared ambition with the Design Practices Research Group members. Having recently concluded a Research Fellowship, he is positioned within this research-practice cycle to prioritise implementing ideas through the collaborative and investigative projects of Climate Cartographics.

The Climate Cartographic approach is rooted in practice-based research and knowledge sharing through visually representing the hyper-scale of the climate and ecological crisis, utilising data and cartographic techniques. This involves developing methods to represent typically intangible datasets to engage diverse audiences and ultimately enhance climate literacy and empathy towards these issues. Central to this practice is fostering a deeper understanding of the intricate connections within climate and ecological systems while evidencing and advocating for spatial design strategies that prioritise environmental regeneration and well-being.

Ben Pollock, Research Laboratory, University of Westminster, May 2024

Adam Thwaites

Adam has been teaching at the University of Westminster on the Architectural Technology (AT) BSc for 18 years. Adam represents the Architectural Technology BSc on the University of Westminster, Architecture + Cities Climate Action Taskforce. Adam is module leader for the 3rd year AT Design Studio and 3rd year AT Research Project among other teaching responsibilities, which include PHD Supervision and Personal Tutoring.

Adam, alongside 3rd year AT students is in an on-going collaboration with Transformation Workshop (TW), Pedra Furada, Brazil, and the initiator of the TW project, Professor Paulo Gomes of the Federal University of Bahia. The TW is an innovative social enterprise in which plastic waste (destined for landfill or illegal disposal) is recycled into items of furniture which are then sold locally. This work is undertaken by, and for the benefit of economically disadvantaged communities and exemplifies eleven of the seventeen UN Sustainable Development Goal's (UNSDGs). The outcomes from the project include the reduction of Co2 emissions, the preservation of the biosphere by avoiding harmful plastic pollution (Brazil is the 4th largest global producer of plastic waste with a recycling rate of 1.28%. Globally, just 9% of plastic waste is recycled.). The TW also provides employment, training and education for impoverished communities in Brazil. A previous collaboration, also with the TW in 2022-2023, was awarded a grant from the Green Fund and won the Architecture + Cities Climate Action Taskforce (ArCCAT) Prize for Sustainability 2023.

Adam's teaching is closely related to his research interests, with students as collaborators in 'live' projects which centre on ways to address the Climate Crisis, Global Justice and the UNSDGs.

Research

Adam's focus on the Tropics relates to the geographical origin of the TW project, as a technology developed in Brazil, the comparatively low plastics recycling rates in Brazil (less than 2%), deforestation in the region and the pressing need for housing. The tropics are home to approximately 40% of the world's population and 55% of the world's children under five. Populations in the tropics are growing. Within 40 years, it is expected that more than half the world's population will be in the tropics and 67% of the world's children. In 2018, 47% of the tropical population lived in an urban setting. Of that population, roughly 37% lived in slum conditions. Construction in this region is predominantly characterised by reinforced concrete and clay block, (which are energy intensive materials to produce and account for high levels of greenhouse gas emissions) and un-certified timber. This growing population will need adequate housing that does not result in significant emissions and de-forestation and is sustainable, regenerative and resilient.

Adam's mid-term ambition is to build a prototype, simple dwelling/structure in Brazil, in collaboration with the TW, Professor Gomes, and others at the Federal University of Bahia on the grounds of their campus in the city of Salvador.

Adam Thwaites, TW plastic material chair, University of Westminster, May 2024

Jane Tankard

Jane Tankard has been teaching and practicing architecture for over 30 years and more recently her practice has included art works, film-making and installation. Jane joined the University of Westminster in January 1999, where she is a Senior Lecturer, leading Year 3 of the BA hons Architecture degree and Design and Professional Studies. Jane is currently a member of the RIBA Learning and Teaching Committee and is an external examiner at the universities of Lincoln and Oxford Brookes. Jane has had the opportunity to teach and contribute to education and pedagogical theory at a number of global institutions including the Bauhaus, Dessau and collaborated on projects with both the Arts and British Council in the UK, India and Europe. Jane has been a Partner of Tankard Bowkett, a small architectural firm, since 1992 with their work published and exhibited by the RIBA, and a number of journals and magazines. Jane Tankard is the co-author of two books about becoming an architect: *The Seriously Useful Guide to Professional Practice* (Elsevier) and *Towards a New Architect* (Routledge). Jane enjoys collaborating with artists and designers in multi-disciplinary practice and has curated and taken part in a number of exhibitions and public events.

Research

Readings of the city, specifically London and Manchester, using the notion of unheimlich in theory, art and making are used as mechanisms through which to reveal spaces of the uncanny or locations of the 'other' as sites of disruption, agitation or political defiance which, through creative action, can be transformed into spaces of liberation and agency, challenging rational modernist thinking in architecture. Tankard's research is concerned primarily with pedagogy and the hybrid relationship between academia and practice and focuses on the notion of an architecture against the grain, exploring the creative potential in the identification and interrogation of interstitial spaces and radical marginal practice, both in academia and the profession.

Most recently, Jane's research has focused on the unheimlich and the interstitial spaces between the ordinary, the everyday and the 'other', as a means to determine the potential for defining and synthesising micro-climates of diversity, challenging assumptions of how we live and share our environment as preparation for an uncertain future. Through pedagogical processes the research seeks to identify, understand, record and (re)construct, through drawing and action, the potentially alchemic space of the 'other', exploring the relationship between the design studio, the needs of neglected or marginalised urban communities and the architectural opportunities inherent in collaborative experimental design processes – both real and imagined. In this context Jane is particularly concerned with identifying an alternative feminist language and methodology as a mechanism to address the hegemony and patriarchal structures embedded in modernist principles, both inside and outside of the profession and education. Jane is the founder of Studio Juggernaut a student research collective which has made two films on the culture of listening and hearing those who do not feel they are being heard – in this case BAME and disabled Architecture students. The process of mapping these relationships and threads of consciousness as a series of interconnected representations, installations and writings looking at the marking and erasure of corporate and political presence in civic buildings. Most recently, this is manifesting as an investigation into the representation and misrepresentation of modernist social housing in Manchester and the use of buildings in 1980s and 90s Manchester as transgressionary, collective and communal spaces.

Jane Tankard, Marylebone, May 2024

Francois Girardin

Francois has an academic training in the History of Arts and Architecture, and practical experience in sculpture and conservation. For 20 years Francois worked in International architectural practice on a wide range of projects including the millennium wheel in London with architects Marks Barfield and the Canal + headquarters in Paris with Richard Meier Associates. His personal practice in the US was focused on vulnerable and still contentious health care projects. As an academic, Francois has worked for a number of UK universities including Cambridge, Oxford Brookes, Greenwich, Ravensbourne and the RCA. Internationally, Francois has also taught in New York, Paris and Switzerland. Francois has received the President's medal tutor prize from the RIBA and he was part of the team that created the new department of Architecture in East Anglia. Since 2002, Francois has worked for the University of Westminster, teaching across the curriculum at undergraduate and master's level and he is currently part of the team for MArch Studio DS23.

Research

Francois's current research is focused on lightweight structures, exploring innovative construction techniques and advanced materials. Combined with digital optimization and CNC manufacturing technology Francois is researching the creation of modular and customizable building solutions with low environmental impact. As a part of this 'circular' approach to sustainable construction, Francois is also studying associated material transportation and logistics, impacts on shipping costs, ease of transportation, and overall sustainability – contributing to more efficient supply chain practices. At the heart of this research is the user/maker interaction and experience. Francois is designing modular systems for ease of assembly and disassembly which allows for community engagement, local adaptability and resilience.

Francois Girardin, Pop-Up City working models, University of Westminster, April 2024.