

A photograph of a wooden table covered with various architectural drawings and blueprints. The drawings are spread out, showing different stages and types of plans. The scene is lit by a large, circular, warm-toned lamp hanging from the ceiling. The background shows a window with a view of the outdoors.

The Archive Nurtures a Culture of Circularity

*Symposium
Drawings as Objects of Knowledge III*

Proceedings

*Location: Drawing Matter, Somerset
28-29 April 2023*

KU LEUVEN



TU Delft DRAWING MATTER

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Friday 28th of April

- 11h00 *Arrival + Intro*
- 11h30 *Introduction + Walk towards archive*
- 11h45 **Session 1: Drawing as Building / Building as Drawing**
Session chair: Caroline Voet
Associate Professor KU Leuven + VOET architectuur
- + *From Soane's Scala Regia to OMA's Hotel Sphinx: Generative Visions of Architecture, the Metropolis and the Archive as a Design Resource*
Sophia Psarra
Professor Architecture and Spatial Design, The Bartlett School of Architecture, London
 - + *Book of Stone, Cathedral of Paper: Reanimating Viollet-le-Duc's Album of Record*
Oscar Mather
Architect + Associate Lecturer, Oxford Brookes University
 - + *Building as Drawing: the Cowshed (2012) at Shatwell farm*
Helen Thomas
Senior Research Fellow at the Department of Architecture, ETH Zürich, Switzerland
- 13h15 *Lunch*
- 14h15 *Honorary 1*
Nicholas Olsberg: Diplomacy and Instrumentality of the Drawing
Former Director of the Canadian Centre for Architecture and Founding Head of the Getty Research Institute Special Collections
- 14h45 **Session 2: Drawings as Cultural Landscape Patterns**
Session chair: Sophia Psarra
- + *Cedric Price, Parc de la Villette*
Ana Bonet Miro
Lecturer in Architectural Design and Architectural Technology, University of Edinburgh
 - + *Natural Zigzags, Artificial Rocks*
Alice Nouvet
Research Assistant at FAUP (Faculdade de Arquitectura da Universidade do Porto)
 - + *Time Draws the Stone*
Mieke Vink
Ph.D. Candidate and Lecturer at TU Delft + Practicing Architect
- 16h15 *Honorary 2*
Martin Bressani: Gothic Put to Use: The Viollet-le-Duc Album
William Macdonald Professor, Peter G-h Fu School of Architecture, McGill University
- 17h00 *Performance Rock Dance by Clare Whistler*
- 18h00 *Dinner in Farm Yard*

All times are GMT

Saturday 29th of April

- 09h00 *Arrival*
- 09h30 **Session 3: Drawing Abstract Directness: the Manufacture, the Resilient and the Real**
Session chair: Martin Bressani
- + *The Manufacture of Architecture: Joseph Paxton and the development of the Great Conservatory*
Hugh Strange
Hugh Strange Architects + Ph.D. Candidate at AHO, Oslo School of Architecture and Design
 - + *Aqueduct of Malagueira - Complexity or Contradiction*
Rodrigo Lino Gaspar
Ph.D. Candidate at DA/UAL - Department of Architecture of Universidade Autónoma de Lisboa.
 - + *Architecture and Real Abstraction*
Francesco Marullo
Assistant Professor, School of Architecture, Ph.D. University of Illinois at Chicago
- 11h00 **Session 4: Amorphous and Tacit Knowledge Patterns within Drawings**
Session chair: Helen Thomas
- + *Memory's Floating Vessel. Aldo Rossi's Teatro Del Mundo and other images*
Pari Riahi
Architect and Associate Professor Architecture at Massachusetts Amherst
 - + *The Animated Wall: A Fragile Vigour*
Saar Meganck
Ph.D. Student KU Leuven and Architecture Academy of Maastricht (AAM) + Dhooge & Meganck Architects
 - + *Thank you but nothing is ordinary or: Some thoughts on the creative process of Tony Fretton*
Benjamin Machin
Architect
- 12h15 *Lunch and Closing Talk Sessions*
- 13h30 *Honorary 3*
Stephen Bates: Strategy and Detail, Drawing/Feeling everything at once.
Sergison Bates Architects + Professor of Urbanism and Housing at TU Munchen
- 14h00 *Visit Upper Lawn with Stephen Bates*
- 16h00

All times are GMT





Nicholas Olsberg, former director of the Canadian Centre for Architecture and founding Head of the Getty Research Institute Special Collections, is an independent archivist, curator, critic, and historian with a particular interest in architectural ideas and artefacts as an expression of the society and temper of their times. Published works include studies of Gregory Ain, John Lautner, Arthur Erickson, the California Ranch House, Ernest and Esther Born, Modernisms in Los Angeles, and the Kramlich Project of Herzog & DeMeuron. His exhibitions with Drawing Matter include *Land Marks*, on the relationship of architecture and the natural world, *A Civic Utopia – Architecture and the City in France 1765-1837*, and *Re-Inventions*, on exploratory architectures in Europe and America from 1956 to 1986. He is currently completing a major study of William Butterfield, and a documentary publication on the conception, construction and reception of Richard Neutra's Lovell Health House, both to be published in 2024.

Diplomatics and Instrumentality of the Drawing

Nicholas Olsberg

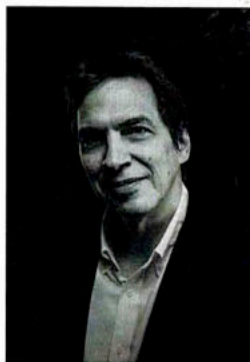
Keynote Lecture 1
28.04.23

14.15 h

Elevation of North End of Library.



*This lecture is part of Drawing Matter Symposium, Part III:
Drawings as Objects of Knowledge. The Archive Nurtures a Culture of Circularity
28-29 April 2023*



Martin Bressani, is Sir William C. Macdonald Professor at McGill University's Peter G-h Fu School of Architecture. He has held visiting professorships at M.I.T, Cornell University, and Syracuse University and was a fellow at the Study Centre of the Canadian Centre for Architecture in 2003. He has published in many of the topical forums for architectural debates and in scholarly journals. He is the author of a monograph on 19th-century French neo-gothic architect Eugène-Emmanuel Viollet-le-Duc, *Architecture and the Historical Imagination: Eugène-Emmanuel Viollet-le-Duc* (Ashgate, 2014), and co-editor of *Gothic Revival Worldwide. A.W.N. Pugin's Global Influence* (Leuven University Press, 2017), *The Companions to the History of Architecture – Nineteenth-Century Architecture* (Wiley Blackwell, 2017), and, forthcoming in 2023 at MIT Press, *Narrating the Globe: The Emergence of World Histories of Architecture*.

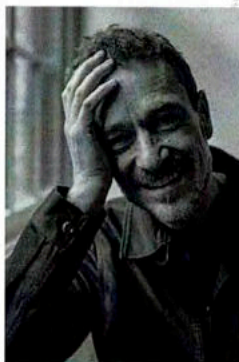
Gothic Put to Use: The Viollet-le-Duc Album

Martin Bressani

*Keynote Lecture 2
28.04.23*

16.20 h

*This lecture is part of Drawing Matter Symposium, Part III:
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Stephen Bates is a founding partner of Sergison Bates architects. Established in 1996, the practice was awarded the Heinrich Tessenow and the Eric Shelling Awards in 2006 and many of their projects have received prestigious awards.

Stephen taught at the Architectural Association and was Visiting Professor at ETH Zurich, EPF Lausanne, ETSAB Barcelona, the Oslo School of Architecture, University of Antwerp, and GSD Harvard. Since 2009 he has been Professor of Urbanism and Housing at TU München.

Through his work in practice, in his teaching, and his writing he has explored the role of architecture at all scales, from city-making to domesticity, designing buildings that are rooted in place, engaged with the historical dimension of existing urban fabric, responsive to the challenges of environmental, economic, and social sustainability.

Drawings as Objects of Knowledge. The Archive Nurtures a Culture of Circularity



Strategy and Detail

Drawing/Feeling everything at once

Stephen Bates

Keynote Lecture 3
29.04.23

13.30 h

*This lecture is part of Drawing Matter Symposium, Part III:
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photograph by Iana Marinova. From: Peter Allison, The Invisible Restoration, A Conversation with Sergison Bates, in: 2G International Architectural Review nr. 34, July 2005, p.93

Sessions



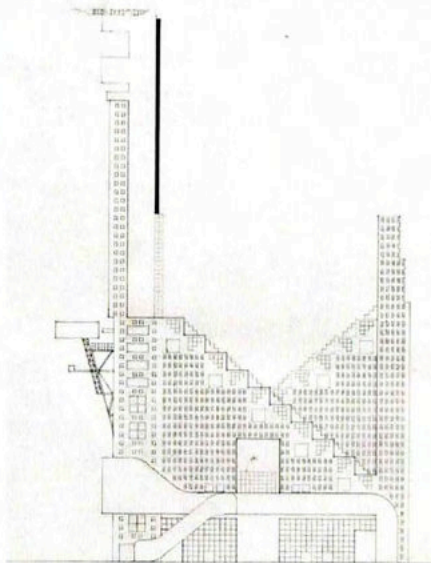
Session 1

Chair: Caroline Voet

*Drawing as
Building /
Building as
Drawing*



Gandy, Joseph Michael, *alcoves at the top of the Scala Regia*, UK, 1823-1824
The House of Lords, London: study views for Sir John Soane's designs of the Scala Regia 1823-1824 (3)
 pencil and watercolour
 460 x 357 mm
 DM 1357



Koolhaas, Rem & Zenghelis, Elia, *Roosevelt Island Redevelopment Project, United States of America (USA)*, 1975
 Pencil and gouache on board
 840 x 1030 mm
 DM 3070

From Soane's Scala Regia to OMA's Hotel Sphinx: Generative Visions of Architecture, the Metropolis and the Archive as a Design Resource

*This paper explores the potential the juxtaposition of dissimilar things holds as a method for design and meaning-making, based on unexpected encounters and associations. Drawing inspiration from Warburg's collection, cabinets of curiosities and creative tableaux, it investigates how drawing and text interact in the work of John Soane and Rem Koolhaas (OMA), constructing fantastic visions of the interior, architecture and the metropolis as generative universes for invention. Separated by a century and a half, the two architects (in collaboration with other architects and artists) used writing and drawing to envision design as a generative 'archive' of the supra-historical imagination (Soane) and contemporary collective unconscious (Koolhaas). In doing so, they articulated an idea of architecture and the city as combinatorial universes of architectural invention. Starting with two drawings from the Drawing Matter collection - John Soane's *Scala Regia* and Elias Zenghelis' *Hotel Sphinx* - and expanding to Joseph Gandy's drawings of Soane's architecture, and OMA's drawings of the fictive projects in Koolhaas' *Delirious New York*, the paper explores the ordering strategies of overlapping classifications, rhythm and proximity as generative design methods in these architects' work. In doing so, it proposes a creative analogy between these strategies and the drawing archive as a potential generative resource for imaginative narratives and design experimentation.*



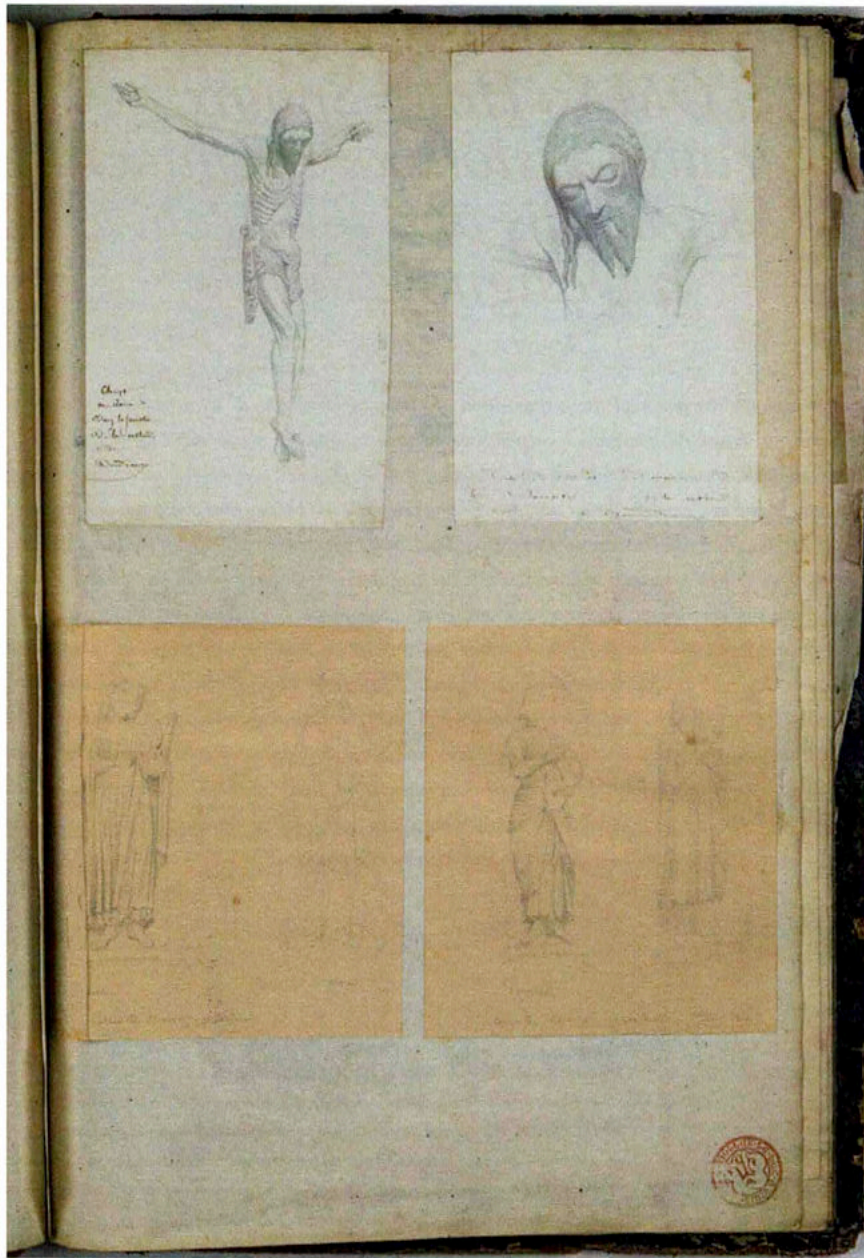
Professor **Sophia Psarra** is author of *The Venice Variations* (UCL Press 2018 https://www.uclpress.co.uk/products/107619?utm_source=jiscmail&utm_medium=listserv&utm_campaign=jiscmail_ARCH-HISTORY_Psarra) exploring cities and buildings as multi-authored processes of formation alongside authored projects of individual design intention. Her book *Architecture and Narrative* (Routledge, 2009) explores the relationship between design conceptualization, narrative and human cognition. Her edited book *The Production Sites of Architecture* (Routledge, 2019) addresses the production of knowledge in architecture. Sophia is the Director of History and Theory PhD programme at the Bartlett School of Architecture, and has taught undergraduate/graduate studios and seminars at the Bartlett, University of Michigan (2005-2011), Cardiff University (1997-2004) and the University of Greenwich (1992-1997).

Book of Stone, Cathedral of Paper: Reanimating Viollet-le-Duc's Album of Record

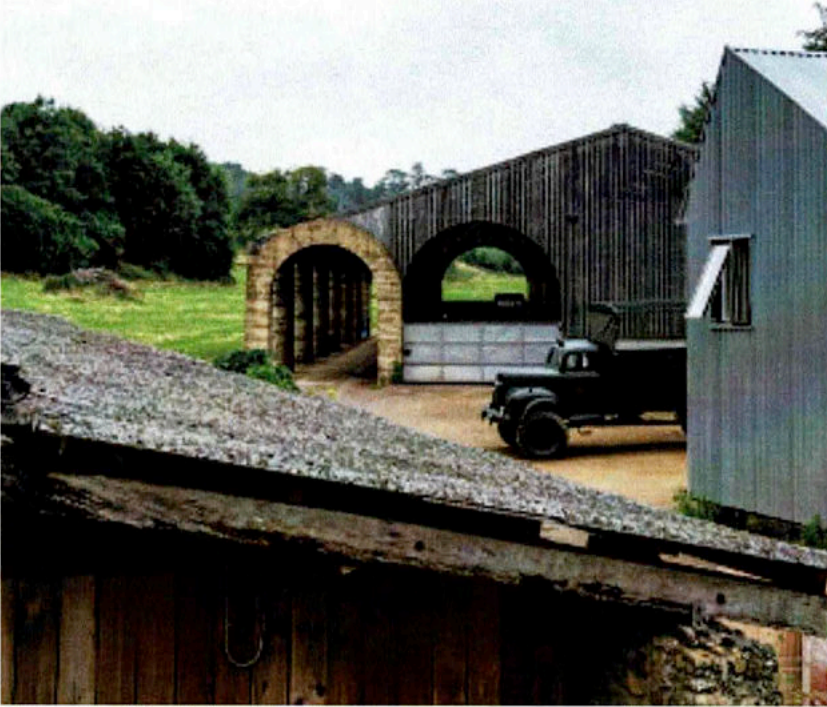
Eugène Viollet-le-Duc's work has increasingly regained attention, partly due to the tragic fire at Notre-Dame de Paris in 2019 which saw the collapse of the spire he designed in 1859. Viollet-le-Duc was deeply concerned with care for existing buildings, stating in his *Dictionnaire* that "restoring a building is not about maintaining, repairing or redoing it, it is about restoring it to a complete state that may never have existed at any given time." In light of this statement, the *Album of Record* held at the Drawing Matter collection is particularly intriguing. Rather than architecture itself, the drawings assembled in the *Album* focus on the sculpted figures and ornaments that are part of the thick fabric of the buildings. Through a meticulous record of these petrified occupants, Viollet-le-Duc seems to recreate a narrative that transcends the singular building. In a way not dissimilar to the cathedral being a collection of topographically organised fragments and narratives, characterised by Victor Hugo as a "book of stone", the *Album* becomes a cathedral of paper. Hugo wrote that the printed book would kill the building, yet Viollet-le-Duc's *Album* remains far from it: a carefully crafted document, a record of fragile fragments. In fact, Viollet-le-Duc's paper spire has outlasted its built counterpart, questioning which of the two is the fragile one. The current decision to rebuild the spire as per the 1859 design suggests again a displacement from paper to stone, long after the original participants' involvement. This essay will investigate the circular movement between paper and stone - understood as an open-ended spiral rather than a closed loop. The particular focus will be on the *Album* as a structuring whole, in relation to the contemporary written and drawn work of Victor Hugo. Coming back to Viollet-le-Duc's statement, this essay will explore the possible places (*topos*) for a building's "complete state".



Oscar Mather trained as an architect first at the ENSA Paris-Belleville (2012 – 2016) then at the USI Accademia di Architettura di Mendrisio (2015 – 2018). Between the two years of the Masters course he worked for Burkhalter Sumi Architekten in Zürich. During the final year at the Accademia, he worked as an auxiliary at the Fondazione Archivio del Moderno under the supervision of Dr Nicola Navone. Since graduating, he has worked as an architect in London first with Lynch architects (2018 – 2021), then with Maccreanor Lavington (2021 –), working in both cases mainly on housing projects for public authorities. His published writings include an article on Fernand Pouillon's drawings of the Abbey of Le Thoronet, on Drawing Matter's website and in *Canalside Press' Journal of Civic Architecture*, issue 6.



Eugène Viollet-le-Duc, France, 1844
f.19 Christ in ivory; figures on north porch, *Cathedrals of Bordeaux; Chartres*
Pencil on paper
500x330x27mm
DM 1713.19



Photographs of Cowshed
Inhabitation of Cowshed - wedding, opera, fires in the field



Building as Drawing: the Cowshed (2012) at Shatwell farm

I propose to begin with a specific building as a living drawing, attracted to it initially for its formalisation of an idea of the vernacular, a vernacular particular to Shatwell Farm as rural home to Drawing Matter and its collection. The talk takes as a theoretical starting point the concept of the doric as explored by Demitri Porphyrrios in his essay 'Reversible Faces' (1977) and is influenced by Martin Bressani's chapter 'The Paestum Controversy' in Henri Labrouste (2013). The building – the cowshed designed by Stephen Taylor Architects and constructed in 2012 – is approached not through the (architectural) drawings that described its construction, that precede it, but rather using drawings (texts, photographs etc) that came after it, in dialogue.

The Drawing Matter collection spills out from the drawing chests in the archive room in that it includes a series of built and unbuilt commissions made for a landscape that is cultural, both conceptually and physically. The cowshed in this setting resonates with potential situations: social and learning opportunities, scenes of negotiation and interpretation. In this sense it is like an architectural drawing; it is the groundwork for something else.

A selection of these other things will be discussed in relation to the framework implied above: Porphyrrios, where the doric is understood as an oscillating moment between vernacular and classical, speech (as the vernacular) and text (as the formalised). Analogies include medieval translations from the Latin into the vernacular used musical notation to create rhythm, to punctuate, as a new written language was created. Interpretative glosses in the margins of texts, defining words for the first time, were didactic tools similar in intention to design studio briefs. With Bressani, it is the relationship between object, representation, and the production of knowledge that his text explores that is relevant here.

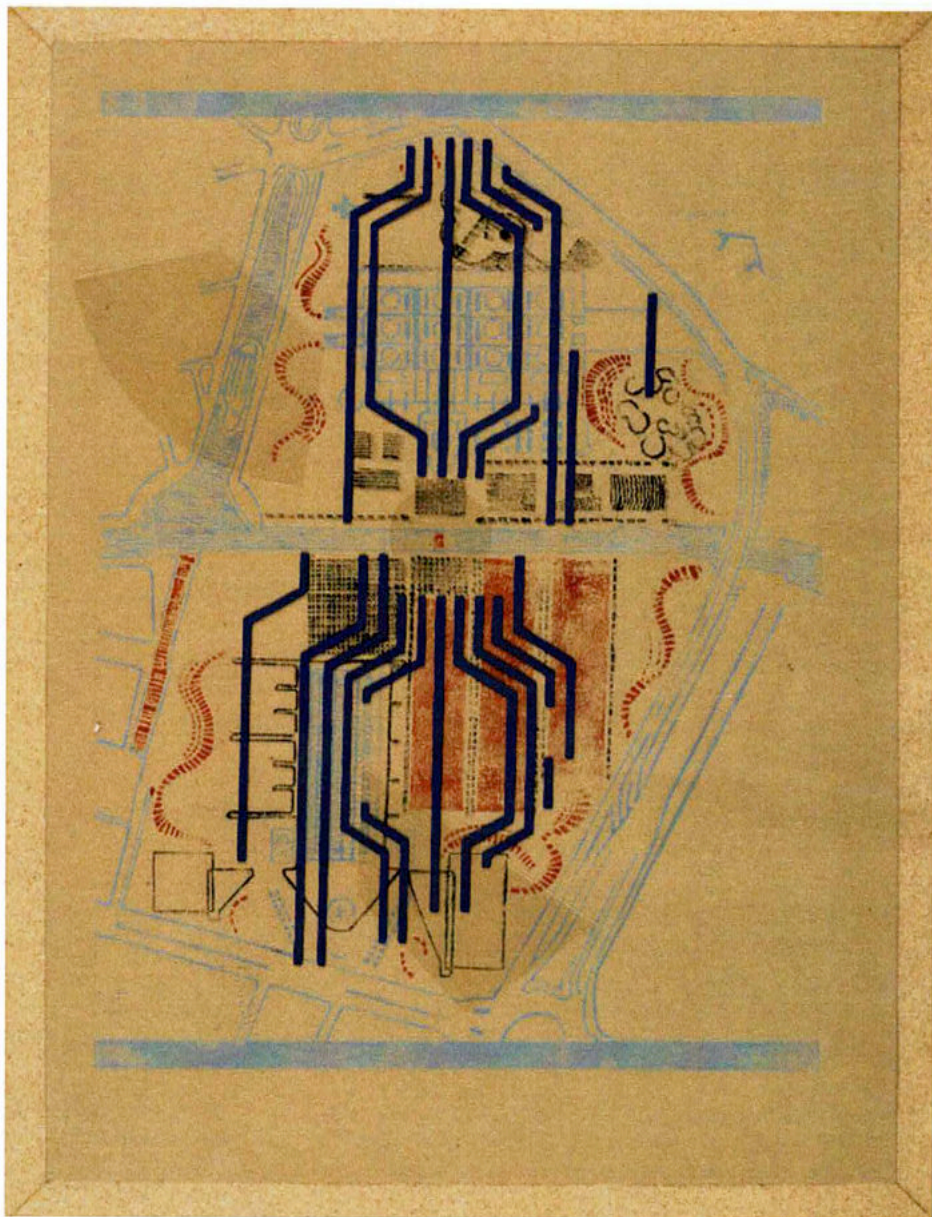


Helen Thomas worked for 4 years at the Victoria & Albert Museum to develop and implement an interpretation strategy for the then, in 2003, newly united RIBA+V&A Architectural Drawing collections. Subsequently, she has been involved in the interpretation of architectural drawing through her collaboration with Drawing Matter, and in several publications including *Drawing Architecture; Architecture Through Drawing* with Desley Luscombe and Niall Hobhouse; and in essays on the drawings of Marie-José Van Hee, Petra Blaisse and Stan Allen.



Session 2
Chair: Sophia Purnia

Drawings as Cultural Landscape Patterns



Cedric Price (1934–2003), Competition entry for the Parc de la Villette, Paris, 1982–1983. Lithograph on paper with painted mylar overlay, 350 × 465 mm. DMC 1438.

Cedric Price, Parc de la Villette

'Bloody marvellous – just the right amount of detail with a mattering degree of partial judgement that makes "CP Projects Int" such an unbeatable agency for the biased good ... CP HQ [Cedric Price Head Quarters] now undertaking rapid assessment of how little is needed & how much would spoil'.¹ Price greets the 2-page survey sent by his 'Site-Looker' Joan Littlewood – the so-called client of the Fun Palace project. 'Map you have v. (very) incorrect. Site is cluttered with buildings'²– she notes, and compiles a thorough list of both the solid buildings and temporary structures present in the two main areas of the park, 'Grande Halle Patch' and the 'Musee Patch' – an 'enormous affair' seemingly abandoned, 'resembling a dockland crane structure'.³ Despite the 'open access on all sides of "Grande Hall Patch"', she notes, the park is cut out of its surroundings: 'considering the number of kids who must be coped up in the housing blocks seen on all sides the emptiness is uncanny. I saw 2 people plus dog in the park. But access is v. (very) dangerous via dangerous roads ... a labyrinth of criss cross sorties + tunnels'.⁴

A colorful lino print transforms this miserable site into an urban lung. Laboured erosion of matter – and clutter – thins out the datum of ink. Large reservoirs of uncommitted land are carved out. Few winding lines and patches mark the paper with ink. Rolling entertainment, the plan multiplies, and Price's life-long design brief unfolds: 'Uncertainty & Delight in the Unknown'.⁵ 25 copies are retained in the archive: 'development drawings/ site plans, some used for cutouts, sketches, and notes'.⁶

Music, science, astronomy, horticulture, fish farming, the square, the maze, patches of variable activities – the site plan competition entry names the pleasures available.⁷ High-level infrastructures of light cranes over the farmland and public areas provide both servicing – electronic and pneumatic – and public observation, sketches Price.

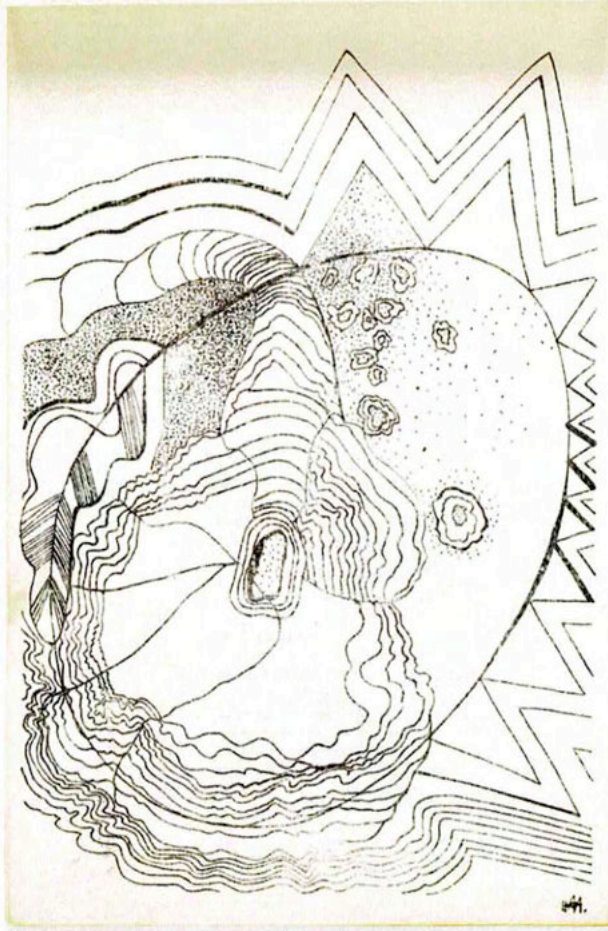
This paper looks into Price's Parc de la Villette competition entry DMC1438, to quest for the modes in which this media object resituates his design approach of 'Uncertainty & Delight in the Unknown', not only as the evolution of his practice, but crucially as part of an enduring conversation with Littlewood that had been initiated in the 1960s with the Fun Palace project.



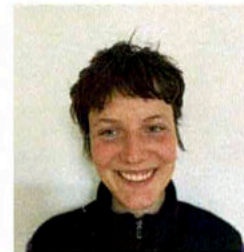
Dr. Ana Bonet Miro is Lecturer in Architectural Design and Architectural Technology at the the University of Edinburgh since 2015. She has been a chartered architect in UK and Spain, where she practised between 2000 and 2013. Her academic research focuses on Joan Littlewood's and Cedric Price's Fun Palace (1961-1975). She has published in *Architecture and Culture*, *ARQ: Architectural Research Quarterly* and *RA: Revista de Arquitectura*. She was keynote speaker at the 1st International Cedric Price Day, Stoke on Trent (2021), and contributed to the podcast series *Politics and Public Space* by Architecture Foundation, London (2022). She is author in *Drawing Matter: Her monograph Architecture, Media, Archives*, will be published by Bloomsbury Visual Arts in 2024. More broadly, her research explores the cultural dimension of architectural artefacts and discourses.

Natural Zigzags, Artificial Rocks

The curves and zigzags of the drawing are lumpy due to the unevenness of the blotting paper and the different reliefs of the cutting grooves. What are rocks? What is sand? Is that an egg in the centre of the composition? More, is that a giant worm emerging from the contour lines? In view of this, is it urban planning or an abstract composition? The engraving represents "a 200' sand pile which will be continuously detonated from within for landslides" printed in a 1960s journal at the forefront of environmental concerns. The drawing DM2004, "Project for a Park", resonates with other endless representations of nature within the Drawing Matter collection. Trees, water, mountains, rocks, natural elements in contrast or dialogue with the shapes of human construction. Inquiring the ambiguity of architectural drawings aims to engage us to rethink the breadth of lives, of lives and deaths, considered in our worlds. Rather than detaching and representing with detail the things that inhabit the pile of sand, the drawing conveys an entangled world. Hence, this object has a strong resonance today, as Marielle Macé wrote in *Une pluie d'oiseau*, "a strange time where [ecosystems], which are disappearing, come back: come back into our field of vision, our attention, our speech. (...) As if we were trying to hear [and see] them better (to hear [and see] them at last) at the very moment they are leaving." How can architectural drawing forge new forms of connection and understanding with the elusive realm of nature? This proposal is part of an ongoing research, 'Fishing architecture', directed by the European Union (ERC, 101044244).



DM 2004. Keith Albarn, Ian Knight, Anthony Hutt, *Journal of Centre for Environmental Studies*, 1967.



Alice Nouvet Alice Nouvet (1996) is a research assistant since 2023 for the research project 'Fishing Architecture' founded by André Tavares in Porto. She holds a master degree from the Faculty of Architecture la Cambre Horta (Brussels), where she completed her master thesis, documenting the customs of a territory threatened by extinction and their relic. For this work, Alice has been awarded honours in the context of the master thesis' prize of the Faculty. Since 2020, Alice had the opportunity to work with the magazine *Accatone* as part of an exhibition at the Villa Noailles (Hyères), with the artist Simon Boudvin, and with the researcher Alice Paris with whom she co-created the blog atlas-terreau.tumblr.com. In 2022, Alice's project 'Habitat outside the residence' – carried out in the frame of the Atelier 'History Theory Critic' supervised by Vincent Brunetta and Jean-Sébastien de Harven at the Faculty of Architecture la Cambre Horta – has been selected to exhibit at the IABR, 'Future Generation' (Rotterdam).

Time Draws the Stone

When mineral stones are cut, their sections contain drawings. With these drawings an abundance of colours, patterns or hidden geometries making up the stones are revealed. As spectator, it is easy to wonder over their interior richness or, as Roger Caillois does in *Les Ecris de Pierres*, recognize figures in them as if the drawings were our own. The drawings become our own, when John Ruskin motivates how re-drawing the curves, textures and forms of stones form the ultimate training for practitioners concerned with drawing.

Yet, as the works of John Ruskin and Roger Caillois also express, these drawings contain another layer of knowledge. The stone drawings are neither spontaneous nor do they have an artistic author. The drawings found in the sections of stones are images of their own formation processes. This presentation will lay out how stone drawings are expressions of time in order to expand the understanding and awareness of time, to revalue material and reconsider the impact of building. The stones of John Ruskin reveal what is drawn up in time by nature. Their drawings exist in a constant becoming, rooted in geographic embeddedness and activated by environmental forces present over a generous amount of time. In them one sees how sediment sinks, water carries, tectonic plates press, cracks are filled and minerals transform. They reveal immense time spans containing every environmental change and are therewith dense carriers of knowledge.

As drawing refers to the act of forming, a process in time, re-drawing the images found in stones stimulates architectural practitioners to consider their work as time embedded and expressed in material. In the reconsideration of the relationship between building and planet, they need to think of time looking both further back and ahead, to allow for past, present and future to meet in the continuum of the infinite, omnidirectional cosmos.

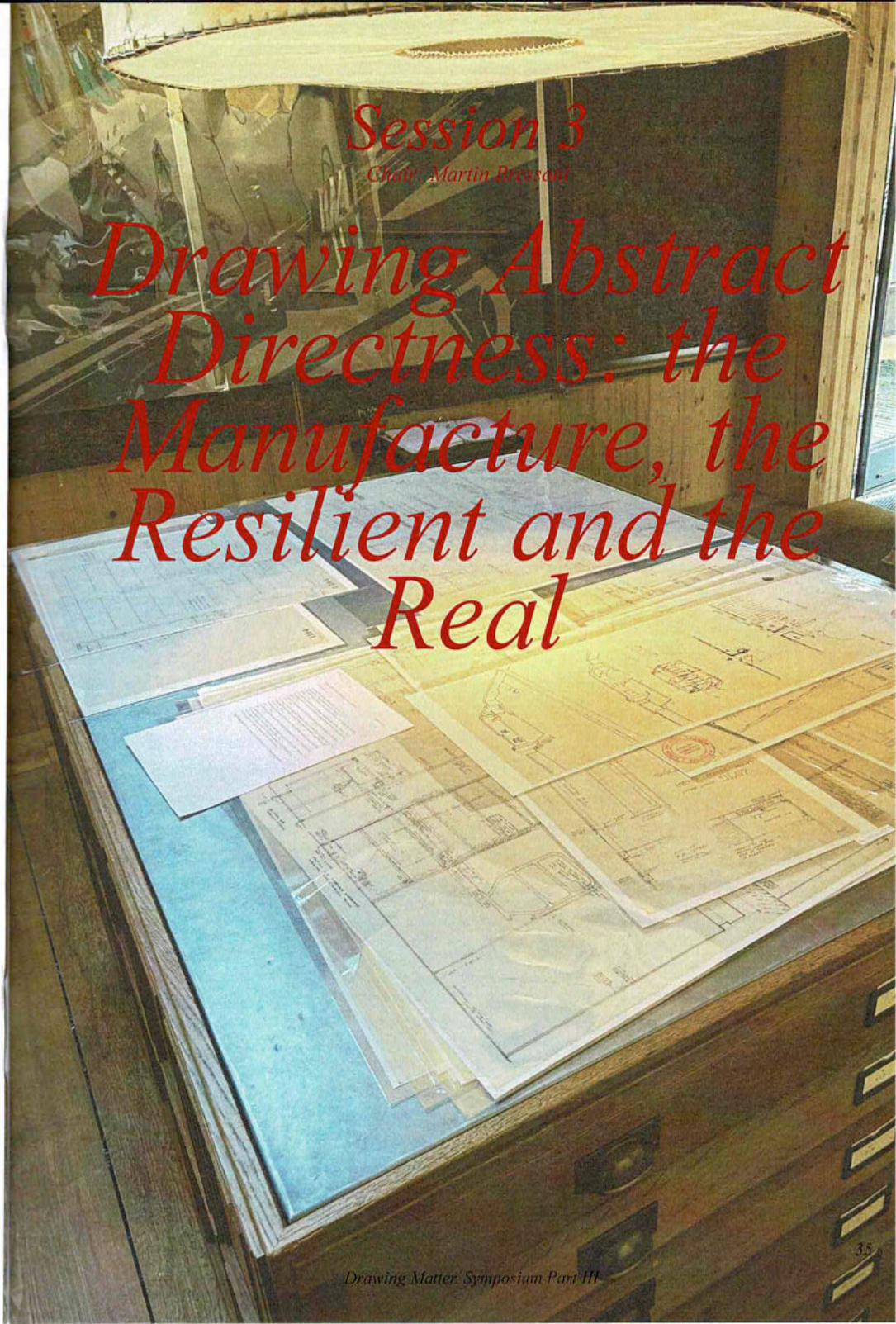
The apparently static drawings of stone sections, show how every past condition is contained whilst remaining subject to change. Drawing of stones' time, in time, extends the consideration of time simultaneously in two directions, from within the material towards the eternal. Through the stone drawing, architects could understand their material interventions as ever-lasting traces and forever unfinished.



Mieke Vink is an independent architect based in the Netherlands and lecturer at TU Delft. After graduating cum laude (2015, TU Delft), she worked at Robert van Oosterom Interiors (2015) and KAAAN architecten (2016-2018). From a deep interest in making and the poetics of space, she has been combining teaching and her own practice since 2019. She engages with various media – physical models, poetry and painting in a phenomenological approach towards architecture. In BSc courses Mieke teaches the fundamentals of spatial composition through observation and physical models. In various courses, she teaches on the role of intuition and expression in architecture. In the MSc she teaches the relationship between time, landscape, experience and building in delta conditions.



John Ruskin, Collection of Siliceous Minerals. Given to and Arranged for St. David's School, Reigate, United Kingdom (UK) 1883.
Jasperine Agate in perfect brecciation
Mineral stone
DM 2128.11



Session 3
Chair: Martin Bressani

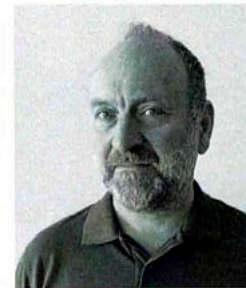
*Drawing Abstract
Directness: the
Manufacture, the
Resilient and the
Real*

The Manufacture of Architecture: Joseph Paxton and the development of the Great Conservatory

Joseph Paxton was born in 1803 in Bedfordshire and left home at the age of 13, seemingly with little formal education, to be employed in physical work as a gardening boy. After various apprenticeships he was taken on in 1823 as a labourer by the Horticultural Society, recently relocated to Chiswick Gardens. It was here that in 1826 Paxton met the sixth Duke of Devonshire, William Cavendish, one of the country's richest men. The portrayal of the meeting by Paxton's grand-daughter Violet Markham, indicates some of the later romanticisation of the event,

'A gate divided the duke's garden from the grounds of the Horticultural Society. It was a pleasant stroll from one to the other. Though not at that time an enthusiast, he found much to interest him in the Society's plants and flowers, for new varieties were very fashionable and the curious were interested in such things. During his strolls his attention was drawn to a short, pleasant-looking man who often opened the gate for him.'

The duke, temporarily lacking a gardener at his Chatsworth estate, and clearly charmed, made a bold decision and offered the young and relatively inexperienced Paxton the job as Head Gardener. Two weeks later Paxton had moved north to Chatsworth, and from here, deep within the Derwent Valley, his experiments in glasshouse construction began. At first, Paxton's energies were directed towards general garden maintenance, but subsequently, from 1828 until 1834, Paxton undertook the construction of a series of small to medium-sized timber forcing houses and glasshouses, arriving at incremental improvements in their design. Key developments at this stage were oriented towards better horticultural performance, and included the refinement of the sash bar profile, the practical application of ridge-and-furrow roofing, and the invention of what was later famously known as the 'Paxton gutter'.



Hugh Strange studied architecture at Edinburgh University, graduating in 1994, and established his London-based practice, Hugh Strange Architects, in 2011.

The practice designed the Archive building for Drawing Matter, completed in 2014. The building was nominated for the European Union Prize for Contemporary Architecture - Mies van der Rohe Award 2015.

In parallel with his practice, Hugh is currently studying for a PhD at AHO, the Oslo School of Architecture and Design. His PhD, currently titled 'Architecture at the Building Site' examines and challenges the separation of design and construction, and includes case studies of William Lethaby, Walter Segal and Joseph Paxton.

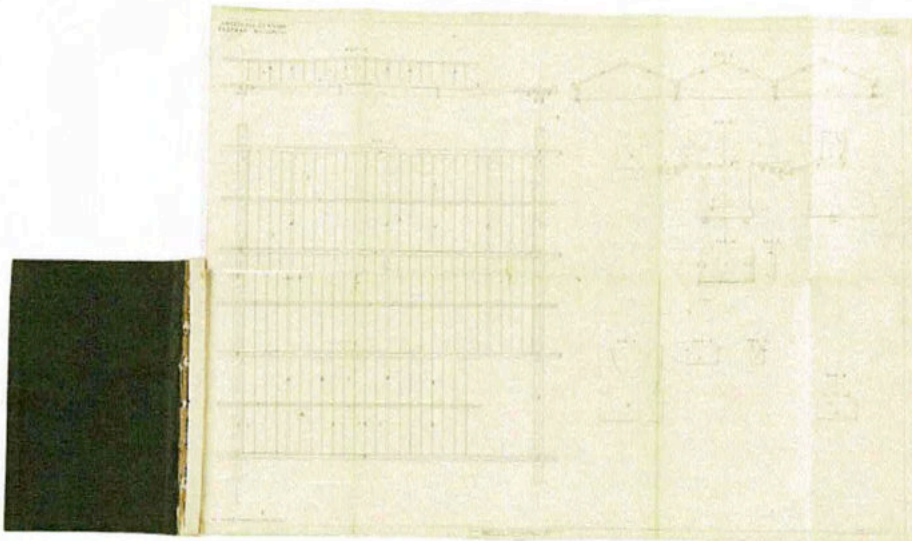


Fig. 1 Patent specification for roofing improvements. Submitted by Paxton 1850, enrolled by the Patent office 22 January 1851, printed by Eyre and Spottiswoode 1857. Print, 265 × 185 mm (folded) DMC 2694.2.7.

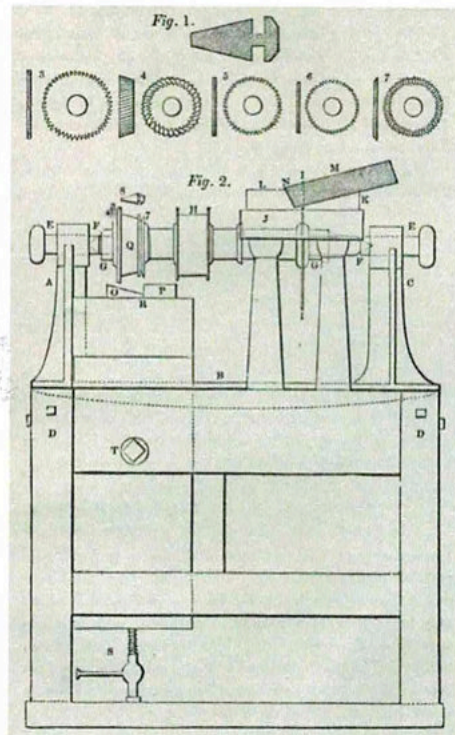


Fig. 2 'Machine for making Sash-Bars' 1840

Aqueduct of Malagueira - Complexity or Contradiction

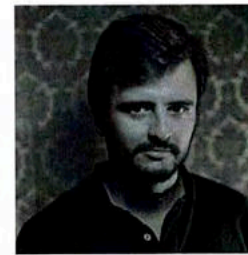
In his sketchbooks, Álvaro Siza describes the Portuguese city of Évora as the “white city with granite”. This poetic connection is immediately recognizable when contrasting the city’s dense white urban fabric with the granite monuments of its historic centre. This analogy is referenced in this piece of a new town that constitutes Malagueira housing estate, a project dating from 1977, where white row houses overlap with a strange concrete body that crosses the neighbourhood streets. First designated as conduit, this element is later elevated to aqueduct.

Malagueira projects the work of Álvaro Siza beyond borders. International critics rediscovered the architect of Casa de Chá da Boa Nova in what some deem to be the last great social housing project. It is analysed mainly through an urban and typological lens - the conduit is scarcely mentioned, sometimes omitted, and even criticised. Rafael Moneo doesn’t understand it, concluding that the project could exist without this element, which he describes as monumental, evident and rhetoric.

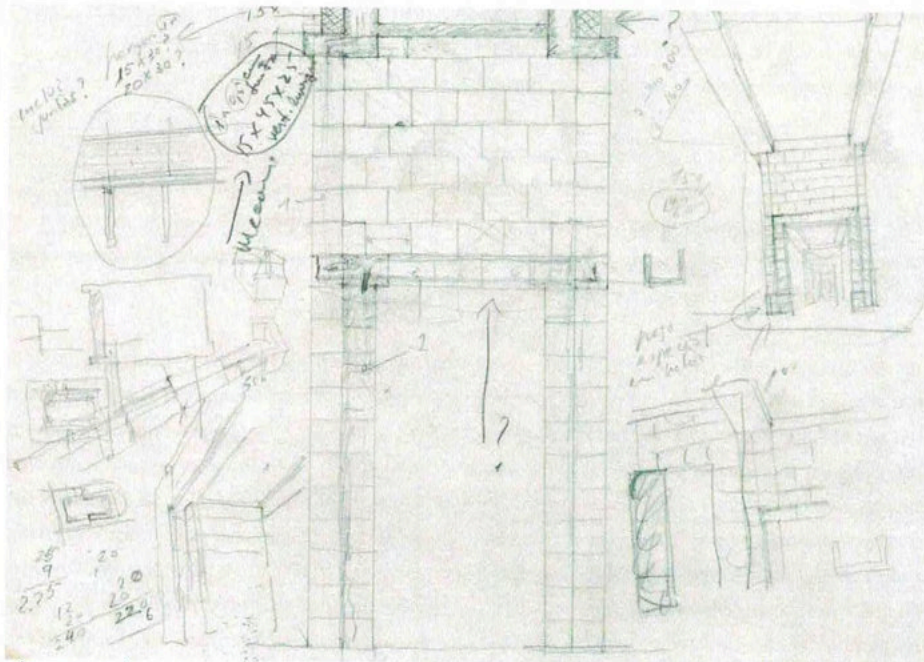
Based on an array of primary source materials from Drawing Matter’s Álvaro Siza Archive, mostly unpublished – 48 sketchbooks, 110 project drawings and 560 photographs – this analysis seeks to build a new understanding of Malagueira project, of its goals, references, pre-existences of place and conditions, in an attempt to establish the fundamental role of its aqueduct.

It’s about the search to build a city with time, imagining evidence between sustainability, brutalism and arte povera to create a new urban place - resilient and timeless. The aqueduct embodies what Álvaro Siza describes as another scale or the introduction of a new complexity. The result is a self-referential element, an artificial pre-existence - a contradictory body that raises more questions than it gives answers.

Should we consider Malagueira an example on how to build resilient cities?



Rodrigo Lino Gaspar is an architect and researcher. Having graduated from DA/UAL in 2009 with the Master Thesis “100 Possibilities to inhabit Lisbon”, he participated in SIA workshops’ Marginal and Connections, and collaborated with architectural practices in Lisbon and Geneva on major urban design and architecture projects. Member of Lisbon Ground - Biennale di Venezia’s organising team and Colina de Santana Urban Study, he participated in a conference on the experience of practice versus teaching. In 2016 he published “Parque Estoril - evolution of a territory of architecture”, and recently became a doctoral candidate at DA/UAL’s PHD Program on Contemporary Architecture. His ongoing research is focussed on understanding how the transition to a democratic system changed the Architecture of the City. Recently published research papers on Chelas Plan and “Housing . from the greatest number for all” revisited recent past projects from the 1970s that remain unfinished, unsolved and misunderstood.



Álvaro Siza, Évora Malagueira, Portugal (PT) EM-GER-ASE-04, Évora Malagueira Gerais - “Infrastructure conduit/aqueduct portico section”, pencil on tracing, 210x295 mm, DM 2111.4

Architecture and Real Abstraction

The Selz Schwab & Company Shoe Factory, built in Chicago between 1886-1807, is not among the most impressive commercial projects of Adler & Sullivan. It was cheap but experimental steel framing system on isolated footings and the austerity of its simplified exterior facade, marked by the obsessive vertical repetition of the projected piers and the absence of a culminating cornice. (1) The gentle tapering of the external piers and the horizontal alternation of white stone sills and arches mitigate the repetitive facade, interrupted only by the exception of the main gate on the northern side. (2)

While at the same time, the tripartite skyscrapers in the Chicago Loop were still symbolically masking the steel frame and the perversion of financial speculation and business, the Selz Schwab & Company fully revealed the violence of the capitalist ethos at work — maximum productivity at minimum costs — which soon would reduce the architecture of production to a rational apparatus, anticipating the spatial challenges of the concrete daylight factory.

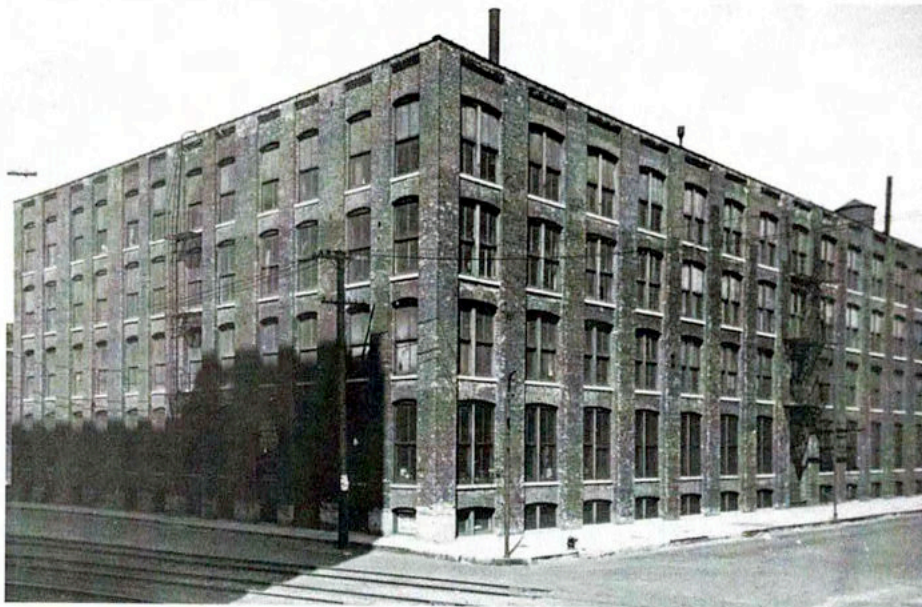
The drawings preserved at the Drawing Matter Collection manifest how abstraction has become tangible, real, as Karl Marx noted in his writings: not just the fruit of a logical simplification but a worldly abstraction, emerging from the material necessities of production and the homogeneous categories of time and space dictated by the rules of exchange erupting in Chicago in the mid-19th century. (3)

As labor becomes abstract — not this or that labor but “a pure and simple activity, abstract labor, indifferent to its particular specificity, but capable of all specificities,” uniform in quality and only varying in quantity indifferently from the modes of expenditure or its use-value — so architecture becomes generic: the most profitable spatial diagram to put at work the generic human mental and physical capacities to work. (4)

The architecture of the factory, with its slender structural skeleton, unobstructed manufacturing floor, large windows, covered court, and strategically positioned technical cores and wardrobe, could be considered the expression of the most advanced scientific, economic, and social forces that produced it, stripped bare from any ideological mystification: the crystallization of the animal spirits of the modern metropolis and the litmus paper of the future. (5)



Francesco Marullo is an architect and theorist interested in the relationships between labor, space, production, and the forms of life they entail. He is currently an assistant professor at the UIC School of Architecture in Chicago and holds a Ph.D. in History and Theory of Architecture from the Delft University of Technology and the Berlage Center. His research has been featured in numerous architectural publications (*Log*, *Volume*, *OASE*, *San Rocco*, *Domus*, *Flatout*, *JAE*) and international exhibitions such as the Venice Biennale (2014, 2016), the Oslo Triennale (2016), and the Lisbon Triennale (2019). He coedited *The Architecture of Logistics* (*Footprint*, TUDelft 2018), coauthored the book *Tehran: Life within Walls* (Hatje Cantz, 2018), and contributed to the volume *The Contested Territory of Architectural Theory* (2022). He recently curated a thematic section of *Log* (Fall 2022) about the notion of the desert within the architectural imagination, and he is coediting the next issue of *JAE* (Fall 2023) titled *Deserts*. In 2020, he was awarded the first Drawing Matter Writing Prize.

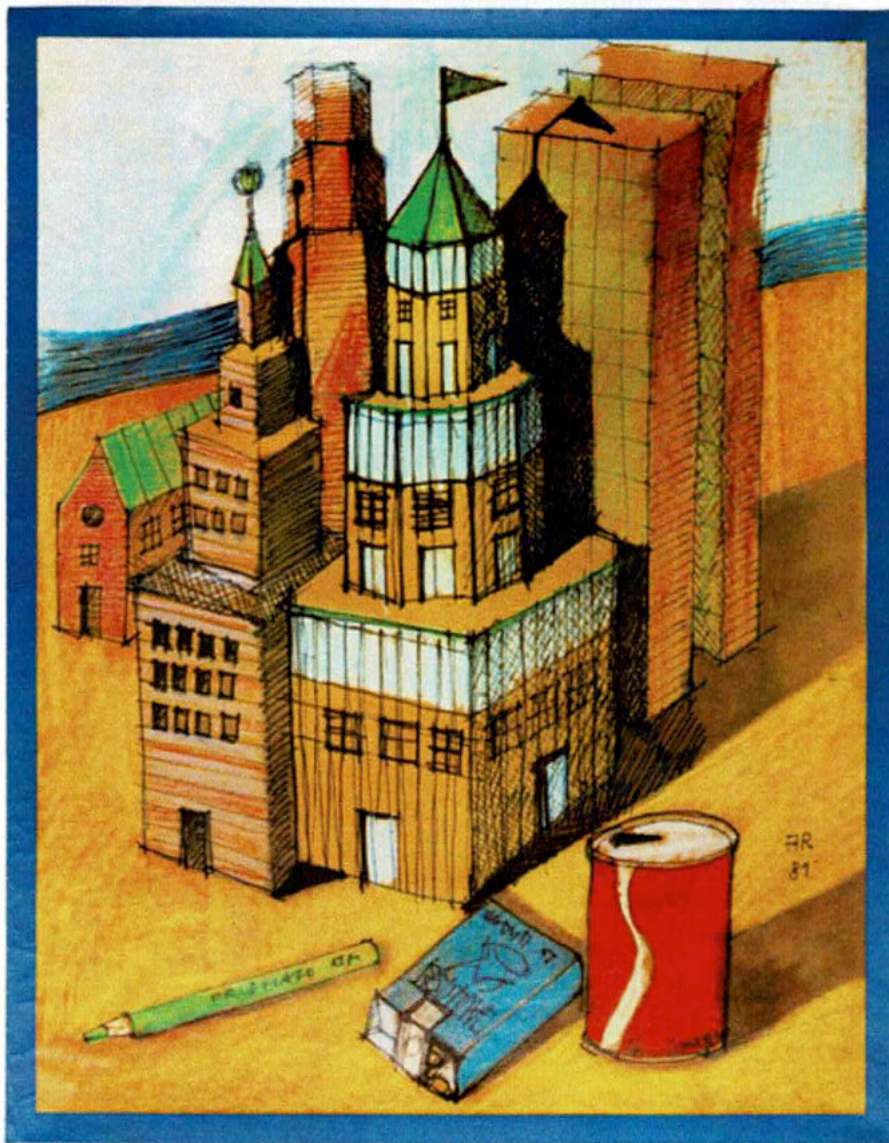


Selz Schwab & Company Shoe Factory at W. Superior St. and N. Larrabee St.
(Four-story masonry shoe factory, steel frame, 204' long x 111' wide. Cost 57,773\$. Demolished)
Photograph by Richard Nickel, 1907
Richard Nickel Archive, 1850-2011 (bulk 1945-1972) Collection Call Number 2010.6
Courtesy of Ryerson and Burnham Art and Architecture Archives
Art Institute Chicago



Session 4
Chair: Helen Thomas

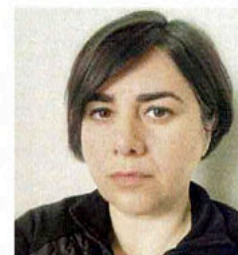
Amorphous and Tacit Knowledge Patterns within Drawings



Aldo Rossi, *Teatro del Mondo*, Sketch, Color Poster, 1981, 950x750mm, Italy, 3019

Memory's Floating Vessel. Aldo Rossi's *Teatro Del Mondo* and other images

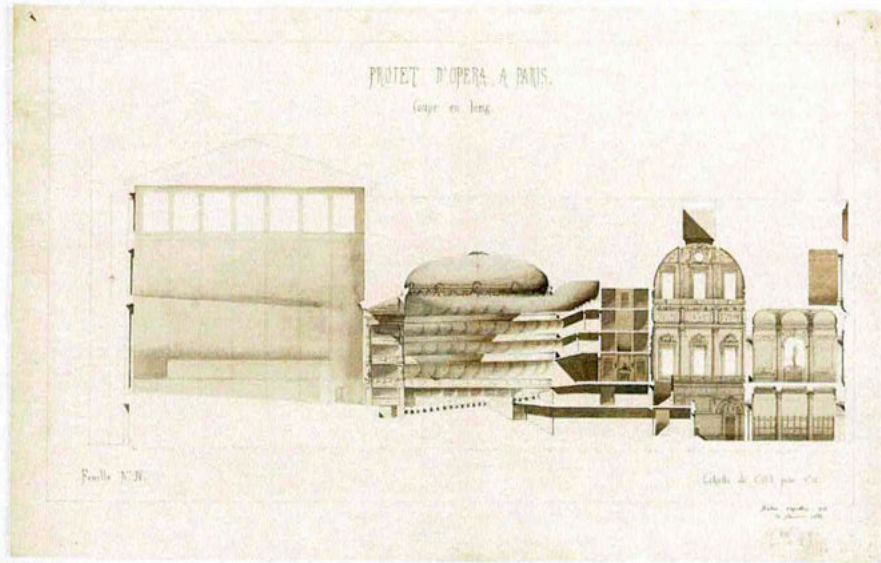
In architecture, drawings and images mediate between the abstract and the real. Sometimes they surpass their purpose and fully occupy the amorphous space between the two, turning into vessels of their own. Inspired by Aldo Rossi's seminal work, *teatro del mondo* and a visit of the Modena Cemetery and the Fagnano Olona Primary School, the paper probes the viability of an architecture that perseveres through image making and drawing. Centering on memory and arguing for an architectural project that goes beyond the confines of the built and then a dismantled space, or built and then forgotten places, the paper reflects upon the implication of time, memory, and a tangle of images as they defy the solidification of architecture into a finished form. In Italo Svevo's *The Conscience of Zeno*, Zeno reminisces on his long life, as the story unfolds. While the reader is reconstructing fragments of Zeno's life in their mind, Svevo reminds us that Zeno is not to be trusted, as he weaves together facts and fiction, truths and lies. The story is therefore not a single narrative, but one that can be read in fragments and remembered and interpreted differently every time. Rossi's work, seen in this light can also be understood as a constellation, combination, and tangle of images. What if drawings and photographs, imagined and real, more than writing and buildings, formed a significant poetic image of Rossi's oeuvre, beyond the bounds of time and place? Borrowing from Elena Ferrante's notion of *Frantumaglia*, as a tangle of things in one's head, the paper suggests understanding Rossi's work as a fluid constellation that straddles the past, present, and future, for appearing and disappearing in our memory and shaping and reshaping our understanding of his architecture. A few of Rossi's drawings and photographs by the author will be presented of an architecture that is precise and fleeting simultaneously. The primacy of the geometric forms, the site-lessness (in case of the teatro), and the humble materials, present a desire to make the buildings both present and absent, physical and ephemeral, real and dreamlike. Beholding our imagination, the theater bears witness to the potency of drawings, collages, and photographs as strong proponents in the repertory of an architecture that belongs to the realm of memory and dreams. This work posits that architecture may have a point of origin, and many appearances in written, drawn and photographed forms, and yet its resistance to become finished and its capacity to return to our minds, albeit slightly differently every time, is as critical in cultivating our imagination, as are finished buildings.



Pari Riahi (priahi@umass.edu) is a registered architect and Associate Professor of Architecture at University of Massachusetts Amherst since 2016. Riahi completed her PhD at McGill University in 2010. Her first book, *Ars et Ingenium: The Embodiment of Imagination in Francesco di Giorgio Martini's Drawings* (Routledge, 2015) concerns the systematic inclusion of drawing as a component of architectural design during the Renaissance. Her current book project, provisionally titled *Rising Measures* studies the tangle of urban form, social housing, and open and public grounds surrounding them in the suburbs of Paris. She is the instigator, co-chair and co-editor of a series of symposia and edited volumes on contemporary architecture: *Exactitude* (2020), *Multiplicity* (2022) and *Quickness* (2024). *Exactitude: On Precision and Play in Contemporary Architecture*, the first in the series, is in print (UMass Press, 2022). Pari has published in *Journal of Architecture*, *Journal of Architectural Education*, *Journal of Interior Architecture and Adaptive Reuse and Architecture Boston*. She has held exhibitions of her work: *Rising Measures* (2019, Amherst and New York) and *In the Wake* (2022, Amherst). She serves on the advisory committee to the *Journal of Society of Architectural Historians* and is an international editor of the *Journal of Architecture*.

The Animated Wall: A Fragile Vigour

A drawing is not an artefact of closed thinking. In the act of re-reading, re-drawing, and reexperiencing a transcription arises. In its form and technique - black and red ink and black, brown and pink washes on woven paper- this sketch of Charles Rohault de Fleury narrates a distinct idea in which the gravity of 'building' evaporates. The spaces are designed as a set of shades, textures, colours, and ornaments in the plane. A paper-thin stretched layer on a sheet that stages the walls as the protagonists in the sequence of experiences. Which perspectives can we unlock from a close reading of a drawing that acknowledges the animated wall as a fragile vigour in the built? Re-imagining/ The surfaces in this drawing take on their individuality through an attentive build-up of layers. This layering is not a univocal representation of illumination and shadow but seems to capture the experience. What can we derive from the technique this draughtsman deploys with the repetition of 'washes' on top of each other as layers of intensity? The hue seems to impregnate (imprégner/pregnant) the paper with intentions by repeating the touch. The Dutch poet Lucebert (1924-1994) almost seems to paraphrase this in the poem 'The very old sings': "everything of value is defenceless, becomes rich in tangibility (...) like the heart of time ". Projecting/ This drawing highlights the role and power of the 'added layer' to a building. What methodologies can we distil from this drawing to revalue and deploy this stratification in the act of building? Based on sustainability, we aim to demolish and rebuild as little as possible. In this, we reach for the creation of an intelligent solid carcass. The 'animation of the wall' as a layer of hue, chromacomposition, ornament, and texture can be the meaningful time-bound component in this, so that spaces lay themselves as a tangible distinctive experience (scenography) around the user. Where the structure is robust and timeless, the layer can excel as a defenceless 'touch' over and over again, a layer of time. Just therein lies its value and vigour.



1730.3

Principal Name: Rohault de Fleury, Charles

Object Title: Paris Opera

Group Title: Sketch designs and competition design for Paris Opera House, 1861 (7)

Project Name: Paris Opera Competition

Project Country: France

Project Date: 1861

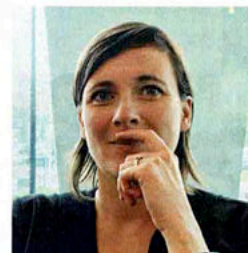
Medium: Black and red ink and black, brown and pink washes on woven paper

Dimensions: 610 x 968 mm

Description: longitudinal section

Annotations: 'Coupe en long.' / 'Feuille No. IV' / '31 Janvier 1861'

Provenance: Charles Rohault de Fleury, his family home until sale in 2012



Saar Meganck (Ghent, 1979) studied civil engineering at Ghent University. Together with David Dhooge, she founded her own office 'Dhooge & Meganck architects'. Work by this office has been exhibited and published at home and abroad such as; Lisbon (triennial of architecture/ "What is ornament, the poetics of reason"), Frankfurt ("Maatwerk/Massarbeit", Deutsches Architekturmuseum), Biennale Architettura 2021 in Venice and M KHA in Antwerp ("Prélude, a new emerging generation from the Low Countries"), Bauwelt, Baumeister, Yearbook Architecture Flanders.... She lectures at home and abroad and is a jury member at UGent, KU Leuven, TU Dortmund and UHasselt. Since 2020, she has been appointed as coordinator of theory within Architecture Academy Maastricht (AAM), where she had been lecturing in the Bachelor and Master's degrees since 2018. From October 2022, Saar started a PhD at KU Leuven and AAM (Prof. Caroline Voet and Prof. Wim van den Bergh) on: "The Animated Surface. On Materiality, Texture and Chromacomposition in Architecture".



'Get Ready', Tony Fretton

Thank you but nothing is ordinary or: Some thoughts on the creative process of Tony Fretton

There exists in the work of Tony Fretton a hypersensitivity to the body in space. His curiosity towards this relationship has led to the making of architecture infused with the tension of hazed memory, potent ambiguity, and acerbic re-readings of society. There is a precision in the interpretation of the human condition found in the work's unstableness.

I find that it is useful to think of a triangle when understanding the production of this work. This triangle comprises performance (the doing), observation (the noticing) and drawing (the interpreting). Rocking back and forth, up-and-over, aside and between each of these vertices seems to afford the oxygen to produce architecture with presentness, with tales to tell, lingering on the tip of its tongue.

The proceeding three groups of selected drawings and photographic slides from the collections of Drawing Matter and Tony Fretton will attempt to convey these processes that form this triangle. It is not proposed that the article will reveal the full extent of this triangle's role in the making of work for Fretton, but instead offers a suggestion of a method and an understanding of architecture as a cultural pursuit whose ambition should be to make sense of the world and the narratives of its inhabitants.



Benjamin Machin graduated from the University of Liverpool and the University of Westminster. He currently teaches at Loughborough University and has his own practice, Architect Benjamin Machin, in London.

Organising Committee

Caroline Voet (KU Leuven)



Caroline Voet is Associate Professor of Design, History and Theory at the Faculty of Architecture, KU Leuven. She teaches, supervises PhDs (research groups ARP and Structural Contingencies) and is Programme Director of the Bachelors. Her scholarly research has been published in a number of international journals including ARQ (Cambridge University Press) and Interiors (Routledge). Her book Dom Hans van der Laan. A House for the Mind received the DAM Architectural Book of the Year Award 2018. She was co-editor of the book Autonomous Architecture in Flanders (2016) and of The Hybrid Practitioner; Building, Teaching, researching Architecture (2022).

Caroline Voet worked as a project architect for Zaha Hadid and Christian Kieckens. Her office VOET crosses the boundaries between urban research, small architectures, reconversions, scenography and curatorship. They created projects within the public and cultural domain for clients like the Trienal de Lisboa 2022, Flanders Architecture Institute, Arts Centre deSingel, the Interior Biennale in Kortrijk and Cinematek Brussels. VOET's furniture won several prizes (Good Design Award, Henry Van De Velde Label).

Eireen Schreurs (TU Delft)



Eireen Schreurs is a Dutch architect and academic. She combines a PhD position at the KU Leuven/U Antwerp with a teaching and research position at the TU Delft. Trained as an architect at the TU Delft, she also holds the practice SUBoffice architects in Rotterdam with Like Bijlsma. Their co-housing project Hoodrifi has won the Rotterdam Architecture prize.

Her doctorate is called Material Dialogues Transformations: the iron columns in the work of Labrouste, Wagner and Lewerentz, and it traces the architectural project through its processes of materialisation. Historical case study research and the development of specific drawing techniques integrate practical knowledge with recent theories on materials and their affordances. The aim of the study is to gain a better understanding of how material culture is produced, to define a number of mechanisms of material change, and to make the material literacy of architects explicit. Her PhD is supervised by Caroline Voet (KU Leuven) and Lara Schrijver.

Laura Lievevrouw (KU Leuven)

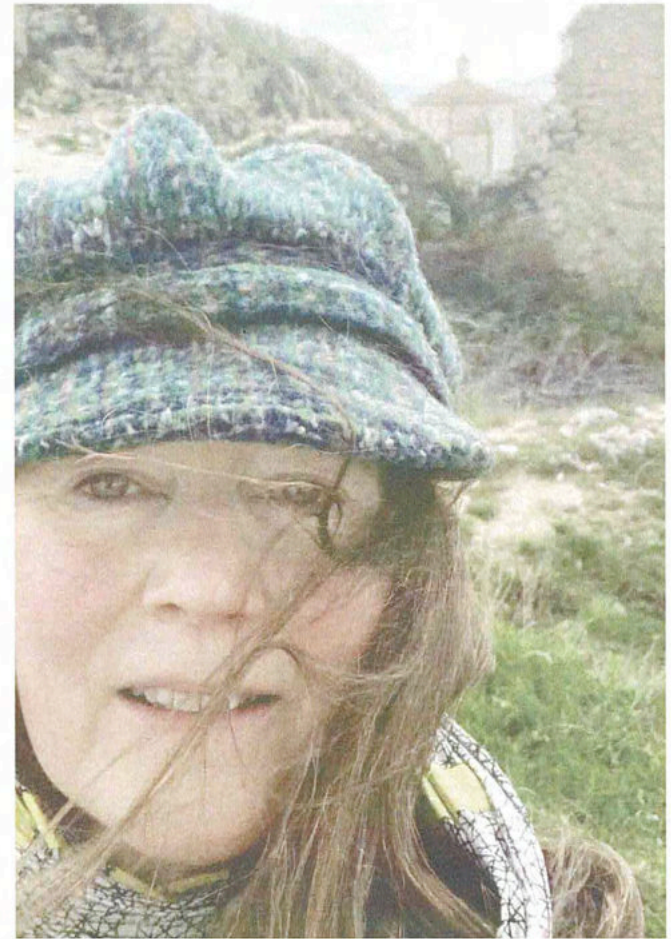


Laura Lievevrouw is a PhD researcher at the KU Leuven Faculty of Architecture. Within the Pioneering Practices Project framework, her research seeks to understand the Flemish architectural culture of the 1960s and 1970s. Through a close reading of case-study buildings by re-reading and re-drawing their design process, she explores how an architectonic and countercultural research lens can generate new insights on this period's architectural culture and the current one as well. This endeavour is supervised by Prof. Caroline Voet and co-supervised by Prof. Fredie Floré.

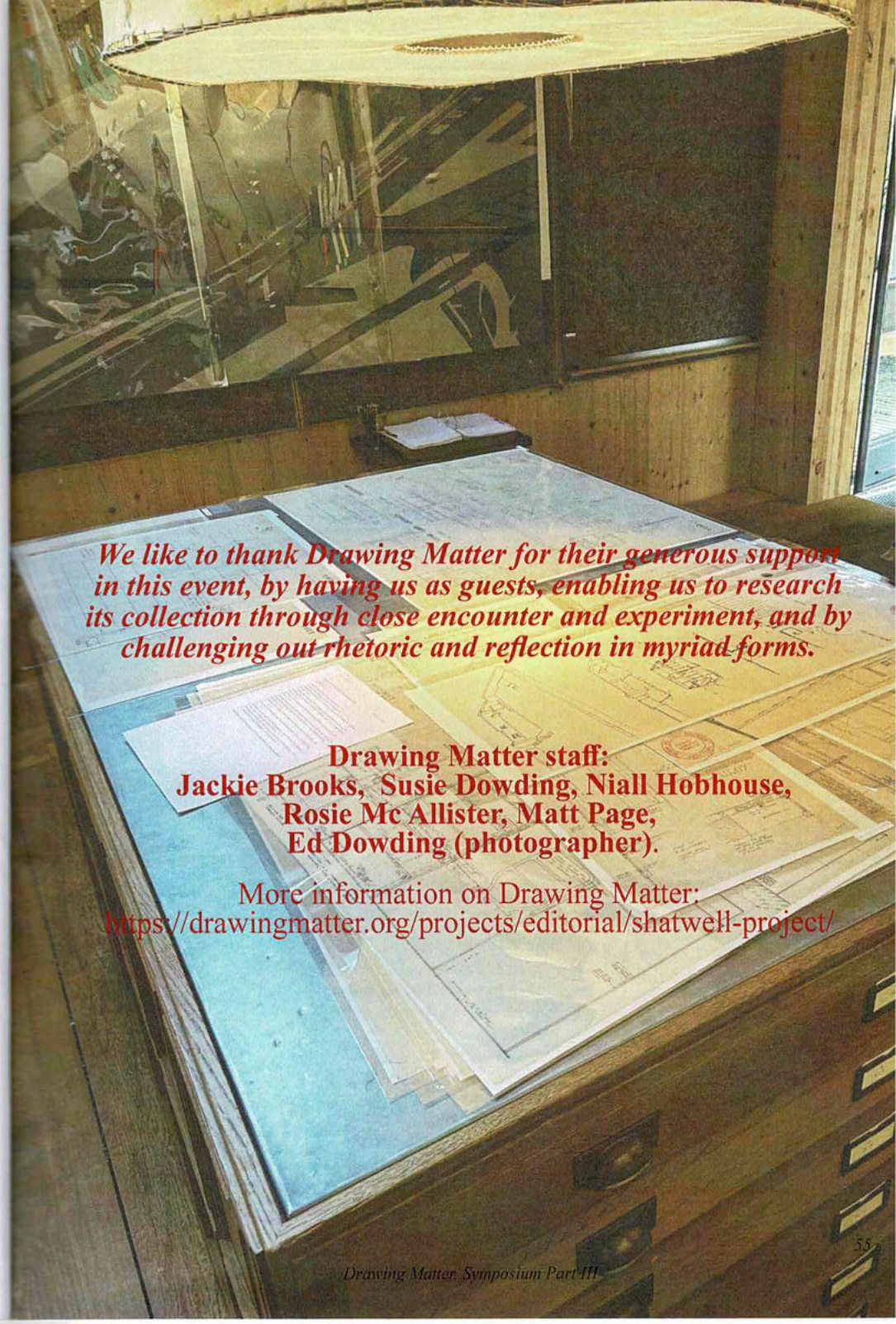
Helen Thomas



Helen Thoman worked for 4 years at the Victoria & Albert Museum to develop and implement an interpretation strategy for the then, in 2003, newly united RIBA+V&A Architectural Drawing collections. Subsequently, she has been involved in the interpretation of architectural drawing through her collaboration with Drawing Matter, and in several publications including Drawing Architecture; Architecture Through Drawing with Desley Luscombe and Niall Hobhouse; and in essays on the drawings of Marie-José Van Hee, Petra Blaisse and Stan Allen.



***Performance Rock Dance
An appreciation for John Ruskin
by Clare Whistler***



We like to thank Drawing Matter for their generous support in this event, by having us as guests, enabling us to research its collection through close encounter and experiment, and by challenging out rhetoric and reflection in myriad forms.

**Drawing Matter staff:
Jackie Brooks, Susie Dowding, Niall Hobhouse,
Rosie Mc Allister, Matt Page,
Ed Dowding (photographer).**

More information on Drawing Matter:
<https://drawingmatter.org/projects/editorial/shatwell-project/>

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be put online .
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