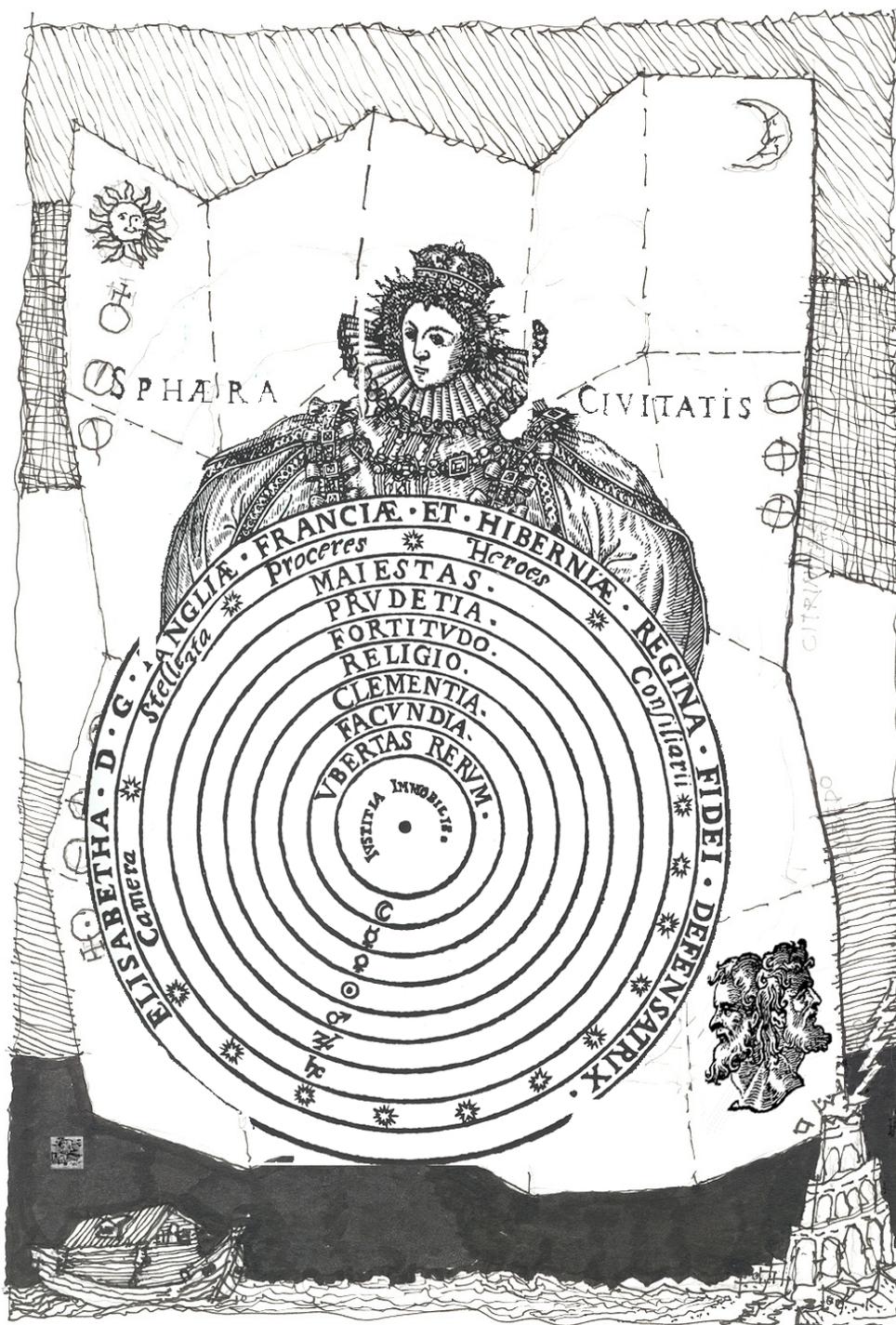


THE MATERIA PRIMA OF ARCHITECTURE



Frascari Symposium IV *The Secret Lives of Architectural Drawings and Models: From Translating to Archiving, Collecting, and Displaying*

Kingston School of Art, London
Department of Architecture and Landscape
June 27-28 2019 Symposium + June 29 2019 Archival Visits

Frascati Symposium IV

The Secret Lives of Architectural Drawings and Models: From Translating to Archiving, Collecting, and Displaying

Architectural drawings and models are instruments of imagination, communication and historical continuity. The role of drawings and models, their ownership, placement and authorship in a ubiquitous digital age deserve careful consideration. Despite them being the first handiwork of the architect, not enough attention is given to discussions about the sites of drawing activity, or to the matter of housing them, which is essential to the active relations between drawing and buildings, building and drawings, before, during and after construction.

Expanding on the well-established discussion of the translation from drawings to buildings, the Frascati Symposium IV questions the significance of the lives of drawings and models- before, during and after construction. Where drawings and models dwell in relation to buildings, impacts their seminality and their potential future translations, from drawing to building, building to drawing. In this process of multi-directional and multi-temporal constructions, who has ownership of the drawings and models, and where do they belong?

Robin Evans outlined the translational gap between drawings and buildings. The Latin word *translationem* during the Renaissance period indicated a physical transporting, including that of building elements. The translations of architectural elements were a documented and planned act that resulted from meaningful changes and led to changes in meaning.

The relevance of the physical presence and location of drawings and models within the buildings that they represent, their physical transporting from one place to another, from the places where they have been made to where they are kept during construction, or to designated locations in the thereafter of the fabrication process deserves scholarly critical analysis.

Nowadays, architectural drawings often reside in private, or public archives, and in museum collections housing the body of work of individual architects. This is the case with many collections, including the works of the Modernist masters of architecture. Archives are progressively making their physical collections digitally accessible online facilitating research and potentially having a tangible impact on the future teaching of architecture.

Architectural drawings can sometimes be found in hidden compartments inside the newel post of staircases in buildings from the Victorian up to the Modern period. The attention to maintaining architectural drawings in buildings shifted to the pragmatic aspects of construction drawings. Nowadays a set of working drawings may be kept in mechanical rooms.

The on-site presence of elected representations is emblematic of the process of on-site inventory in its dual nature of cultural recollection and fostering of future imaginings. The storytelling of the site, the site of building construction and the edifice exist in various relations to each other extending the lives of drawings in meaningful ways beyond the time of construction, which is often perceived as an end to the translational relations between them. The continuity and contiguity of drawings, models and building may define an extended site, which is open even after construction has ended.

The digital age is characterized by a ubiquitous site of drawing production. Even though it is now possible to reproduce digital drawings and models in multiple originals, facilitating the construction of a twinned theory and pondering its significance, digital drawings and models might not remain fully accessible long into the future due to the rapid obsolescence implied by software development. Archives are faced with the challenge of what and how much to preserve.

Architects and scholars are invited to consider these questions before they become an archival question and plan for the representations that inform the future of an extended site in becoming, if past and future are to engage in meaningful relations. A new criticality requires moving beyond the either/or option of the office, the laboratory, the factory, the construction site as separate fabrication and archival sites. The contemporary architect moves between them looking for a critical presence on the construction site, before, during and after construction.

convened by:

Mary Vaughan Johnson

Head of the Department of Architecture and Landscape, Kingston School of Art, London, England

Federica Goffi

Associate Professor, Co-Chair PhD Program, Azrieli School of Architecture and Urbanism, Carleton University, Ottawa, Canada

session topics

Drawing sites and sites of knowledge construction: the drawing, the office, the lab, the construction site, and the archive

The afterlife of drawings and models: collecting, archiving, exhibiting and teaching

The architect's ethical responsibilities: authorship, ownership, copyrights and rights to copy

Tools of making: Relations between architectural representations and their apparatus over time

Frascari Symposium IV *The Secret Lives of Architectural Drawings and Models: From Translating to Archiving, Collecting, and Displaying*

Acknowledgements

It is with gratitude that we acknowledge the selfless support of the peer reviewers of the Frascari Symposium IV. The remarkable response to the call was met with the insightful comments contributed by the peer reviewers. Together with their efforts, we trust, that the broad participation and the guests who anticipate being present at the event will make for a feast of discussions and debates on the sites of knowledge construction.

We are grateful for the response to the call, the early feedback of Paul Emmons on the conference topic, and the speakers who will address the matter of architectural drawing, where do they belong, and where they have been in the thereafter of a construction and construing process, and how this has impacted seminality and continued knowledge construction in architecture beyond the construction of buildings. While this may have gone fairly unnoticed, their secret lives have been pervasive, and many stories will be unrolled, unfolded and slid out of where they have been taking place—whether from archival shelves, the walls or the cases of a museum or a school, where they have been connoting the architecture, or the purposefully constructed rooms inside the buildings that they denote—to reveal the significance of place and its impact on the construction of knowledge. Whether from within a building that has come to contain them in a reverse process, or outside the buildings that have been erected out of them having left in the afterlife of a construction process—they offer reciprocal knowledge sustenance to each other and to us.

The Frascari Symposium IV has been acknowledged by the support of the Paul Mellon Centre for Studies in British Art; whose advisory council awarded an Educational Programme Grant in support of the event.

The Frascari Symposium IV has also received substantial support from the Kingston School of Art Research Fund. In addition, without the enthusiasm, the support of all the faculty and staff, as well as the organizational effort of REGISTER, this event would not be possible, and we are grateful to each and every one of them. We anticipate new thoughtful lives will begin in the new extension for the Department of Architecture and Landscape, whose drawings will find a 'house' constructed by their students within the denoted building, which will be presented at the symposium in celebration of the building's inauguration.

We wholeheartedly thank our Invited speakers who immediately responded with enthusiasm to the invitation to share in the Frascari Symposium IV their lifetime of experience and commitment to the secret lives of architectural drawings.

A special acknowledgement goes to Drawing Matter, and its founder, Niall Hobhouse, for inviting to Shatwell Farm and hosting us within the heart of his collections at the Drawing Matter Archives.

To all the presenters and our moderators goes our debt of gratitude for opening up this field of research in so many new directions.

Last but not least, we would like to mention that this event would not be possible without the moral support and the participation of Paola Frascari. This event—its construction and construing—are infused with the memories of a generous mentor, Marco Frascari.

The where and the how architectural drawings are archived, exhibited, kept or maintained has a direct impact on the kinds of knowledge that still infuses their lives and makes us consider and reconsider their role and significance, and so the stories unfold..

Mary Vaughan Johnson & Federica Goffi

June 27 2019

9.15-9.45 Co-Convenors opening remarks

Mary Vaughan Johnson

Head of the School of Architecture and Landscape | Associate Professor | Kingston School of Art | London | UK

Federica Goffi

PhD | Associate Professor | Co-Chair PhD in Architecture | Azrieli School of Architecture & Urbanism | Carleton University | Ottawa | Canada

9.45-1.00 *Drawing Sites and Sites of Knowledge Construction: The Drawing, The Office, The Laboratory, The Construction Site*

Plenary Session Invited Speaker **Alba Di Lieto**

9.45-10.20 Architect | Curator | Castelvecchio Museum | Carlo Scarpa Archives | Verona | Italy
Introduction **Federica Goffi**

Session 1 *Drawing Sites / Sites of Knowledge Construction*

Moderator **Federica Goffi**

10.25-10.40 **Carolina Dayer**

PhD | Assistant Professor | Aarhus School of Architecture | Denmark

Domestic Imagination: The Foundational Workspace of Carlo Scarpa

10.40-10.55 **Sam Ridgway**

PhD | Architect | Associate Professor | School of Architecture and Built Environment | The University of Adelaide | South Australia

Drawing in A Theater of Architecture

10.55-11.10 **Tracey Eve Winton**

PhD | Architect | Associate Professor | School of Architecture | University of Waterloo | Canada | Research Creation Scholar SSHRC

Drawing Out Hidden Depths: Tracing A Path Through the Castelvecchio Courtyard, Verona

11.10-11.25 **George Dodds**

PhD | Alvin and Sally Beaman Professor of Architecture | University of Tennessee (UTK) | USA

Depict | Demonstrate | Disclose: Drawing 31615

11.45-12.00 *Break*

Moderator **Jonathan Foote**

12.00-12.15 **Claudio Sgarbi**

Architect (Italy) | PhD | Adjunct Professor | Azrieli School of Architecture and Urbanism | Carleton University, ASAU | Canada
Visiting Associate Professor | Lebanese American University | Lebanon

The Fabbrica and the Mise en a-BIM. Where and What are we Trying to Hide?

12.15-12.30 **Simona Valeriani**

PhD | Head of Early Modern Studies | Victoria & Albert Museum | V&A/RCA History of Design Program

Life and Afterlife of a Design Process: Models and Drawings of the Royal Albert Hall

12.30-12.45 **Berrin Terim**

Lecturer | School of Architecture | Clemson University | Clemson, SC | USA

*The 'Body' and the 'Soul' of Architectural Drawings and Models:
Filarete's Anthropomorphism on Representation*

Session 2 *Sites of Knowledge Construction / Drawing Sites*

Moderator **Lisa Landrum**

10.25-10.40

Eleanor Suess

Associate Professor | Department of Architecture and Landscape | Kingston School of Art | London | UK
Analogous Divinations: Projective Worldmaking Through the Artefacts of Architectural Representation

10.40-10.55

Gevork Hartoonian

PhD | Professor of the History and Theory of Architecture | Faculty of Arts and Design | University of Canberra | Australia
Bernard Tschumi: Filmic Image Drawn

10.55-11.10

Aisling O'Carroll

PhD Candidate | The Bartlett School of Architecture | University College London | UK
Drawing and Building, Landscape and Architecture: Hybrid Sites of Production

11.45-12.00

Break

Moderator **George Epolito**

12.00-12.15

Athanasίου Geolas

PhD Candidate | Department of Architecture | Cornell University | Ithaca NY | USA
On the Archive Table: Embodiment, Objectivity, and the Construction of Historical Knowledge

12.15-12.30

Marian Macken, Sarosh Mulla & Aaron Paterson

PhD | Senior Lecturer | SoAP | Faculty of Creative Arts and Industries | University of Auckland | New Zealand
PhD | Lecturer | SoAP | Faculty of Creative Arts and Industries | University of Auckland / Pac Studio | New Zealand
Lecturer | SoAP | Faculty of Creative Arts and Industries | University of Auckland / Pac Studio | New Zealand
Being in the Drawing

12.30-12.45

Rebecca Williamson

PhD | Architect | Coordinator, MS and PhD Programs in Architecture | Associate Professor | University of Cincinnati | USA
The Art of Building, the Chaotic Mess

1.00 -2.00

Lunch Break

2.00-5.15

The Architect's Ethical Responsibilities: Authorship, Ownership, Copyrights and Rights to Copy

Plenary Session Invited Speaker | **Niall Hobhouse**

2.00-2.35

Drawing Matter Collection | Shatwell | Somerset | UK
A Collector's Ethical Responsibilities?

Introduction

Andrew Clancy

Frascari Symposium IV

Session 3 *The Architect's Ethical Responsibilities*

Moderator **Andrew Clancy**

2.40-2.55

Yvette Putra

PhD | Research Fellow & Tutor | Melbourne School of Design | Faculty of Architecture, Building and Planning | University of Melbourne | Australia
Ugly Architectural Drawings: The Case of Hardy Wilson

2.55-3.10

Émélie Desrochers-Turgeon

PhD Student | Vanier Scholar | Azrieli School of Architecture and Urbanism | Carleton University | Ottawa | Canada
Breaking the Silence – Examining Sensorial Agency Through the Drawings of Residential Schools in Canada

3.10-3.25

Terri Fuglem

Associate Professor | Department of Architecture | University of Manitoba | Winnipeg | Canada
The Discovery of the Drawings: Assessing The Cultural Imperative in Fifty Years of Student Work

3.40-3.55

Break

Moderator **Izumi Kuroishi**

3.55-4.10

Marcia F Feuerstein

R.A./AIA PhD | Associate Professor of architecture | Virginia Tech | WAAC | Alexandria VA | USA

"After" the Original: High Costs, Low Roads and Circumventions

4.10-4.25

Nilly Harag & Jan Tandrevold

Architect | Senior Lecturer | Architecture Department | Bezalel | Co-founder Arctic Architects | Jerusalem | Israel
Architect | Lecturer | Architecture Department | Bezalel | Co-founder of Arctic Architects | Jerusalem

The Limits of Architectural Authenticity: A Villa Tell-Tale of Two Non-Identical Twins

4.25-4.40

Fei Wang

Coordinator MS Arch Program | Assistant Professor | School of Architecture | Syracuse University | USA

The Impossible Shadow.

A Study on the First Chinese Treatise on Perspective, Shi xue (視學, 1729/1735)

4.40-4.55

Jan Frohburg

Architect | Lecturer | University of Limerick | Ireland

Object Number 571.1963: Biography of a Collage

Session 4 *Drawing Sites | Sites of Knowledge Construction*

Moderator **Sam Ridgway**

2.40-2.55

Konstantinos Avramidis

PhD | Adjunct Lecturer in Architecture | Drury University | Greece

Drawing After-The-Fact: Documenting and Transcribing Graffiti and Architecture

2.55-3.10

Alberto Bologna

PhD | Architect | Assistant Professor | China Room | Dipartimento di Architettura e Design DAD | Politecnico di Torino | Italy

A Chinese Attitude: From Drawing to Building Through Models and On-site Mockups

The Emblematic Case of the Seashore New Library by Vector Architects, 2015

3.10-3.25

Thi Phuong-Trâm Nguyen

PhD Candidate | The Bartlett School of Architecture | University College London | UK

Anamorphosis - Drawing Spatial Practices

3.40-3.55

Break

Moderator **Eva Sopeoglou**

3.55-4.10

Lori Smithey

PhD Candidate | Architectural History and Theory | Taubman College of Architecture & Urban Planning | University of Michigan | USA

The Architectural Model Divested of Function: Constructing a Site of Intersubjectivity

4.10-4.25

Michael Lee

Architect | Lecturer | Department of Architecture and Landscape | Kingston School of Art | London | UK

Drawings of Things You Cannot See

4.25-4.40

Sophia Banou

PhD | DipArch | MSc | AFHEA | Lecturer in Architecture | University of the West of England | Bristol | UK

The Intimate Archive: Rural Excursions in the Work of Superstudio

5.30-6.00

Reception & Inauguration

Mary Vaughan Johnson & Nicholas Lobo Brennan

Aurelio Almeida Miranda, Anne Berit Bergstad, Delia-Mariana Coman, Joel Donoghue, Cai Hall, Mohammad Ali Noei

Inauguration of *The Drawing House*

Paul Emmons, Jodi La Coe

Book Launch: *Ceilings and Dreams: The Architecture of Levity*

Edited by Emmons, Goffi, La Coe (Routledge 2019)

7.00 -9.00

Dinner at the *Warren House Conference Centre*, Warren Road, Kingston-Upon-Thames, Surrey, KT2 7HY

June 28 2018

9.15-12.45 ***Tools of Making: Relation Between Architectural Representations and Their Apparatus Over Time***

Plenary Session | Invited Speaker **William Whitaker**

9.15-9.50 Curator | The Architectural Archives | University of Pennsylvania School of Design | Philadelphia | USA

Introduction **Mary Vaughan Johnson**

Session 5 ***Tools of Making***

Moderator **Mary Vaughan Johnson**

9.50-10.05 **Paul Emmons**

PhD | Registered architect | Professor of architecture | Virginia Tech | Associate Dean of Graduate Studies College of Architecture and Urban Studies | WAAC | Coordinator PhD Program in Architecture + Design Research | Alexandria Old Town VA | USA

Animate Instruments

10.05-10.20

Donald Kunze

PhD | Emeritus Professor | The Department of Architecture | Penn State University | State College PA | USA

Orthographic Melencolia & Purloined Palimpsests

10.20-10.35

Jonathan Foote

PhD | Associate Professor | Aarhus School of Architecture | Denmark

The retroactive Construction of Architecture: Michelangelo's New Sacristy Wall Drawings

10.35-10.50

Marion Cinqualbre & Olivier Cinqualbre

Independent paper conservator, specialised in modern and contemporary art | Paris | France

Architecture curator / Head of the architecture collection / National Museum of Modern Art / Centre Pompidou / Paris

Industrial Graphic Products for Architecture Drawings: the Use of Zip Films

11.10-11.25

Break

Moderator **Jodi La Coe**

11.25-11.40

Lisa Landrum

PhD | M.Arch II | B.Arch, MAA, MRAIC, AIA | Associate Dean (Research) | Associate Head & Associate Professor
Department of Architecture | Faculty of Architecture | University of Manitoba | Winnipeg | Canada

Tableau Vivant: Tables and Stages of Architectural Striving

11.40-11.55

Sofía Quiroga Fernández

PhD Lecturer | Department of Architecture at Xi'an Jiatong Liverpool University | Suzhou | China

The Model as an Experimental Tool: The Moholy Nagy's Lighting Devices

11.55-12.10

Bruno Silvestre & Armando Rabaça

Architect | MArch (DARq UC) ARB | Course Leader, BA (Hons) Architecture | Department of Architecture and Landscape | Kingston School of Art | London | UK

Professor Auxiliar | Departamento de Arquitectura | FCT Universidade de Coimbra | Portugal

The Life of Secret Architectural Drawings:

Considerations on the Generative Power of the Sketch through Álvaro Siza's Archive

12.10-12.25

Claudia Conforti, Maria Grazia D'Amelio & Lorenzo Grieco

Full Professor | History of Architecture | Department of Engineering | University of Rome Tor Vergata | Italy

Professor | History of Architecture | Department of Engineering | University of Rome Tor Vergata | Italy

PhD student | Department of Engineering | University of Rome Tor Vergata | Italy

Design in Real Scale: Full-size Architectural Models in History

Session 6 ***Tools of Making***

Moderator **Rebecca Williamson**

9.50-10.05

Andrew Clancy & Colm Moore

Architect | PhD MRIBA | Professor of Architecture | Director of REGISTER | Department of Architecture and Landscape | Kingston School of Art | London | UK

Architect | PhD | Senior Lecturer | Director MArch | Queens University | Belfast | Ireland

Between Strategy and Detail - Kay Fisker and the Conditions of Life

10.05-10.20

Christoph Lueder

PhD | Associate Professor | Department of Architecture and Landscape | Kingston School of Art | London | UK

Gestures and Diagrams, Corporeality and Choreography

- 10.20-10.35 **Elizabeth Deans Romariz**
PhD Candidate | History of Art | University of York | UK
Presentation Albums as Architectural Documents and Objects
- 10.35-10.50 **Samuel Korn**
PhD student | Research Assistant | Universität Kassel | Architektur Stadtplanung Landschaftsplanung
How a Wrapping Paper Transforms its Contents
- 11.10-11.25 *Break*
- Moderator **Eleanor Suess**
- 11.25-11.40 **Andelka Bnin-Bninski**
PhD | Architect | Teaching Assistant | Faculty of Architecture | Faculty of Architecture | University of Belgrade | Serbia
Working with the Gap: Measuring and Continuous Drawings
- 11.40-11.55 **Aaron Tobey**
PhD Student | Yale School of Architecture | New Haven | USA
Promiscuous References and the Becoming Discontinuous of the Architectural Drawing
- 11.55-12.10 **Tim Gough**
Senior Lecturer | MA(Cantab) DipArch RIBA | Department of Architecture and Landscape | Kingston School of Art | London | UK
Beyond the Closure of Representation: How to do Things with Drawings
- 12.45 -1.45 LUNCH BREAK
- 1.45-5.00 ***The afterlife of drawings and models: collecting, archiving, exhibiting and teaching***

Plenary Session Invited Speaker **Olivia Horsfall Turner**

- 1.45-2.20 Senior Curator, Designs, V&A, and V&A Lead Curator for the V&A + RIBA Architecture Partnership, London, UK
Introduction **Matthew Wells**

Session 7 *The Afterlife of Drawings and Models: Archiving, Collecting and Teaching*

Moderator **Matthew Wells**

- 2.25-2.40 **Weiling He**
PhD | Associate Professor | Director of the Academy for Visual and Performing Arts | Department of Architecture | College of Architecture | Texas A&M University | USA
Drawings for Interpretations: Speculating on John Hejduk's Drawings in Relation to His Claims about Architectural Pessimism
- 2.40-2.55 **Jean-Pierre Chupin & Carmela Cucuzzella**
PhD | Architect | Université de Montréal | Professor | Director of the Université de Montréal Research Chair on Competitions | Co-director of interuniversity Laboratoire d'étude de l'architecture potentielle (L.E.A.P) | Canada
PhD | Concordia University Research Chair (IDEAS-BE) | Associate Professor | Design and Computational Arts | Montréal | Researcher at Laboratoire d'étude de l'architecture potentielle (L.E.A.P) | Canada
108 Embodiments of Potential Architecture: Sisyphus Building Databases of Competition Projects
- 2.55-3.10 **Lizzie Muller & Ainslie Murray**
PhD | Senior Lecturer | Art & Design | University of New South Wales | Sydney | Australia
PhD | Senior Lecturer | Built Environment | University of New South Wales | Sydney | Australia
Under the Dust and Dirt: A Discussion About Architectural Models with Allan Wexler
- 3.25-3.40 *Break*
- Moderator **Paul Emmons**
- 3.40-3.55 **Alejandro Henriquez Luque, Maria Elisa Navarro Morales & Cristina Albornoz Rugeles**
Architect | Bogotá | Colombia
PhD | Assistant Professor | Facultad de Arquitectura y Diseño | Universidad de Los Andes | Bogotá | Colombia
MArch | Associate Professor | Facultad de Arquitectura y Diseño | Universidad de Los Andes | Bogotá | Colombia
German Samper, A Life Among His Drawings
- 3.55-4.10 **Fabio Colonnese**
PhD | Architect | History, Drawing and Restoration of Architecture Department | Sapienza University | Rome | Italy

Tear it Down! Agency and Afterlife of Full-size Models Between Testing and Regretting

4.10-4.25

Tina Di Carlo & Niall Hobhouse

Editor | Drawing Matter | Somerset
Visiting Tutor | Architectural Association | London
Geddes Fellow | University of Edinburgh | Edinburgh

Drawing Mobility and Cultural Transference: Charles Robert Cockerell's Pavement Plan of the Parthenon

4.25-4.40

Neil Levine

Emmet Blakeney Gleason Research Professor of History of Art and Architecture | GSD | Harvard University | Cambridge MA | USA

The Move of the Frank Lloyd Wright Drawings and Models from Private Archive to Public Collection and Its Promotion of Use and Deterrence of Abuse

Session 8

The Afterlife of Drawings and Models: Collecting and Exhibiting

Moderator **Marcia Feuerstein**

2.25-2.40

Jordan Kauffman

PhD | Research Fellow | MADA | Monash University | AUS ; Research Affiliate | Massachusetts Institute of Technology | USA

Perceiving Architectural Drawings and Models in the Postmodern Era: Art Markets and Their Effects

2.40-2.55

Thordis Arrhenius & Christina Pech

PhD | Architect SAR | Professor | School of Architecture | Royal Institute of Technology (KTH) | Stockholm | Sweden

PhD | Research Coordinator, Architectural History | Swedish Centre for Architecture and Design (ArkDes) | Lecturer | School of Architecture | Royal Institute of Technology (KTH) | Stockholm | Sweden

The Asplund Collection and the Swedish Museum of Architecture

2.55-3.10

João Miguel Couto Duarte

PhD | Architect | Assistant Professor | Faculdade de Arquitectura e Artes da Universidade Lusíada | Researcher at Centro de Investigação Arquitectura Território e Design | Lisbon | Portugal

The Singular Afterlife of What Was Once an Architectural Scale Model

3.25-3.40

Break

Moderator **Tracey Eve Winton**

3.40-3.55

Carolina B. Garcia Estévez

PhD | Architect | Serra Hünter Fellow, Theory and History of Architecture | Polytechnic University of Catalonia UPC | Barcelona School of Architecture ETSAB | Spain

Monuments in Motion. Exhibiting the Full Scale Replicas from the Barcelona School Collection (1817-1929)

3.55-4.10

Gavin Keeney

PhD | Independent Scholar | USA

Doshi's Other Legacy

4.10-4.25

Stefaan Vervoort

Stefaan Vervoort | PhD Candidate | Department of Architecture and Urban Planning | Ghent University | Belgium

Idea as Model (and its Discontents)

4.25-4.40

Adam Sharr

Professor of Architecture | Head of Architecture, Planning and Landscape | Newcastle University | UK

Principal of Adam Sharr Architects | UK

The Secret Afterlife of Three Drawings and the Replica They Spawned

Session 9

The Afterlife of Drawings and Models: Collecting and Archiving

Moderator **Carolina Dayer**

2.25-2.40

Izumi Kuroishi

Professor | School of Cultural and Creative Studies | Aoyama Gakuin University | Tokyo | Japan

Avant-Garde Quality of the Reality Sketches by Kon Wajiro: Ever-lasting Inspirations of the Archival Architectural Drawings in Japan

2.40-2.55

Ashley Mason

PhD candidate in Architecture by Creative Practice | School of Architecture, Planning & Landscape | Newcastle University | UK

THIN SHEETS: Afterlives and Traces of Handling Within the Archival Drawings of A+PS

2.55-3.10

Elisa Boeri

PhD | Post-Doc Researcher | Université Paris 1 Panthéon-Sorbonne | France | Teaching Assistant | Politecnico di Milano | Italy

Rise and Fall of a Draftsman: The Lequeu legacy at the National Library of France

3.25-3.40 *Break*

Moderator **Bruno Silvestre**

3.40-3.55

Felipe Lanuza

Architect (Chile) | PhD | Postdoctoral Researcher | UCL Urban Laboratory | The Bartlett School of Architecture | London | UK
Archive and Site: The Ghost of Peter Eisenman's Cannaregio Ovest Project (1978) in Venice

3.55-4.10

Francesca Favaro

Phd Student | Dipartimento di Architettura | Politecnico di Torino | Italy
Documents as Barycentres: Documentary Constellations in the Architect's Archive

Plenary Session: The Beginnings of the Afterlife of Drawings and Models

Moderator **Mary Vaughan Johnson**

4.30-4.50

Nicholas Olsberg

Charles Robert Cockerell: Is Architectural Drawing an Art or a Science?

4.50-5.40

**Niall Hobhouse, William Whitaker, Olivia Horsfall Turner, Alba di Lieto
& Nicholas Olsberg**

Panel Discussion

5.40-6.00

New Beginnings

Paul Emmons

11 Frascati Symposia

Book Launch: Ceilings and Dreams: The Architecture of Levity
Edited by Emmons, Goffi, La Coe (Routledge, 2019)

Lisa Landrum & Sam Ridgway

Frascati Symposium V

*The Secret Lives of Architectural Drawings and Models:
From Translating to Archiving, to Collecting and Displaying*

Department of Architecture and Landscape, Kingston School of Art (KSA) June 27-29 2019
Kingston University - Knights Park Campus - Grange Road - Kingston upon Thames - KT1 2QJ

June 27 2019

9.15-9.45

Co-Convenors opening remarks

Mary Vaughan Johnson

Head of the School of Architecture and Landscape | Associate Professor | Kingston School of Art | London | UK

Federica Goffi

PhD | Architect (Italy) | Associate Professor | Co-Chair PhD Program | ASAU | Carleton University | Ottawa | Canada

9.45-1.00

Drawing Sites and Sites of Knowledge Construction:

The Drawing, The Office, The Laboratory, The Construction Site

9.45-10.20

Plenary Session | Invited Speaker **Alba Di Lieto**

Architect | Curator | Castelvecchio Museum | Carlo Scarpa Archives | Verona | Italy

Introduction **Federica Goffi**

This presentation delves into the history of the *Carlo Scarpa Drawing Collection* at the Castelvecchio Museum, Verona, Italy, since its beginning with the acquisition by Licisco Magagnato, director of the museum from 1956-1986, of the renovation drawings, directly from the architect around 1975. Since then, a long journey has been made by the drawings in this collection. The uniqueness of the Verona archive consists of the mutual correspondence between container and content. The collection as of today counts over six-hundred drawings that have been catalogued, photographed in high resolution, restored and exhibited. Since 2004 a twin digital archive was introduced. At this time the archive is both physically located in the Castelvecchio Museum and ubiquitous in nature. The presence of the drawings in the South-East tower facilitates their ongoing study and consultation in support of both conservation works and new design, thus developing a dialogic relationship amongst authors in the life of a museum in the making. The online catalogue conversely allows scholars to consult the collection anywhere and at any time. Alba Di Lieto edited a general catalogue: *I Disegni di Carlo Scarpa per Castelvecchio*, published in 2006 by Marsilio, Venice. The seminality of the drawings was extended by travelling near and far, through exhibitions realized both inside and outside Castelvecchio.

Alba Di Lieto is the executive architect in charge of the city museums in Verona, Italy. She is the curator of the Carlo Scarpa Archive, as well as the restoration and maintenance of Scarpa's work at the Museo di Castelvecchio, where she is responsible for the exhibit-design work. She curated the exhibition *Carlo Scarpa and Castelvecchio* and collaborated on the first North American exhibition of Scarpa's work at the *Centre Canadien d'Architecture and Carlo Scarpa, Mostre e Musei 1944/1976 Case e Paesaggi 1972/1978* staged in Verona and Vicenza. In 2004 she co-organized the website www.archiviocarloscarpa.it. She edited relevant publications regarding Carlo Scarpa. She is Visiting Professor in the Politecnico di Milano - Polo di Mantova.

alba.di-lieto@comune.verona.it

Moderator **Federica Goffi**

10.25-10.40

Carolina Dayer

PhD | Assistant Professor | Aarhus School of Architecture | Denmark

Domestic Imagination: The Foundational Workspace of Carlo Scarpa

The smell of coffee announces the beginning of another workday. Accompanied by homemade bread and aged cheese, Carlo Scarpa and his assistants enjoy the distinctive flavors of well-made goods while chatting and cruising through some books from *il Professore's* library.¹ After finishing breakfast, at around 11.00 o'clock in the morning, the small working crew gathers at the home-studio located on Rio Marin in Venice. Once at the drawing table and usually with an open window, Scarpa makes a line with his pencil to test the air humidity and judge whether it would be a good day to stay in the office, or to rather visit the construction site of one of the on-going projects. Often, Scarpa would rely on his pencil to make such decision, expressing that "if this tool does not tell us where to go, we should abandon the field!"² Once they decide on the workday routine, they all begin their tasks. However, the phone rings, more conversation occurs, and the clock has now marked 2.00 o'clock in the afternoon. Delicious food smells from Nini's cooking begin to awake Scarpa and his assistant's appetites. It is now lunchtime. During days when Scarpa's wife does not feel like cooking, they all walk to a nearby casual restaurant. After a long lunch, Scarpa usually decides to take a short nap. At around 5.00 o'clock in the afternoon, work continues until 9.00 in the night, when smells of a yet another delicious meal await the diners upstairs. According to Guido Pietropoli who worked with Scarpa for many years, the time after dinner was the most productive time because the phone had ceased ringing, there were no more meals in the way, and perhaps because the day had been filled with conversations, flavors, images, and anecdotes. Until 1:00 o'clock in the morning, the team devotes itself to the construction of multiple architectural drawings. Luciano Gemin, another former assistant, states that for the architect: "working was a mode of living."³ [3] If as Gaston Bachelard claims, the house is one's "corner of the world," the place where all memories and material reveries are hosted and from which they all emerge,⁴ the deliberate close communication between Scarpa's house and workspace situate the domestic as constitutive in the production of architecture. From the design of furniture, water closets and door handles, to the design of houses, this paper unfolds details of the architect's workspace collected through oral history and archival research, and explores theoretically the role of homely everyday life events as foundational for the architect's imagination.

Carolina Dayer, PhD and Architect, is Assistant Professor in Architecture at Aarhus School of Architecture in Denmark and Design Associate Editor of the Journal of Architectural Education (JAE). Her research, teaching, and original work centers on theoretical and practical demonstrations in the fields of representation, material culture and habitation. She has published and lectured internationally, and organized symposia on matters of the imagination and drawing practices. Her co-edited books *Confabulations: Storytelling in Architecture* (Routledge, 2016) and *Activism in Architecture: Bright Dreams of Passive Energy Design* (Routledge, 2018) expose the wide range of her research and interests. Her personal drawings and pedagogical work have been exhibited in Argentina, United States and Denmark.

cd@aarch.dk

10.40-10.55

Sam Ridgway

PhD | Architect | Associate Professor | School of Architecture and Built Environment | The University of Adelaide | South Australia

Drawing in a Theater of Architecture

In troubled times, it may be helpful to conceive of the very different but indelibly interconnected sites of the architectural office, lab, construction site and archive, and including the architecture school, as constituting a theater of architectural production. Within each site there is a *Magister Ludi*: architect, researcher, builder, archivist and professor. This is more than a series of spaces for discipline-based performances, although it should be understood to embody a performative function, including an acknowledgement of its ancient origins. This suite of labyrinthine and interconnected sites for drawing, knowledge construction and building, constitute a sphere or a theater of engagement. Within and between all of these sites, drawings and models, now primarily digital, are the paramount mode of imagining, creating, communicating, reflecting on and guiding the construction of buildings, cities and landscapes. In this ubiquitous digital age, the secret lives, significance, poetic human qualities and technological complexity of architectural drawings are rapidly disappearing. Design drawings are required to be unimaginatively photorealistic, and construction documents to accurately describe the building in minute detail using sophisticated documentation software.

¹ Interview to Guido Pietropoli by author, April 2015.

² Ibid.

³ Sandro Giordano. *Il Mestiere di Carlo Scarpa: Collaboratori, Artigiani e Committenti / Relatori*. F. Dal Co, G. Mazzariol; Doctorate Thesis Interview to Luciano Gemin. Translation by author. (IUAV: Istituto Universitario di Architettura di Venezia, 1983/1984), 50.

⁴ Gaston Bachelard, *The Poetics of Space* (Boston: Beacon Press, 1994), 4.

To engender change, could the architectural office be (re)conceived as a theater of memory, imagination and production, where buildings are translated into drawings and models through a process of demonstration? Would these representations of buildings, and consequently the constructed buildings themselves, be more likely to embody architectural knowledge and be imbued with meaningful even symbolic content reflecting the knowledge and memories collected in the office-theater? Could these drawings channel the theater's revelatory and creative power and (re)connect architectural drawing and model-making to imaginative and ethical theoretical practices?

The drawings, design practices and buildings of Carlo Scarpa exemplify this mode of making architecture. Marco Frascari explains that Carlo Scarpa's museum designs are analogous to a theater of memory in which human artifacts are displayed and arranged spatially in a building in order to reveal and promote unusual associations and unions to the museum visitor; a means of stimulating memory, creativity and imagination. Frascari and others characterize this metonymical collision between artifacts, and multiple encounters with the same artifact viewed from different positions while moving through the building, as surreal. Dream and reality become unified and a firm distinction between the concrete and the abstract dissolves. Manfredo Tafuri, commenting on the position of the Cangrande sculpture at Castelvecchio and other pieces installed by Scarpa in his museum projects, writes that there is "undeniably something 'surreal'"⁵ about their position and the multiple ways they are encountered on a museum visit, "they seem "liberated from traditional bonds, set free for new interpretations, liberated as problematic images stimulating us to wonder about their meaning."⁶ Frascari's texts give insights into how these remarkable buildings and the displays of artifacts they contain were created. He writes that Scarpa's museography "becomes a science of possible solutions to the different kinds of interpretation and time frameworks established by the collective memory in the artifacts preserved in a museum."⁷ Scarpa created an architectural memory theater in which to draw a theater of the muses, a museum.

Sam Ridgway is an architect and associate professor in the School of Architecture and Built Environment at the University of Adelaide. He teaches theorized and historically contextualized architectural design studios and architectural construction. He publishes in the areas of construction and design. His recent book *Architectural Projects of Marco Frascari: The Pleasure of a Demonstration*, explores the complex relationship between the texts, drawings and buildings of the remarkable architectural teacher and architect Marco Frascari.

sam.ridgway@adelaide.edu.au

10.55-11.10

Tracey Eve Winton

PhD | Architect | Associate Professor | School of Architecture | University of Waterloo | Canada | Research Creation Scholar SSHRC

Drawing Out Hidden Depths: Tracing A Path Through the Castelvecchio Courtyard, Verona

"Almost every artist has his own peculiarities, which escape him without his being aware of it." — Giovanni Morelli
"A Castelvecchio tutto era falso..." — Carlo Scarpa

At Verona's Castelvecchio Museum, Carlo Scarpa drew the architecture he imagined in a layered, fragmentary idiom more resembling contemporary art than contract documents. Although he drew over measured prints, his drawings (archived on site) reveal traces of his working process, and incorporate time and movement. How Scarpa drew, outside of conventions, both reflects his creative position with respect to knowledge-construction and discloses his reasoning. His drawings offer clues to specific narratives which he embedded in the architecture, and their communicative meanings. The traces of the author's hand matters to me, and I examine these 'marks of the maker' in certain of Scarpa's drawings in order to reveal stories about process that in technologically produced drawings would not be visible. Giovanni Morelli (1816-1891) was a physician born in Verona. Since he diagnosed patients by their bodily symptoms, he paid careful attention to trivial features. The doctor noticed that painters rendered particular details like ears, noses or hands by a habitual practice of drawing, thus un(self)conscious and idiosyncratic rather than being subject to deliberate stylistic control. Dramatizing his theory in a narrative, dialogue form, Morelli noted that minor details in artworks can betray authorship, allowing the observer to distinguish original works from fakes. In this way he imported into iconography the critical, linguistic character of philology, to speak not only about an artistic element's imagery and content, but also the manner in which the artist characteristically executed that element.

Considering architectural practice through an analogy to art, the discipline's professional logic of controlling the future appearance of a building also governs the conscious imposition of design, whereas in traditionally non-self-expressive domains like bricolage, design-build, and the handyman who performs repairs, allows for a different sort of character to emerge, one that suppresses individual expression, and instead channels and discloses cultural norms, the status quo, local resources and practices — even Zeitgeist. Details can be exotic for purposes of distanciation and vividness, and also conventional to communicate 'under the radar' in a kind of lingua franca. In the postwar era in Italy and USA, artists like Jackson Pollock innovated non-mimetic practices that provided the work a 'space' where which chaos or entropy might enter and balance its imposed formal aspects. This strategy downplayed a work's object-quality in favor of its process. An artwork now consisted of an artist's activity on a material site, and communicated its meaning by traces in the present which were left

⁵ Marco Frascari, "A Heroic and Admirable Machine: The Theater of the Architecture of Carlo Scarpa, *Architetto Veneto*," *Poetics Today* 10:1 (Spring 1989): 113.

⁶ Ibid.

⁷ Ibid.

by some event or historical act. By analogy, at another scale entirely, Scarpa concerned himself with making palpable on site the intangible lives of Verona's historic inhabitants.

The 'hermeneutic circle' describes reading a textual object by dialectically integrating overall form and details. Scarpa's renovation uses techniques and strategies that integrate highly expressive design elements with details that disclose another, subterranean order. Some of his drawings for Castelvecchio bring these conflicting concerns fruitfully to the surface. My discussion concerns the representational implications of specific drawings Scarpa made for (and on) this site. In drawing 00152 showing the exterior of the *sacellum*, Scarpa reveals his process of tessellation to effect a distributive field condition of color and texture in the stone cladding that recollects aspects of Pollock's work. In drawing 31610, a rendered plan of the courtyard garden, the application and depth of color to key elements allows us to read the narrative sequence of the intended visitors' path, to reveal the significance of the twin hedges, which divide the north and south areas like a horizon, as a clue to the greater meaning of the garden space, and further, to observe some tiny, practically invisible inclusions penciled onto the plan, that by their presence alone signify their key role in the narrative

Tracey Eve Winton is a SSHRC Research-Creation scholar and a professor of Architecture at the University of Waterloo. She has a Ph.D. in the History and Philosophy of Architecture, from Cambridge University, where Dalibor Vesely supervised her dissertation on the Hypnerotomachia Poliphili, and M.Arch from McGill University in the History and Theory of Architecture, with Alberto Pérez-Gómez. Her research interests include urban morphology, sacred sites of architecture, ritual and narrative structure, representation, architectural language, modern art, photography, and materiality. She is working on a book on modern architectural language and discourse in Carlo Scarpa's Castelvecchio Museum in Verona.

traceywinton@me.com

11.10-11.25

George Dodds

PhD | Alvin and Sally Beaman Professor of Architecture | University of Tennessee (UTK) | USA

Depict | Demonstrate | Disclose: Drawing 31615

Unlike paintings, sculptures, and decorative arts, which are accessioned in institutional archives, architectural sketches, photographs (and in some cases, drawings and entire original portfolios) may not. They can be the flotsam and jetsam of an archival *terra incognita*. At MoMA in New York or at the well-organized Centro Carlo Scarpa at Treviso – a place dedicated to preserving Scarpa's architectural legacy – I've encountered uncatalogued, misattributed (or misfiled) drawings, sometimes absent identifying nomenclature on virtual scraps of paper, or tattooed with boot prints.

Family-owned archives present their own unique challenges. As we spoke in the apartment Carlo Scarpa shared with his wife Nini at the Villa Palazetto in Monselice, longtime client and friend, Aldo Businaro (who was developing his own Scarpa archive at the time) absent-mindedly opened a bedside nightstand drawer and pulled out A4 sheets covered with Scarpa sketches – apparently heretofore unknown to Businaro. Collecting is one thing; keeping track of things is quite another. At the William Lescaze archive at Syracuse University, unable to locate a critical Lescaze drawing, the archivist discovered in her notes that Peter Eisenman apparently still had it, a decade or more after the Urban Institute's exhibition and the institute itself had closed its doors.

Access to collections is another matter.

When I began researching landscape and garden in Carlo Scarpa's *oeuvre*, I had entrée to less than 4% of his original drawings—one of several reasons my dissertation advisor at the time, Marco Frascari, was wary of my taking on the topic. For 25 years following Scarpa's death, the main cache was stored in the professional office of Tobia and his then partner/wife Afra Scarpa in Montebelluna, which presented Tobia with birthright and burden. Owing in part by the unenviable shadow cast by the father on the work of the son, and the impossibility of caring for and keeping track of tens of thousands of graphic documents, only a handful of former associates and academics gained admittance. These are the more than 25,000 graphic documents that since 2006, constitute the bulk of the collection at the Archivio di Stato di Treviso and at MAXXI in Rome. Until then, however, and certainly while writing my dissertation, I was limited to fewer than 1,000, preserved in the Castelvecchio archives at Verona, the Fondazione Querini-Stampalia at Venice, and the private collections of Guido Pietropoli, Arrigo Rudi, Aldo Businaro, and a few other former Scarpa associates.

My first research visit to the Museo di Castelvecchio archive would have been disastrous were I searching for Scarpa's exuberant "factures," as Frascari refers to such things in his *Eleven Exercises* (Routledge 2011). In this instance Marco's factures include Scarpa's famous drawings of the design of Cangrande's new setting, and his infamous overly elaborate details. On this day, most of these canonical and graphically attractive drawings were out for cleaning in preparation for the 1999 exhibition at the CCA in Montreal. Fortunately, my interest lay in the less attractive flotsam and jetsam.

Which brings me to my final dilemma; what do you do when you get there?

When investigating a heretofore unknown genre, one confronts an inevitable dilemma; it requires a good bit of just looking around at a great many projects rather than homing in on one or two – a notion anathema to archivists. Yet, it was imperative that I did just that. I had come to the Castelvecchio, after all, to research the garden that the museum director who had hired and worked with Scarpa, Licisco Magagnato, had insisted in his essay in the *Opera completa*, was not a garden at all.

Amidst the less photogenic as-yet-unidentified drawings in the Castelveccchio's relatively new archive the helpful archivist Alba Di Lieto—being an architect first and an archivist second—was open-minded to my flipping through documents, during which, I came across a rough sketch that the patient Di Lieto had considered quite rightly of little graphic interest. Now catalogued as drawing 31615, this raw and rough fracture discloses nothing less than the structured experience of the garden and its integral relation to the museum. It demarcates a key position in one's movement through the garden-as-*cour d'honneur*, that begins a highly structured path throughout the Castelveccchio that is at once, *promenade architecturale* and *passeggiata del paesaggio*.

George Dodds has taught at several universities throughout the United States, and practiced in Detroit, Washington D.C., and Philadelphia. While earning his doctorate at the University of Pennsylvania, he was a fellow at Harvard University's Dumbarton Oaks in Washington. He joined the University of Tennessee's (UTK) School of Architecture in 2000. He has published *Building Desire: On the Barcelona Pavilion and Body and Building: Essays on the Changing Relation of Body and Architecture* (with Bob Tavernor), along with dozens of articles. The Executive Editor of the *Journal of Architectural Education* (2006-2010), he has been the Clemson Mickel Professor of Architecture, the UTK Cox Professor, and is currently the UTK's Alvin and Sally Beaman Professor of Architecture and a member of the ACSA's College of Distinguished Professors.

gdodds@utk.edu

11.45-12.00 Break

Session 1 (part b) *Drawing Sites / Sites of Knowledge Construction*

Moderator **Jonathan Foote**

12.00-12.15

Claudio Sgarbi

Architect (Italy) | PhD | Adjunct Professor | Azrieli School of Architecture and Urbanism | Carleton University, ASAU | Canada
Visiting Associate Professor | Lebanese American University | Lebanon

The Fabbrica and the Mise en a-BIM. Where and What are we Trying to Hide?

To build implies the occultation of something. Traditionally something must be "buried" inside the building. Obviously to build also means to make something evident, available to inspection; but that which is inevitably occulted was already waiting there. Where and what are we trying to hide? I will present two cases of occultation: the *Fabbricaria* and BIM. The *Fabbricaria* is a "room" with an ancient tradition that is still operative today in the form of the builder's office on the construction site: a place where you can keep everything that is relevant for the construction, while the construction is ongoing. No matter how carefully you intend to preserve something, the risk it runs is always that of vanishing.

There is hidden anxiety in the construction of something, and this hidden anxiety must be occulted. Archaically to keep this hidden anxiety occulted the architect had to be killed at the end. All the documents that might survive after the death of the architect are the proofs of the architect's culpability. The forgiveness after a building is built is postponed into infinity. The end is postponed indefinitely like in *The Thousand and One Night*. I will present two cases of *Fabbricaria*. One is the historical *Fabbricaria* of San Petronio in Bologna, and the other is a case of a humble barrack on a construction site.

BIM is now one of the most top-rated digital "tools." I am interested in its capacity to store a potentially infinite amount of data – big data – concerning the building. This is an interesting way to occult: by applying sensors and digital surveying systems to anything, you can know anything in real time and store anything concerning anything in a mass of data that is bigger than the real (*mise en abyme*). Being always more than anything you might be interested to know about anything, the BIM is the fulfillment of the project of the proportion between the microcosm and macrocosm. Like exposing his own beating heart to the dying victim of a sacrifice, BIM disorients whoever wants to know. I will present two cases of BIM's application: one concerning a public building and the other relating to a project of "diffused" BIM - Building Identification (Identity Card), as suggested nowadays in Europe, for everybody who wants to know the documents and all the information that are relevant for the building they buy, or live in. That which is occulted inside, or outside the building – more or less carefully preserved or contained, often inexorably dispersed, available on condition, or hidden behind the inscrutable storage of big data – is its representation; and its honesty depends on our willingness to know without being obsessed by the insistence to deceit.

Claudio Sgarbi is an architect (IUAV), MS, PhD (University of Pennsylvania), Adjunct Research Professor (ASAU, Carleton University) practicing in Italy and lecturing in several universities in Canada, Europe and the United States. His major fields of theoretical research and his publications concern the image, role and gender of the architect, the meaning of limits in the construction of space, the building technologies and the relevance of architectural history and theory in our contemporary debate. He published several articles and a book: *Vitruvio Ferrarese. "De architectura": la Prima Versione Illustrata*, (Franco Cosimo Panini Editore, 2004). He is working on different projects and a publication with the title *Misconceptions. The Infertile Belly of the Architect*.

cldsgbr@gmail.com

12.15-12.30

Simona Valeriani

PhD | Head of Early Modern Studies | Victoria & Albert Museum | V&A/RCA History of Design Program

Life and Afterlife of a Design Process: Models and Drawings of the Royal Albert Hall

When Francis Fowke died in 1865, the Royal Albert Hall (at the time still the 'Central Hall of Arts and Sciences') was still little more than an idea; its only embodiment was a wooden model of a proposed interior. Born out of the enthusiasm following the Great Exhibition of 1851, the plan of creating a space where scientific, literary and artistic societies could meet, discuss and exhibit their work to the public was very much fostered by the Prince Consort. It was a key element of the wider scheme for the erection of a new center for the Arts and the Sciences at South Kensington. The scale of the project in its entirety, financial limitations, the precedence given to the pressing problem of housing growing collections, as well as Prince Albert's death, conjured against the development of the Hall for many years. The production and presentation to the Queen of the aforementioned model by Fowke, however, seems to have helped move matters forward: The patronage of the Prince of Wales could be obtained, and serious, pragmatic conversations started, which led to the Hall's construction. The building was intended to embody the coming together of Arts and Sciences, utilizing innovative materials and building practices. As archival material testifies, the process of designing the building was characterized by an interplay between drawing and 3D modeling in a variety of scales and was based on the principle of experimentation. In the words of Mayor-General Henry Young Derracott Scott, who became the Hall's designer after Fowke:

"The director of New Buildings prepares experimental plans and sections [...], Block models are then made, but without inserting architectural details. Several models are generally made and experiments tried, when the block model has been settled the structural plans with sketches are finally made [...]"

A wealth of models were indeed produced, six of which survive 'in the flesh' while others are only known from contemporary photographs. Others still, including a proposed full scale one, only figure in written accounts. The paper will explore the genesis and use of such models, which inhabited different contexts: some lived their life on the architect's or on the commissioner's desk, where they could be inspected at any time by potential subscribers, others were taken to meetings, or to the building site to be discussed. Moreover, the genesis of the idea -very much connected to the engineering background of the designers- that models and drawings were 'experiments', will be discussed. Finally, the paper will consider the afterlife of the models. It will present an experimental work currently in progress as a case study within the activities of an international Research Network on architectural models: to make the Albert Hall's models, drawings and photographs, at the moment stored away in different institutional archives, easily accessible to the public in a cohesive way.

After graduating in Architecture (Genoa), Dr. **Simona Valeriani** earned a PhD in History of Art, Building Archaeology, Conservation (Berlin). Her research is concerned with 15th-19th centuries architecture, focusing on the role played by artifacts and physical spaces in the creation of knowledge; within this, a long-term interest is on the use of models in the design process. She is currently Senior Tutor in the V&A/RCA History of Design Postgraduate Program and Head of Early Modern Studies. PI of the International Research Network 'Architectural Models in Context: Creativity, Skill and Spectacle' (AHRG); Leverhulme Trust Research Fellow (2018-20), working on the project 'Designing the Future: Innovation and the Construction of the Royal Albert Hall.'

s.valeriani@vam.ac.uk

12.30-12.45

Berrin Terim

Lecturer | Clemson University | Clemson, SC | USA

The 'Body' and the 'Soul' of Architectural Drawings and Models:

Filarete's Anthropomorphism on Representation

During the early modern period, as treatises on architecture had redefined and codified the status of the architect in relation to building practice, the subject of drawing and model making had emerged as an integral discussion topic. The particular relation of these material artifacts to the building itself had actually been interpreted in quite different ways, rather than as a 'translation' — as defined by Robin Evans' address of the 'gap' particular to architectural practice.⁸ While our modern attitude sees this 'gap' as an obstacle in controlling the building practice, the Renaissance authors had established different approaches with allegorical meanings that maintained it as room for imagination.

In that regard, the fifteenth century treatise by the Florentine architect, Filarete, has a significant value. In his narrative composition of *Libro Architetonico*, Filarete presents his anthropomorphic theory on architecture as an integrated discourse on both *disegno* (with its double meaning of both design and drawing, and model making) and building. In Filarete's interpretation, the 'body' metaphor not only signifies physical attributions of a building, but also responds to a temporal dimension that corresponds to a life-span of a man, with explicit references to the material nature of the built product. Within this, his theory of architectural representation constitutes the first stage of building practice, which implicitly suggests being studied in anthropomorphic terms as well. Demonstrated based on a pregnancy metaphor, Filarete defines three distinct moments for the

⁸ Robin Evans, "Translations from Drawing to Buildings," in *AA Files* 12 (Summer 1986), 3-18.

design practice; the invisible part, which belongs to the womb, to be performed in mental and physical images, the visible part, which is referred as the baby, delivered in the form of a scaled relief drawing, or wooden model, and the growth of the baby with the milk of the wet-nurse (which Filarete specifies is the mother - architect- taking that role in the ideal scenario of the completion of the building).⁹ This famous metaphor of Filarete, although frequently mentioned, has never been taken as a clue for the emerging authority of the architects on the practice of representation during the Renaissance, and their distinct approaches to these artifacts.

While Vincenzo Scamozzi, a close reader of Filarete, would define the drawings and models as “inanimate bodies” that asks to be given soul and speech through the voice of the Architect,¹⁰ Filarete would claim the model, or the drawing, as the baby building, needs the mother’s nurturing to grow into its built form. The Renaissance interpretation on the wet-nurse, reminiscent of ancient traditions, would consider a direct effect of the wet-nurse’s character affecting the baby’s soul, which would be transmitted through the milk. Such interpretations on representation artifacts do suggest a particular approach that does not see the gap between the two as a problem of translation, but rather as a “growth” that is sustained with a sort of ‘anima.’

In this paper, I will trace these curious expressions on animistic and in-animistic nature of architectural drawings and models, to reveal the “secret lives” they may have believed to have during the Renaissance. I will primarily focus on Filarete’s narrative as the ‘site for knowledge construction’, while zooming into artist’s workshop, building site, and the court where the production and interpretation of design artifacts take place, and the margins of the manuscript where they are displayed.

Berrin Terim is a full time lecturer at Clemson University and teaches history, theory and design. She has earned her masters from Penn State University, and she is currently enrolled in the PhD program at Virginia Tech Washington Alexandria Architecture Center. Berrin’s research in architecture focuses on representation. Her dissertation work is focusing on anthropomorphism in architectural design, through the role of metonymy. Her research is exploring this framework through the narrative of the fifteenth century Florentine architect Filarete’s treatise on architecture. Berrin presented her work in international conferences.

bterim@clemson.edu

Session 2 (part a) *Sites of Knowledge Construction / Drawing Sites*

Moderator **Lisa Landrum**

10.25-10.40

Eleanor Suess

Associate Professor | Department of Architecture and Landscape | Kingston School of Art | London | UK

Analogous Divinations: Projective Worldmaking Through the Artefacts of Architectural Representation

This presentation uses Marco Frascari and William Braham’s *On the Mantic Paradigm in Architecture* (1994) as a key text from which to draw out a discussion of the constructive projection of the unbuilt building through architectural representation and to develop further Frascari’s ideas around the analogous relationship between drawing and building.

Frascari (2007, 4), Sonit Bafna (2008) and Kester Rattenbury (2002) each independently identify the perceptual suspension of disbelief that architects experience when proposing works of architecture through their representational artifacts. For architects, treating the prospective buildings in their drawings, models and words as if they were real requires a form of worldmaking (Frascari 2007, 4), (Goodman 1978, 6), whereby the prophecy (Frascari and Braham 1994, 263) of the drawing acts as a form of memory of that as yet, non-existent building. For Frascari, following James Frazer, this divinatory act is a form of “magic,” and like magic utilizes analogical processes of metaphor and metonymy in the use of drawing and making tools, and the respective marks and edifices which are made through them (Frascari and Braham 1994, 264).

This presentation will explore further notions of an analogical relationship between architecture’s representational artifacts (drawings, models, and more) and their building referent. While Frascari’s projective construction links the architect’s drawing to their (future) materially manifest building, the very act of perceptual construction that takes place through the reading of architectural representations introduces a third element into the drawing/building analogical relationship – that of the unbuilt building. Drawing upon theories of analogy from several fields, including Frascari’s substantial work around analogy, I will emphasize that an analogical relationship between architectural representation and building allows the opportunity for each to be independent and autonomous, and for the two to have a non-hierarchical relationship. The fundamental difference between the building and its representation is one to be acknowledged and celebrated, and, according to Saussure “the play of difference was the functional condition, the condition of possibility, for every sign” (Derrida 1973, 281).

⁹ Filarete, *Trattato di Architettura*, eds. Anna Maria Finoli and Liliana Grassi, 2 vols. (Milan: Il Polifilo, 1972), 39- 41.

¹⁰ Vincenzo Scamozzi, *Dell’Idea Della Architettura Universale*, I. XV. 52.

Philosopher and semiotician C. S. Peirce identifies that “the diagrammatic sign or icon [...] exhibits a similarity or analogy to the subject of discourse” (Dipert 1996, 388), whilst cognitive scientist Douglas Hofstadter (2001, 500) argues that analogy is at the core of cognition. Philosopher and logician Paul Bartha asserts that “analogies are widely recognized as playing an important heuristic role, as aids to discovery” (Bartha 2013), and art historian Barbara Maria Stafford posits that “analogy is the vision of ordered relationships articulated as similarity-indifference” (Stafford 2001, 9). In his triadic system of signs Peirce adds the “interpretant,” or critical observer, to Saussure’s dualist notions of “sign” and “object,” and social anthropologist Alfred Gell adds the fourth component of the “artist,” the author of the representational artifact (Gell 1998, 29). These active agents perceptually construct architecture through the making and reading of representational artifacts.

REFERENCES

- Bafna, Sonit. 2008. "How Architectural Drawings Work — and what that implies for the role of representation in architecture." *The Journal of Architecture* 13 (9), 535-564.
- Bartha, Paul. 2013. *Analogy and Analogical Reasoning*. In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. <http://plato.stanford.edu/archives/fall2013/entries/reasoning-analogy/>.
- Derrida, Jacques. 1973. "Différance." In *Speech and Phenomena*, edited by Jacques Derrida and David B. Allison, 278-301. Evanston: Northwestern University Press.
- Dipert, Randall R. 1996. "Reflections on Iconicity, Representation, and Resemblance: Peirce's Theory of Signs, Goodman on Resemblance, and Modern Philosophies of Language and Mind." *Synthese* 106 (3):373-397.
- Frasconi, Marco. 2007. "Models and Drawings - The Invisible Nature of Architecture." In *From Models to Drawings: Imagination and Representation in Architecture*, edited by Marco Frascari, Jonathan Hale and Bradley Starkey, 1-7. London: Routledge.
- Frasconi, Marco, and William Brahm. 1994. "On the Mantic Paradigm in Architecture: The projective evocation of future edifices." Proceedings of the Association of Collegiate Schools of Architecture Annual Meeting, 261-267.
- Garfield, Jay L. 1997. "Mentalese not spoken here: Computation, cognition and causation." *Philosophical Psychology* 10 (4), 413-435. doi: 10.1080/09515089708573231.
- Gell, Alfred. 1998. *Art and Agency: An Anthropological Theory*. Oxford: Clarendon.
- Goodman, Nelson. 1978. *Ways of Worldmaking*. Hassocks: Harvester Press.
- Hofstadter, Douglas R. 2001. "Epilogue: Analogy as the Core of Cognition." In *The Analogical Mind: Perspectives from Cognitive Science*, edited by Dedre Gentner, Keith J. Holyoak and Boicho N. Kokinov, 499-538. Cambridge, Mass.; London: MIT Press.
- Rattenbury, Kester. 2002. "Introduction." In *This is Not Architecture: Media Constructions*, edited by Kester Rattenbury, xxi-xxiv. London: Routledge.
- Stafford, Barbara Maria. 2001. *Visual Analogy: Consciousness as the Art of Connecting*. Cambridge, Mass.: MIT Press.

Eleanor Suess is an architect, artist, and educator, with qualifications in Fine Art and Architecture from Australia and the UK. She is an Associate Professor at Kingston School of Art and was previously the Head of Kingston’s Architecture Department. Eleanor’s work lies in the intersection between architecture and art practice and has been exhibited and published internationally. She has two linked strands of practice based research: artists’ film making as a tool for producing time based architectural drawings, and cyanotype printing to explore light and shadow within architectural space. Eleanor’s published research focuses on artists’ film as spatiotemporal architectural drawing, and she is currently undertaking an AHRC funded PhD at Central St Martins, London.

E.Suess@kingston.ac.uk

10.40-10.55

Gevork Hartoonian

PhD | Professor of the History and Theory of Architecture | Faculty of Arts and Design | University of Canberra | Australia

Bernard Tschumi: Filmic Image Drawn

Drawing is the medium offering the architect a ground to work towards the realization of architecture in the absence of the building —the thing. The fact that a hand drawing unfolds itself on a two-dimensional surface is nothing but a default process of Durer’s window that mediates between the object and the architect. The geometrization of the scribbling technique of hand into digital image should not be interpreted one-sidedly. Starting with Bernard Tschumi’s juxtaposition of a freehand sketch with the digital image of the *Museu de Arte Contemporânea*, 2011, this essay discusses the historicity of drawing. It establishes an indexical rapport between horizontality and verticality to highlight architecture’s contrast with the pictorial realm, whether it is depicted by hand, or produced by technical means. Tschumi’s drawing is also suggestive of the paradox involved in the position of the body and drawing. It demonstrates the reversal in the physical position of the body brought about by techniques of digital reproducibility. This reversal alludes to Tschumi’s theorization of architecture in terms of space and event anticipated in *The Manhattan Transcripts* (1981) where a set of freehand drawings evoke a filmic mood with the projected image paralleling the spectator’s seated position. The essay argues that the theatricality permeating contemporary architecture is in part due to the shift from horizontality to the painterly and that the emergence of this phenomenon is not merely a technical issue, but rather alludes to architecture’s dialogical rapport with painting at work since the Renaissance.

The investigative and speculative aspect of **Gevork Hartoonian’s** research in architectural history/theory draws from Walter Benjamin’s drive to save the tradition from its tendency to conform. Central to his critical investigation of architectural history is the modalities of the crisis of the object and its implications for the tectonics. Starting from the historicity of the project of Modernity, Hartoonian’s research also pursues the impact of modernization and globalization for the architecture of countries such as Australia, China. Hartoonian teaches architectural history and theory and design studio in the Design Discipline of the Faculty of Arts and Design and supervises research students. He has taught at Columbia University and other American schools of architecture. He was the 2013 invited Professor of Architecture at Tongji University, Shanghai. Books include; *Architecture and Spectacle: a critique* (2012), *The Mental Life of the Architectural Historian* (2013/11), *Walter Benjamin and Architecture*, ed. (2010), and *Ontology of Construction* (1994), a Korean edition released in 2010. His research is primarily focused on architectural history and contemporary theories of architecture. Hartoonian is a prolific writer. In addition to journal essays and conference proceedings, he has contributed scholarly chapter essays to a number of books including, *Against the Post-Political: Reclaiming the Critical Project in Architecture* Routledge, 2014; *Architecture Postmortem*, Ashgate, 2013; *The Political Unconscious of Architecture*, Ashgate, 2012.

Gevork.Hartoonian@canberra.edu.au

10.55-11.10

Aisling O'Carroll

PhD Candidate | The Bartlett School of Architecture | University College London | UK

Drawing and Building, Landscape and Architecture: Hybrid Sites of Production

As an investigative device, drawing constituted a way of learning for French architect Eugène Viollet-le-Duc (1814–1879). As a form of art—alongside painting, architecture, and the other arts—it served as a form of expression with the capacity to transport the observer through the ideas it communicated. These ideas and the sensations they produced, however wonderful, were, as Viollet-le-Duc stated, none the less real.¹¹ Through a case study of his work on Mont Blanc, this paper will discuss the role that both drawing and architecture serve as forms of representation in Viollet-le-Duc's work, and how, together, they transform each other and serve as hybrid sites of production.

Viollet-le-Duc's study of Mont Blanc spanned almost a decade, and, as with his study of Gothic architecture, relied heavily on the use of drawing to determine the underlying order of the system. He produced hundreds of sketches of the mountain to ascertain the geoscientific laws that structured the landscape so that he could reapply their governing logic in his creations and his speculative reconstruction of the peak. In 1874, Viollet-le-Duc designed and built a house for himself in a new subdivision of Lausanne, Switzerland. The house, named La Vedette, served as a base for his Alpine expeditions. It was in the main room of this building, the Grande Salle, facing out over Lake Geneva and towards the Alps beyond, that he culminated his alpine study in an idealized geotectonic reconstruction. The landscape he constructed assimilated the relations between glaciers, peaks, forests, and time that he had studied in nature, and translated them through pigment and paint to the walls of the room in an engulfing panorama. Once installed, the panorama morphed with the architecture of the room, transforming from a flat image to produce the space of the mountain, and simultaneously transforming the space of the Grande Salle from a room within La Vedette to a belvedere in an idealized restoration. Together, the room and panorama became one hybrid, generative space, producing an idea of time that addressed the historicity of the earth and the emotional sensations of the landscape experience.

This paper will explore the relationship between building and drawing, architecture and landscape, space and knowledge, produced at La Vedette. In 1975, the home was demolished. All that remains of the room and landscape are a series of photographs, a single written description, and a few drawings. These records convey hybridity between building and drawing but lack the immersive experience of the space itself. Given the ephemeral quality of the Grande Salle at La Vedette, this paper will also touch on the use of drawing today as a way of restoring the space of the room and landscape through the author's own design work.

Aisling O'Carroll is a trained architect and landscape architect. She is currently completing her PhD in Architectural Design at The Bartlett, funded by the UCL Graduate Research Scholarship and Overseas Research scholarship. Her work addresses the relationship between history, narrative, and representation in architecture, landscape, geology and hybrids of the three—examining, in particular, critical approaches to preservation as design through each element. She has previously taught design studios at Harvard Graduate School of Design and The Bartlett School of Architecture and has practiced internationally for several years with design firms and research platforms. Her work has been funded by Harvard University, the Canada Council for the Arts, the Danish Arts Foundation, and UCL, among others. She is co-founder and co-editor in chief of *The Site Magazine*.

a.m.ocarroll@ucl.ac.uk

11.45-12.00

Break

Session 2 (part b) *Sites of Knowledge Construction I Drawing Sites*

Moderator **George Epolito**

12.00-12.15

Athanasios Geolas

PhD Candidate | Department of Architecture | Cornell University | Ithaca NY | USA

On the Archive Table: Embodiment, Objectivity, and the Construction of Historical Knowledge

"Dead things are easier to handle than live ones," wrote Robin Evans, and like the stabilized geometrical systems he described, the dead-certainty of historical knowledge derives from the empirical dissection of drawings on the archive table.¹² To name drawings "historical" or "archival" is also to render them lifeless, innocent, and easily manipulable—as if the archive were somehow outside of active political negotiation, or the documents themselves (through some unknown power) were in the past at the same moment they are also on in the historian's hands. From full-scale details to discursive annotations, architectural drawings are first a foremost a means of enacting relations of power. Far more than the translation of ideas, they are material objects that circulate among hands, desks, and buildings as they engage in complex transactions

¹¹ E. Viollet-le-Duc, 'Lecture I', in *Discourses on Architecture*, translated by B. Bucknall (London: George Allen & Unwin Ltd., 1860), I, 20.

¹² Evans, Robin, *The Projective Cast: Architecture and Its Three Geometries*, paperback edition (Cambridge, MA; London: The MIT Press, 2000), xxvii.

between professions, cultures, and institutions. They are also rhetorical objects granting authority for historical knowledge—once transformed into evidence, they legitimate the historian’s claim to an objective articulation of the past, thus solidifying active narratives with empirical certainty. Too frequently the rhetorical impact of these documents has been limited to their role in the production of architecture and the architect’s authority. Despite exciting scholarship on the architect’s embodied practices, the majority of architectural discourse remains unconcerned with the relationship between drawings and other expert bodies. Nevertheless, these inscriptions continue to affect the dynamics of their immediate social realities. What is at stake in the historian’s active engagement with these documents at the archive?

Based on a summer research residency at the Canadian Center for Architecture in Montreal, this paper focuses on the Fonds Paul Philippe Cret, a collection containing the majority of the design development drawings produced between 1907 and 1911 for the construction of the Pan American Union Building in Washington, D.C. Amidst active political relationships, I will consider these material objects in two ways. First, through their use by three architectural historians to produce knowledge in 1913, 1980, and 2011 respectively. Second, paying particular attention to my own place in the archive, I will describe and evaluate the process by which architectural-historical methods transform fourteen acid free boxes containing three hundred and two folded pieces of paper into evidence of historical fact. I argue that archive tables are no less important sites of knowledge production than the drafting table, the publication, or the computer screen. At a moment when archives are making their collections available online, it is important to remember that this too is an active choice about how we circulate and engage with architectural drawings and our discipline’s past; a decision that is no less bound up at the intersection of embodiment and objectivity in the construction of historical knowledge. Thus, this paper asks what knowledge gets to count for our considerations of architectural drawing today, and how can we be so certain.

Athanasiou Geolas investigates relationships between the bodies of architectural professionals and unwieldy institutions from the A.I.A. to the self-made man. Trained at Rhode Island School of Design, he has practiced architecture with archaeologists, academics, architects, and the city of New York. As a Ph.D. candidate in the History of Architecture at Cornell University, he asks what kinds of questions come from thinking about a professional’s conduct c.1900

ajg355@cornell.edu

12.15-12.30

Marian Macken, Sarosh Mulla & Aaron Paterson

PhD | Senior Lecturer | SoAP | Faculty of Creative Arts and Industries | University of Auckland | New Zealand

PhD | Lecturer | SoAP | Faculty of Creative Arts and Industries | University of Auckland / Pac Studio | New Zealand

Lecturer | SoAP | Faculty of Creative Arts and Industries | University of Auckland / Pac Studio | New Zealand

Being in the Drawing

The architectural office is a site of drawing: within this room, spaces are designed to be built. The drawings produced here are taken as projective; when reading a plan, one’s miniature self imagines moving through the spaces, as though “walking across the surface of the drawing.”¹³ The generative qualities of these drawings refer strongly to a future tense: the architectural drawing seems to proclaim this will be. Once a project is built, these drawings are recast: they now have a referent which can be experienced, able to be walked around and lived in at full scale. Documentation drawings – the drawings produced to get to a building – can now be read as documents of that which has been built, and is now lived in.

This shift in the role and reading of drawings that occurs once their subject matter moves from the unbuilt to the built is not apparent in architectural drawings. These drawings do not acknowledge the passage of time, of either a building’s life or the design process. Conventionally, orthographic drawings present an idealized fragment of a snapshot in time without origin, decay, palimpsest, or lived-in-ness and do not refer to their passage through time as artifacts: a plurality of temporalities is omitted.

This paper outlines an ongoing collaborative research project – titled Drawing the Room | Drawing within the Room – which addresses this aspect of architectural drawing, through working with the 1:1 scale. It couples projective documentation drawings with post factum documentation – or creative post-occupancy data using motion capture technology – of five houses by Pac Studio, New Zealand. These are exhibited in the space of the architectural office, the site of conceiving and production of both drawings and architecture. Hence, temporality is admitted to projective documentation by including the flux of inhabitation through performative drawing practices.

Using the architectural office as the space of installation and exhibition presents a practice for acknowledging and engaging with these spaces of creativity. Unlike artists’ studios – some of which may be preserved or reconstructed as studio-museums – architectural offices themselves are not historically presented as sites of creative production. Preserving intact a formerly productive architectural office – as though its inhabitants had just left the room – is not an established practice. This paper presents an alternative approach for these interior spaces, not to preserve former spaces of creativity, but to engage with those that are current and ongoing. In this research project, the office is cast as the site of the merging of designed intentions with realized outcomes – here, the architects imaginatively inhabit both the space of production and construction through the projection of full scale drawings. Hence, the office itself becomes the site of exhibition, repository and ongoing archive.

¹³ Susan Hedges, “Scale as the Representation of an Idea, the Dream of Architecture and the Unravelling of a Surface”, *Interstices Journal of Architecture and Related Arts*, 11 (2010), 73.

Dr. **Marian Macken** teaches in design and media in the School of Architecture and Planning at the University of Auckland. She trained in architecture, landscape architecture and visual art, receiving a PhD, by thesis and creative work, from the University of Sydney. Marian's research examines histories and theories of spatial representation; temporal aspects of architecture; and the book form as spatial practice. Her work has been acquired by international public collection of artists' books, including those at Tate Britain, the Victoria and Albert Museum, UK, and Canadian Centre for Architecture, and has recently published *Binding Space: The Book as Spatial Practice* (2018), as part of Routledge's Design Research in Architecture series.

m.macken@auckland.ac.nz

Aaron Paterson is a practicing architect and Lecturer at the School of Architecture and Planning, The University of Auckland. In the field of residential architecture, both multi-unit housing and single dwellings, Aaron is widely recognized in New Zealand – as well as widely published and awarded. His research is focused on non-normative architectural representation of fabrication and assemblage in practice.

aaron.paterson@auckland.ac.nz

Dr **Sarosh Mulla** is a practicing architectural designer and Lecturer at the School of Architecture and Planning, The University of Auckland. His design work has been awarded by both the New Zealand Institute of Architects and the Designers Institute of New Zealand. His doctoral research focused on the design and construction of a live project, the Longbush Ecosanctuary Welcome Shelter. Sarosh is also a founding member of design collective Oh.No.Sumo and the Auckland Crit Club.

s.mulla@auckland.ac.nz

12.30-12.45

Rebecca Williamson

PhD | Architect | Chair PhD program | Associate Professor | University of Cincinnati | USA

The Art of Building, the Chaotic Mess

“When one speaks of the art of building, the chaotic mess of clumsy debris, immense piles of shapeless materials, a dreadful noise of hammers, perilous scaffolding, a fearful grinding of machines and an army of dirty and mud covered workman – all this comes to the mind of ordinary people, the unpleasant outer cover of an art whose intriguing mysteries, noticed by few people, excite the admiration of all those who penetrate them.”¹⁴ With these words, Laugier promotes the superiority of the architectural critic's discernment over the know-how of the builder. He betrays his ignorance when he describes his famous rustic hut as made of propped-up fallen branches, covered with leaves, with no indication of how to connect them into a sturdy structure. Any child who has tried to build a fort would know that Laugier's hut would not stand up. Eisen, in his illustration for Laugier's frontispiece, draws a remedy by rooting trees for columns, nesting cross-pieces in the stumps of branches, and adding a ridge beam.

Eisen's other work included erotic illustrations for La Fontaine's fables. One shown here is reminiscent of Effie Gray's comments about another architectural critic, when she told her father that her husband, John Ruskin, had informed her “that he had imagined women were quite different than what he saw I was, and that the reason he did not make me his wife was that he was disgusted with my person that first evening.”¹⁵ Laugier himself betrays an unrealistic and turbulent emotional relationship with architecture, alternating between his desire to “penetrate her mysteries” and his revulsion with things not being as they expect them to be.

Prior books on architecture, even the text by Cordemoy on which Laugier relies, reflect a tension between ideals and experience of the act of building. This presentation will examine this tension in the use of drawings and words to depict construction in early architectural texts. Images of construction techniques in illustrated editions of Vitruvius such as Caporali, Cesariano, Martin, and Perrault will provide the visual support for a discussion of how architectural discourse can re-engage ordinary understanding and plunge back into the chaotic mess.

The proliferation of images and texts, enabled by technology and promoted by our systems of professional and academic advancement, has produced an avalanche of communication about architecture. Lost in the chatter, however, is the chance for “ordinary people” to engage that “unpleasant outer cover” that Laugier decries, but that, in itself, can be as worthy of a realm for exploration as those imagined mysteries.

Rebecca Williamson has taught architecture at the University of Cincinnati since 2006. Prior to that she taught in France for five years. A registered architect with experience in practice in Europe and the United States, she has taught studio at many levels as well as theory and history courses. Her research interests are varied. Recurrent interests include the history and theories of the city, early infrastructure, pre-modern architectural texts, and the history of architectural education. As director of the University of Cincinnati's MS and PhD Programs in Architecture since Spring 2016, she has been pleased to learn from her students about urban and architectural concerns in a range of international contexts.

willi2ra@ucmail.uc.edu

1.00 -2.00

Lunch Break

¹⁴ Laugier, Marc-Antoine, *An Essay on Architecture*, trans. Wolfgang and Annie Herman, 7.

¹⁵ Ruskin, Effie, letter to her father, in John Ruskin, Tim Hilton, 118.

2.00-5.15

*The Architect's Ethical Responsibilities:
Authorship, Ownership, Copyrights and Rights to Copy*

2.00-2.35

Plenary Session | Invited Speaker **Niall Hobhouse**
Drawing Matter Collection | Shatwell | Somerset | UK

The Collector's Ethical Responsibilities?

Introduction **Andrew Clancy**

This talk will begin with a brief survey of the collecting ethos of Drawing Matter, as it has changed in scale and focus over the last 25 years.

Addressing specifically relatively recent major acquisitions from Alvaro Siza and Superstudio, I will suggest that the *act* of collecting can offer an activist role- by turns, rewarding and uncomfortable- in defining the public legacy of individual practitioners, and in challenging the structures and the institutions of architectural history, teaching and practice.

Niall Hobhouse collects drawings by architects. He curates exhibitions, and writes about buildings, landscape and museums. He established Drawing Matter Trust to explore the role of drawing within architecture, architectural memory and exhibitions. He is formerly a Governor of the London School of Economics (and Chair, Advisory Board, Cities Programme), Trustee of the Sir John Soane's Museum and of the Canadian Centre for Architecture, Montreal.

niall@niallhobhouse.com

Moderator **Andrew Clancy**

2.40-2.55

Yvette Putra

PhD | Research Fellow & Senior Tutor | Melbourne School of Design | Faculty of Architecture, Building and Planning | University of Melbourne | Australia

Ugly Architectural Drawings: The Case of Hardy Wilson

The late twentieth and early twenty-first centuries have seen the reassessment of cultural works deemed challenging. One example from popular culture is Hergé's graphic novel *Tintin au Congo* (1930-31), which has been, in recent years, criticized for its racist depictions and occasionally banned. In other cases, difficult questions have been raised not only through revaluations of the cultural works themselves but of their authors. The film industry has been the subject of the Me Too movement while, in architecture, the Pritzker Prize-winning architect Richard Meier has been accused of sexual harassment. As architectural drawings are an increasingly critical form of cultural production, to be collected and exhibited both inside and outside architectural contexts, this paper discusses architectural drawings whose content and, occasionally, authors, are challenging.

This paper uses, as its case study, Australian William Hardy Wilson (1881-1955), whose reputation as an artist and a writer all but overshadow his reputation as an architect. Many of his writings go beyond architecture, to touch on socio-political issues and underscore his characterization as an "architectural philosopher" of his day. His responses to the perceived architectural and socio-political problems of early twentieth-century Australia include Colonial Revivalism and a kind of Arts and Crafts rejection of machine-made objects. More eccentrically, he posited a correlation between "atomic force" and the "preservation of humanity." Many of his views are laden with racial prejudice, such as his suggestion, in the early years of World War II, that a Jewish settlement be established on New Guinea. He wrote to both Australian and foreign politicians, and, in the 1930s, included Hitler and Mussolini in his correspondences, even going so far as to send them copies of his publications.

While Hardy Wilson's views are known primarily through his writings, they are also visible in his architectural drawings, which continue to be exhibited, published, and used in architectural education in Australia. In fact, the most recent large-scale exhibition of his architectural drawings was in 2016, at the National Library of Australia (NLA), Canberra. However, in light of his archaic and frankly offensive views, any criticism, or even acknowledgement, of this aspect of his career, is rare.

This paper first introduces Hardy Wilson and his ideas, before demonstrating how these ideas are seen in his architectural drawings. In doing so, this paper considers historical and current attitudes to contentious issues in Australian socio-politics, including indigeneity and immigration, and the place of these issues in Australian architecture. This paper suggests that Hardy Wilson's ideas require more contextualization to be understood. As such, any categorical criticism is to be avoided, as the difficulty of his architectural drawings is best negotiated by reckoning with the prevailing colonial view of his day. This paper concludes with recommendations for the viewing, in exhibitions, publications, and education, of architectural artifacts with similarly challenging authorship and content.

Dr. **Yvette Putra** is an architectural historian and theorist, teaching and researching at the Melbourne School of Design (MSD), Faculty of Architecture, Building and Planning, University of Melbourne. Her main areas of interest are the history and theory of architecture and urban planning, particularly of Europe and the Asia-Pacific, and she has taught extensively in these areas at both undergraduate and postgraduate levels. For her PhD thesis, she researched architectural drawing in postwar Melbourne. She studied architecture and completed a Master of Design (Heritage) at MSD. She also practiced in architectural firms in Melbourne, where she worked primarily on institutional and residential projects.

yvetteputra@gmail.com

2.55-3.10

Émélie Desrochers-Turgeon

PhD Student | Vanier Scholar | Azrieli School of Architecture and Urbanism | Carleton University | Ottawa | Canada

Breaking the Silence — Examining Sensorial Agency

Through the Drawings of Residential Schools in Canada

The Indian residential schools in Canada, which operated from 1883 until 1996, led to the removal of over 150,000 Indigenous children from their communities to attend educational institutions.¹⁶ Those institutions aimed to assimilate indigenous peoples into a settler society. The children were victims of widespread violence, abuse, and neglect by those in charge.¹⁷ While narratives of emotional and physical abuse documenting the loss of culture are present in popular and academic accounts of residential schools, discussions about how this system was designed to ensure the dispossession of Indigenous peoples from their lands is seldom explored.

¹⁶ Robyn Green, *Recovering Subjects: Investment in an Age of Reconciliation*, Dissertation, Ottawa: Carleton University, 2016, 6.

¹⁷ John Milloy, *A National Crime: The Canadian Government and the Residential School System, 1879 to 1986*, Winnipeg: University of Manitoba Press, 1999.

The recent government's apologies risk to minimize the depth and extent of the faults by delinking them from material processes and placing them into the past, failing to implicate the state.¹⁸ In other words, the acknowledgement of wrong doings fails to address the causes of their emergence in the colonial apparatuses as well as the complicity of architects.

The spaces of the residential schools—first envisioned through architectural drawings—persist into the memory of the victims. The traumatic experiences of the residential schools happened cognitively through various degrees of sensorial deprivation exacerbated by the spatial environments. Survivor accounts narrate a sensorial shock both upon their arrival at the residential school and upon their return home.¹⁹ The architectural drawings, currently archived, are disconnected from the survivor's experiences. They are engaged as objects of a distant past, decontextualized from the communities and the impact they had upon them. Archival protocols and aesthetics sanitize, through the normative codes of perception they enforce, a settler logic that further subjugates Indigenous sensory agency. On the contrary, "the agency asserted by survivors through the ways they narrated their experiences— shifting between topics, tempo, and timbres of telling—in many instances resisted the desire to consume traumatic narrative."²⁰ Alternative ways of thinking about the afterlife of the drawings in a way that doesn't harness their sensory force by placing them de facto into the past to provide a hasty sense of closure are to be considered.

Transformative readings of the architectural drawings of the residential schools—where one can reclaim sensory agency and elicit memories previously too painful to speak of through modes of telling—both affirm cultural strength and assert an affective force upon those who are present. The work of artists such as Robert Houle's drawings of the Sandy Bay residential school reclaims his memories of the residential school experience. The Cherokee artist Shan Goshorn slices archival documents and photographs into thin strips that she weaves into double-woven Cherokee baskets. Through a reclamation of sensorial agency Indigenous artists engage into decolonization of the archive, but also call into question the violence induced in/by the residential schools. When the archives engage with the cognitive memories of those spaces, they can become an agent in provoking the ethical imagination.

Educated in Fine Arts, **Émélie Desrochers-Turgeon** completed a bachelor's degree in Environmental Design at Université du Québec à Montréal and a Master's degree in Architecture at McGill University. She is a currently Vanier Scholar and a PhD student at the Azrieli School of Architecture & Urbanism, Carleton University, Ottawa. She explores issues of settler colonialism, landscape representation, language, cross-cultural interpretation, architectural imagination, and the display of architecture. Before starting her doctoral studies, she worked in various design firms specializing in industrial design, architecture and landscape architecture in Montreal and Berlin. Émélie's writing, artwork, and architectural thesis project have been featured in *Canadian Architect*, *Esquisse*, *Kerb* journal, and *The Site Magazine*.

EmelieDesrochersTurg@cmail.carleton.ca

3.10-3.25

Terri Fuglem

Associate Professor | Department of Architecture | University of Manitoba | Winnipeg | Canada

The Discovery of the Drawings:

Assessing The Cultural Imperative in Fifty Years of Student Work

Until 2017, a large body of student work – over 2000 large drawings -- from the Faculty of Architecture at the University of Manitoba had been stored in substandard conditions in a room off a service tunnel. Prone to dust, vermin and leaks from overhead pipes, the room was primarily used for the storage of excess furniture and equipment.

After an initial assessment, the Head Archivist from the University assembled a team for the substantial task of moving the earliest drawings and some blueprints from the tunnel to the Elizabeth Dafoe Library. A large portion of the material having been moved, her team has begun work on sorting, evaluating, restoring, identifying and cataloguing. Although only a fraction of drawings has been assessed and sorted, the collection has already generated substantial interest, and it is now the subject of graduate research at a neighboring university. Student work by renowned alumnae has been identified; drawings from first year students to thesis level are included.

The earliest work goes back to the early 1910s and several dozens of drawings from the 1920s, 1930s and war-era periods have, to date, been catalogued. Examples include impressively large color renderings of building facades and complexes, revealing the continuing influence of the *École des Beaux Arts* teaching practices on student projects inspired by revivalist movements, Art Deco, and later, Bauhaus and functionalist movements.

¹⁸ Eva Mackey, "The Apologizer's Apology" in *Reconciling Canada, Critical Perspectives on the Culture of Redress*, eds. Jennifer Henderson & Pauline Wakeham, Toronto, Buffalo, London: University of Toronto Press, 2013, 54.

¹⁹ As Isabelle Knockwood recounts, upon entering the Shubenacadie residential school, "my worldview or paradigm shifted violently, suddenly, permanently" and the sensory shift that accompanied her return from Shubenacadie was equally as profound: "Everything now looks different than it did before Indian residential schooling. The air smells different, the food tastes different, the sounds are different. And my outlook, my perspective on the world has changed in every area of my life." in *Truth and Reconciliation Commission public testimony*, Oct. 27, 2011.

²⁰ Dylan Robinson, "Intergeneration Sense, Intergenerational Responsibility" in *Arts of Engagement, Take Aesthetic Action In and Beyond the Truth and Reconciliation Commission of Canada*, Waterloo: Wilfrid Laurier University Press, 2016, 50.

Perhaps more important than the subject matter and teaching methods revealed in the designs, is the context of the School of Architecture itself. The School would have been one of the most remote in North America at the time of its founding in 1913 and for its first fifty years. Moreover, its establishment occurred one year after a historical event that led to a slow, radical decline of the region. Yet the projects chronicled in the drawings reveal a visionary optimism that appears to persist through the depression and world wars, and that starkly contrasts the pervasive poverty, cultural diversity of immigrant populations, harsh climate and immediate wilderness of the school's location.

Most of the thesis drawings depict designs of grand institutions such as art galleries, banks, resorts, exhibition halls, airports and bus terminals. The projects reveal how the school of architecture was instrumental in envisioning the future institutions for the region. Both the content of the drawings (large-scale urban projects) and their magnificent drawing style –at odds with their geographical context–serve to advance an economic agenda that would also fulfil a colonizing impulse for a new city then at the edge of civilization. The current interest in the drawings reveals a new willingness to exhume these older motives in order to assess their effects –whether deleterious or not– on architectural pedagogy and its influence on city- and nation-building in the first half of the twentieth century.

Terri Fuglem is Associate Professor of Architecture at the University of Manitoba. She graduated with distinction from a professional degree program in architecture at Carleton University, and completed a post-professional Master of Architecture in History and Theory at McGill University. Terri Fuglem has practiced in Ottawa, Montreal and London, England. Terri Fuglem was Co-Editor of Design for the Journal of Architectural Education (JAE) 2003-2005, as well as Acting Head of the Department of Architecture at the University of Manitoba (2012 – 2015). She currently teaches history, theory and design studio. Ms Fuglem has exhibited and written on a variety of architectural and art-related subjects, with a focus on Canadian modernist architecture

Terri.Fuglem@umanitoba.ca

3.40-3.55

Break

Session 3 (part b) *The Architect's Ethical Responsibilities*

Moderator **Izumi Kuroishi**

3.55-4.10

Marcia F Feuerstein

R.A./AIA PhD | Associate Professor of architecture | Virginia Tech | WAAC | Alexandria VA | USA

"After" the Original: High Costs, Low Roads and Circumventions

"...to consider art not a piece plucked out of the world, but the complete and utter transformation of the world into pure glory"
(Rilke). Oskar Schlemmer's final diary entry 13 days before his death on 13 April 1943.

In *The Work of Art in the Age of Mechanical Reproduction*, Walter Benjamin discusses the aura of an original and the notion of authenticity. How far might one go to create a new work of art that still maintains, or retains the original? This talk will consider this question: what constitutes work "after" the original / copy of the original by considering the case Oskar Schlemmer?

Schlemmer, an artist / performer / teacher / explorer of embodied architecture and space, created a vast output of work exploring the human being as "the measure of all things." In 1937, as part of the National Socialists' "Degenerative Art" exhibit, he stopped, forbidden to continue his work. After he died on April 13, 1943, Tut Schlemmer, his widow, moved his works to the Staatsgalerie in Stuttgart and the Bauhaus Archiv in Berlin, freely granting permission to scholars and museums, dancers and choreographers to study, publish, exhibit and perform his work.

This came to a halt once when she died. As attorney Peter Raue discussed, Tut's daughter and grandson took tight legal control of all of the holdings, even those owned by various galleries, prevented exhibits, publications, and performances as well as refused access by a third heir from her inheritance.²¹ They even attempted to prevent rightful owners from exhibiting, selling or publishing images through legal means, hoping to regain ownership of the works (Such as Schlemmer's painting of the Bauhaus Stairs, owned by MoMA and claimed by the family).

Seventy plus years after his death, on April 27, 2014, a reconstructed version of Schlemmer's Triadic Ballet, based on Gerhard Bohner's own 1977 reconstruction of the ballet, was performed at the Akademie der Künste in Berlin. Then, on November 21, 2014, the Staatsgalerie in Stuttgart, opened "Visions of a New World," a retrospective of Oskar Schlemmer's huge output. These works, long hidden from the public, were once again available. On the one hand, restrictions on archives and scholars made primary research and publication of work more difficult. On the other hand, while the family maintained tight control over the works, including performances, they created their publications and received fees for the right to publish images. Artists and

²¹ Peter Raue, "Schlemmer on Trial," in *Schlemmer! Bauhaus 6*, January 2014. 86-91.

owners have this right. The result was a series of beautiful and carefully curated publications and exhibit although the restrictions and inability to communicate with the family caused some scholars to avoid using images by Schlemmer in their publication while others used small, barely discernible copies. However, there was another result. Scholars and artists created new works based on the originals to reveal the ideas explored within Schlemmer's works. This idea of reconstruction, reinterpretation and translation will be explored as an impetus to use images while still respecting an owners' copyright before the 70-year time limit. This is what comes "after" the original – not a copy but a new original.

Marcia Feuerstein, a professor at Virginia Tech/WAAC, teaches theory and design. Her work considers design through theories of the body, embodiment, performance, and theater. A scholar and architect, her images, writings, and photographs have been published in a number of books and journals, co-author/editor of books including *Expanding Field: Women in Architecture*, *Forty Projects Across the Globe* (in development, 2020), *Confabulations: Storytelling in Architecture* (2017), *Architecture as a Performing Art* (2013) and *Changing Places: ReMaking Institutional Buildings* (1992). A graduate of University of Pennsylvania (PhD), University at Buffalo (M. Arch) and Tufts University, Feuerstein is both a member of the AIA and an NYS registered architect.

mfeuerst@vt.edu

4.10-4.25

Nilly Harag & Jan Tandrevold

Architect | Senior Lecturer | Architecture Department | Bezalel | Co-founder Arctic Architects | Jerusalem | Israel
Architect | Lecturer | Architecture Department | Bezalel | Co-founder of Arctic Architects | Jerusalem

The Limits of Architectural Authenticity: A Villa Tell-Tale of Two Non-Identical Twins

Over the course of architectural history, on rare occasions, an edifice emerges of such quality that it transcends the boundaries of its time and place. On the cliffs of Portopetro, in the island of Mallorca, resides a villa considered of such quality, which also encapsulates an architectural enigma—Villa Can Lis. When we observe its neighboring twin villa—Villa Eckert—several poignant questions come to mind: Is there a sole creator to these two residences? Is he the one who envisioned the final result, after sketching the first ideas? Or is he the one who developed a sketch into construction drawings? The article aims to suggest current creative/detective tools that should be deployed to explore an encounter of two neighboring villas in order to speculate on the ethical authorship of its architect; while one villa is considered a masterpiece, the other was ignored, and any affinity to the renowned architect was disavowed.

The cultural chronicle suggests some possible reasons along the design and construction processes, colored by emotions and pride between the architect and his client, as well as a possible family feud. Regardless of the structural concepts and research, construction period, spatial proximity, the details and materials, only one of the two villas is mentioned as part of the legacy of the renowned architect. One may speculate that the resemblance of the two structures reminds of common rumors regarding an illegal child that his father tries to hide from the public eye. Despite its striking resemblance to its famous sibling, designed by Danish Architect Jørn Utzon, his 'other' villa—Villa Eckert—has received almost no international attention and publication.

The methods of investigating the two villas in order to reveal the *true signature* of the architect are based upon a detective work,²² which spread around the globe from Australia and across Europe from Denmark, Mallorca and Vienna. A thorough examination of the different versions of documents and drawings—including the recently rediscovered construction drawings of the 'forgotten' Utzon villa—may provide us with a source of a testimony: It demonstrates how some buildings, over time, are being detached from any ties to their creator, and questions how the architect's authorship is narrated. We seek to expand the questions raised by this case study to more general issues concerning the authentic limits of any architectural work today. What authentic understanding do we have when we look into the character of the architectural firm, composed of various partners and many employees? To what a degree does the idea of unconscious digital influence, based on the current fashion of cut-and-paste, stand as the stamp of copyright?

Nilly R. Harag is a senior lecturer at the Architecture Department at Bezalel and a co-founder of Arctic Architects in Jerusalem. MArch University of Pennsylvania with honors; BDes Bezalel Academy with honors. Recipient of research grants from the Technical University, Vienna, Oslo School of Architecture, Granada University and Herzl Chair at the Masaryk University. She taught at Carleton University, the Braunschweig University, Ecole Nationale Supérieure d'Architecture de Paris-Malaquais, Architecture School of the University of Nicosia, National Technical University of Athens and Coburg University of Applied Science and Art. Her research is on *Liminal Architecture; Encounters along Cultural Routes*.

Nilly@arcticarc.com

Jan Tandrevold is a Norwegian architect and painter. He is a lecturer at the Architecture Department at Bezalel and a co-founder of Arctic Architects in Jerusalem. In addition to studies at the Oslo School of Architecture, he studied urbanism at the Hebrew University in Jerusalem and painting at the National College of Art and Design in Oslo and the Jerusalem Studio School. Recipient of research grants from the Hebrew University. His research is on Spatial Relationships between Painting and Architecture.

jan@arcticarc.com

²² Carlo Ginzburg, "Morelli, Freud and Sherlock Holmes: Clues and Scientific Method," trans. Anna Davin, *History Workshop Journal*, No. 9 (Spring 1980), 5-36.

Fei Wang

Coordinator MS Arch Program | Assistant Professor | School of Architecture | Syracuse University | USA

*The Impossible Shadow,**A Study on the First Chinese Treatise on Perspective, Shi xue (視學, 1729/1735)*

Shi xue (視學), published in 1729 (second edition in 1735), was written by Nian Xiyao (1671-1739), assisted by Italian Jesuit missionary Giuseppe Castiglione (1688-1766), who treated himself as a disciple of Andrea Pozzo and was the key figure rooting perspective into Chinese painting in the early Qing dynasty (1644-1911). This treatise is the first and only one on linear perspective in Chinese history before the early twentieth century. Nian Xiyao was the minister of the Imperial house and was very interested in science and mathematics. He did not speak any Western language. Unsurprisingly, *Shi xue* is more like the manual of a scientific instrument rather than a book of theory.

Shi xue contains four sections taken from different Western treatises by Andrea Pozzo, Jean Cousin, Jean Dubreuil, and Sebastino Serlio, and is an anthology rather than a single systematic translation. The first section is copied and traced from Pozzo's *Perspectiva pictorum et architectorum I* (1693). The original size of *Shi xue* is identical to *Perspectiva I*. Drawings in *Shi xue* are from Pozzo's simple perspectival illustrations are mostly text-free, on the basis that they are "self-explanatory." Most Shadows are omitted intentionally, while are drawn in dotted outlines rather than the shaded surface in Pozzo's.

Nian Xiyao could not understand perspective through geometry as the West did. Representation in Chinese painting was not based on the measurement of the human body as in Western counterparts. For the Chinese, vision through the eyes is imperfect, while painting pursues the perfection of nature, which should not follow what the eyes see. Chinese *literati* thought that painting ought to remain faithful to its structure, its two basic dimensions. In their eyes, there was no sense in the Western arithmetic division of the body, the "divine proportions" of the head, the typology based on Dürer's system of measurement. Instead, they believed in the relationship with the metaphorical universe (nature). Even when Qing Chinese read *Shi xue* to draw linear perspective, they could only paint "lifeless" objects with steady forms that could be easily geometrized, such as buildings and furniture. The human body could never be engaged in the perspectival system without doubting. That is why human figures don't follow the same perspectival projection as buildings in the series of twelve paintings *Shier yueling* (*Activities of the Twelve Months*, r.1736-95). The Chinese understood that a shadow is a crucial part of a living body in the mortal world, which cannot be taken away from a physical body and cannot be depicted in a painting, the ideal world. Qing Chinese, including Nian Xiyao, understood shadow in perspective as the Daoist *yingyang*, abstract, cosmological and immaterial without specific spatial dimension, and this could be omitted undoubtedly while still tracing the shapes of Pozzo's version.

Shi xue introduces geometrical methods in or to draw the "bones" (contour lines in Chinese painting theory) of "formal" objects. Nian didn't intend to combine both "flesh" (subtle color rendering to create volumetric images) and "bones" to create the truth that the Jesuits pursued in perspective. Even if we could say that shadow is an "informal" object, Nian only depicted the "bone" of shadows, using the dotted line, but never the "flesh" of the shadow.

Fei Wang is an architect, educator, writer and entrepreneur. He is the Coordinator of M.S. Architecture Program at Syracuse University, USA. He is a founder of the interdisciplinary studio FWStudio and co-founder of URSIDE Hotel Shanghai. His design and research work has been recognized with many research and design awards, and have been exhibited worldwide. He has lectured at numerous design and art. His writings appear in *Time+Architecture*, *Domus*, *The Plan*, *Mark*, *Urban Environment Design*, *Architectural Digest*, *Urban Flux*, *Urbanism Architecture*, *Thresholds*, *AREA*, among others. His books include *Inter-Views: Trends of Architectural and Urbanism Institutions in North America and Europe* is published (2010), and *Poetics of Construction, The Discourse of Tectonics in Contemporary China* (2014).

fwang100@syr.edu

Jan Frohburg

Architect | Lecturer | University of Limerick | Ireland

Object Number 571.1963: Biography of a Collage

In his Concert Hall collage of 1942 Ludwig Mies van der Rohe superimposed abstract planes of colour and an Aristide Maillol sculpture onto the enlarged photograph of a vast industrial space designed by Albert Kahn. Inverting Robin Evans, this collage – the singular image of an unbuilt project – is a rare example of a translation from building to drawing. A modern future enters the picture with exacting technical precision, while at the same time traces of artisanal craftsmanship remain clearly visible. It is related to the even more famous collages for the Resor House project before and the Convention Hall collage after it, and it carries distant memories of dada art.

Mies created the collage in the same year that Edward Hopper painted *Nighthawks*. The collage and the painting share not only size and proportion but also a memorable golden glow, a strong sense of interiority and emptiness as well as the strong presence of human figures that speaks at once of displacement and companionship. Like its twin project, the *Museum for a small city*, this collage originated in a project by one of Mies' graduate students, Paul Campagna. Thus the product of iterative design and creative dialogue, the collage opens up questions about authorship in asymmetrical power relationships (which had already been characteristic of Mies' earlier European work).

The collage was first exhibited at the Museum of Modern Art in 1947, and Philip Johnson included it in his monograph on Mies. It joined Mary Callery's private collection of Picasso paintings in the stairwell of her converted coachman's building, and it was Callery who – "foolishly," by her own admission – replaced Maillol's pensive *La Méditerranée* with the image of an ancient Egyptian sculpture from Sakkara, a scribe of all people. Mies, however, not only seemed to have accepted the change, but he also used the collage for further investigation. In order to test other colour combinations and alternative materials, Mies' students at IIT made smaller versions of the collage, oscillating between reproduction and reinvention – multiples before Warhol. This reflected a general shift in the generation of architectural knowledge through drawing as the heroic work of the individual artist-architect yielded to collaborative practice and serial production.

Eventually, the collage returned into the fold of the archive. On the way, its insurance and tax value increased, and it has since become a canonical image. But what makes it valuable to architects today? Rather than accepting that the image has been interred in the museum collection, I argue that it continues to illustrate what is "possible, necessary and significant" in architecture.

Jan Frohburg teaches design studio and lectures on the history and theory of twentieth-century modern architecture at the newly established School of Architecture at the University of Limerick. A graduate of the Bauhaus University Weimar, he studied, practiced and taught architecture in Germany, Great Britain, Switzerland, Ireland and the United States. His research interests include design education and the spatial expression of modernity, focusing on concepts characteristic to the work of Mies van der Rohe. He has presented and published on both aspects nationally and internationally. His doctoral thesis focuses on Mies' 1942 Concert Hall collage and the conditions that enabled its production at a turning point in the architect's career.

Jan.Frohburg@ul.ie

Session 4 (part a) *Drawing Sites / Sites of Knowledge Construction*

Moderator **Sam Ridgway**

2.40-2.55

Konstantinos Avramidis

PhD | Adjunct Lecturer in Architecture | Drury University | Greece

Drawing After-The-Fact: Documenting and Transcribing Graffiti and Architecture

Buildings come from drawings, but what happens when buildings turn into drawing surfaces for unsolicited writings and these, in turn, return back to the original drawings of the building? And what happens when these series of drawings come together displayed in a designed book object? The presentation addresses this line of enquiry through the act of graffiti in three specific situations in Athens city center: the former Nazi Detention Centre which operated during the Nazis occupation (1941- 1944); the Athens Polytechnic that played a pivotal role in the students' uprising against the Greek Military Junta (1967-1974); and the Bank of Greece HQ building, which is a site of recurring political expression in contemporary crisis (2010-2015). This talk critically re-examines a series of architectural drawings that record the graffiti writings in these three cases and were produced as part of my doctoral thesis by-design.

In the drawings, every collected graffito of each site is documented adopting an appropriate empirical technique. In each drawing I'm interested in three interrelated parts: the base, the writings and their indexing. The base drawing constitutes my writing surface and, as such, its provenance, the historical moment it captures and the techniques used to represent it are important. The base drawing also introduces the architectural matrix upon which graffiti is serialized. The graffiti writings are represented in various ways depending on the available material and the scale of the drawing. They are placed and drawn according to the spatial rules dictated by the base drawing whilst superimposing their own matrix. The index of the writings is about their content as well as their spatialization. In a sense, the elevations and/or sections function as maps where the graffiti marks are spatially serialized and temporally sequenced. In so doing, these drawings reveal the dialogue between the matrices of graffiti and architecture. At the same time, they record what once was, and disclose what could have been, if no removal practices had taken place.

The perverted manner through which survey drawing techniques are used herein that they represent architecture retrospectively and document graffiti, which is something that is not normally surveyed – not only compromises the orthodoxy of line drawings but also challenges our traditional linear reading of texts whilst foregrounding a spatial way of treating graffiti. In the drawings of graffiti what we are constantly getting is a kind of tension between the empirical system of measure and this would-be reality that we understand through it.

Graffiti posed a threat to the clean and ordered architectural environment of the drawing. They infuse contingency and action to the seemingly immobile and inactive traditional line drawing. In so doing, the surface of the drawing – and, by extension, the surface of architecture – cease to be conceptually simplistic,

ideologically, or aesthetically monopolistic, and become multi-vocal and multi-temporal. The drawing is transformed into a contested surface where the past and the future meet (in) the present while the architectural imaginary is interwoven with all sorts of consenting and dissenting realities.

Ultimately, the aim of this paper is to show that buildings and writings on buildings are both in the same spatial practice, whilst critically reflecting upon the after-the-fact design methods of collecting, archiving and displaying.

Konstantinos Avramidis is a practicing architect and academic. He holds a DipArch from the Aristotle University Thessaloniki, an MSc in Architecture and Spatial Design from the National Technical University of Athens with Distinction, and a PhD in Architecture by Design from the University of Edinburgh, where he was awarded the Edinburgh College of Art scholarship. He has taught architectural design, history and theory at the NTUA and UoE and currently is an Adjunct Lecturer in Architecture at Drury University – Center in Greece and teaches at Arkki – School of Architecture for Children and Youth. His designs have been awarded and exhibited internationally, while his research has been presented at conferences and published in books and journals. Konstantinos co-founded the architectural design research journal *Drawing On* and is the principal editor of *Graffiti and Street Art: Reading, Writing and Representing the City* (Routledge, 2017).

kavramidis@drury.edu

2.55-3.10

Alberto Bologna

PhD | Architect | Assistant Professor | China Room | Dipartimento di Architettura e Design DAD | Politecnico di Torino | Italy

A Chinese Attitude: From Drawing to Building Through Models and On-site Mockups

The Emblematic Case of the Seashore New Library by Vector Architects, 2015

The Chinese construction industry scenario is nowadays characterized by widespread poor quality. The reasons for this are to be found in the procedural and bureaucratic process to which the architectural project is subjected, which normally prevents the designer from following the work on the building site: all constructive responsibility is delegated to the contractor. The architect manages to make known constructive and spatial expectations only in the case of buildings for which a client decides to invest in the quality of the execution in view of desired returns of image. In this sense, the case study of a new library designed by Vector Architects in Beidaihe New District in China completed in 2015, becomes significant. The building is emblematic of the design research developed by Gong Dong in recent years and of the active relations that he has been able to establish between his drawings and the building (and vice versa) before, during and after construction. This is a formal and spatial research that cannot disregard the casting of exposed concrete used in an ornamental key. Concrete, thanks to its superficial values, shapes a building conceived in the architect's mind as the sequence of spaces studied through different two-dimensional configurations generated by cross-sections.

The library space is the result of spatial experimentalism, a creative process and constructive masteries summarized in three series of physical models. These models are made in different stages and with different purposes to pursue and guide the spatial and surface quality expected of the building. Gong Dong, therefore, works, during the development of the project, with a series of study models: three-dimensional physical objects created to verify the spatial quality imagined through sequences of rooms studied in two-dimensional cross-sections. The type of surface finishing given to the concrete makes it necessary to cast three mockups on site: they are used both to train the workers in their casting and to verify at full scale the surfaces that would have shaped the architectural space. Finally, a decomposable model is made *ex-post* to be exhibited at the 2018 edition of the Venice Biennale, designed to represent the spatial complexity of the building and make explicit creative impulses.

Architectural space is the final outcome of a tectonic process controlled from the beginning of the project, sought after and mediated by a superficial complexity that can only be obtained thanks to the skillful exploitation of local construction conditions. This attitude underlies a cultivated and sophisticated creative process and characterizes the *modus operandi* of a new generation of Chinese architects. The local conditions with which the designer must relate –which lead to the management of construction sites characterized by an evident hyper-craftsmanship– make it necessary to use both architectural models and full-scale mockups: in contemporary avant-garde Chinese architecture, they act as tools to verify the design idea and to train and educate both local workers and new types of clients.

Alberto Bologna, Architect and PhD in History of Architecture and Town Planning, is an Assistant Professor of Architectural and Urban Design at Politecnico di Torino, Italy. In 2018 he has been visiting scholar at Tsinghua University in Beijing, China, where he taught the course Concrete Creativity. From 2011 to 2015 he has been a post-doc scientist at École Polytechnique Fédérale de Lausanne, Switzerland. He focuses his researches on the relationships between tectonic, materials and architectural space with focuses on spatial and ornamental effects generated by concrete surfaces. He is the author of three books on the work of Pier Luigi Nervi, and he is currently working on the forthcoming publication: *Chinese Brutalism Today. Concrete and Avant-Garde Architecture* (ORO Editions, 2019).

alberto.bologna@polito.it

3.10-3.25

Thi Phuong-Trâm Nguyen

PhD Candidate | The Bartlett School of Architecture | University College London | UK

Anamorphosis - Drawing Spatial Practices

Jean Starobinsky, a literary critic and art historian studying the motif of the gaze, associates the origin of the word looking in French, *regarder* (re: return, and garder: to hold, to keep) to the idea of re-capturing, implying that the movement of the gaze is aiming to seize what one possessed, but is now lost. He also discusses the gesture of looking as being something that takes place in time, and which “involves perseverance, doggedness, as if animated by the hope of adding to its discovery or reconquering what is about to escape.”²³ For him, the gaze is not just waiting for the return of something lost but is instead a movement of discovery embedded with the desire for wonder.

The project I would like to present for this panel attempts to tie Starobinsky’s understanding of the gaze — involving an active embodied search to the gesture of drawing in architecture. Driven by the desire to reach toward a meaning not yet known, the persistent gaze projects itself into a world of uncertainties, and it tests the boundaries of perception, in the same manner, in which the architect questions drawing. Therefore, I am proposing a succession of studies representing different moments in the encounter with the unknown when attempting to grasp the elusive. Working with the potential of anamorphic drawing to project forms outside their visible limits, I explore how their return is possible by the adjustment of the body to a specific point in space. The relevance of anamorphic images lies in their capacity to be both a representation technique and to allow entry into the space of vision, thus allowing the drawing site to become the site of knowledge.

From an unfamiliar image to its recognition, the anamorphic transformation follows a sequence of transformations from the shattering of the first appearance, to the awareness of movement and temporality with the return of another image. Following the same logic, the work evolves from a model studying the space of perception opened by anamorphosis to film, passing through the re-enactment of some of the first anamorphic drawing techniques in sixteenth and seventeenth century Italy. Each change in position provokes a change in perception, and I will present how each shift of medium answers a new condition between what is present at hand and what is possible.

The study of the delineation of anamorphic images is an active way of drawing allowing the occupation of the space of vision. It represents a durational process that brings back uncertainty in its making, but with its practice, it allows the emergence of the sense of a place. Following Michel de Certeau’s statement: “place is a practice space,”²⁴ the making of the different type of drawing is part of spatial practice, a process that should be exercised and repeated for the meaning to emerge again because like the anamorphic, it only takes form in movement.

Thi Phuong-Trâm Nguyen is a trained architect in Canada and holds an MA in Architectural History & Theory from McGill University, Montreal. She is currently pursuing a PhD in Architectural Design at The Bartlett (UCL). Her research addresses questions of perception beyond the visual realm, through the study of the gestures involved in anamorphic construction with film and re-enactment. She coordinated (2016-2018) The Bartlett Film + Place + Architecture Doctoral Network, a research platform founded by PhD students using filmmaking as a tool and method of research, it aims to share and generate a dynamic dialogue between practice and research. Her work was published and exhibited in UK and in Europe.

thi-phuong.nguyen.14@ucl.ac.uk

3.40-3.55

Break

Session 4 (part b) *Drawing Sites / Sites of Knowledge Construction*

Moderator **Eva Sopeoglou**

3.55-4.10

Lori Smithey

PhD Candidate | Architectural History and Theory | Taubman College of Architecture & Urban Planning | University of Michigan | USA

The Architectural Model Divested of Function: Constructing a Site of Intersubjectivity

The scaled model has long remained one of the fundamental instruments of architectural design. Indeed, as architectural objects, and monumental structures in particular, were increasingly recognized as being in crisis during the postmodern period, scaled models, for the most part, changed in scope not kind; which is to say that while they may have gathered urban and environmental contexts, rather than isolated buildings, they still performed their essential scalar function of rendering complex spatial, social, and ecological relationships

²³ Jean Starobinsky, *The Living Eye* (Cambridge: Harvard University Press, 1983), 3.

²⁴ Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 2011), 117.

visible. This paper examines a project by the postmodernist architect Charles W. Moore (1925-1993) that cannot be easily qualified as an architectural model, a display cabinet, or a piece of furniture, but rather answers to all three. While he was dean at Yale, Moore moved his home and his office to Essex, CT where he bought a nineteenth-century compound of mill buildings with a social vision that ranged from establishing a more collaborative firm, connections to industrial history, and an ecological agenda for the site.

On the second floor of his new home, the architect built a plywood pyramid that stood simultaneously as a model of an ancient monument, a display case for his toy collection, and a cabinet for his bachelor bedroom. By embedding the architectural model as an exhibition piece within the live-work space of his home office, Moore extended the role of model making beyond its typical function within the design process. Specifically, this paper analyzes three aspects of Moore's pyramid model. First, it considers the structure's role in the formation of a new office within the larger context of an economic crisis. Second, it examines how the piece oscillates between model, display cabinet, and functional furniture. Finally, it looks more closely at the role of collection and exhibition. Contemporaneous with Moore's model pyramid, Jean Baudrillard theorized the subjective role of the collection as distinct from the utilitarian purpose of instruments, writing, "Conversely, the object pure and simple, divested of its function, abstracted from any practical context, takes on a strictly subjective status. Now its destiny is to be collected. Whereupon it ceases to be a carpet, a table, a compass, or a knick-knack, and instead turns into an 'object' or a 'piece'."²⁵ Ultimately this paper argues that as a "piece" Moore's pyramid constitutes an active site of subject formation through its disinvestment of the typical functions of architectural model making.

Lori Smithey is a doctoral candidate at the University of Michigan, Ann Arbor. Her research examines the architectural dimensions of literary decadence and the ways in which decadent aesthetics inform the subsequent design sensibilities of kitsch and camp. An article titled, "Immersed in Aqueous Atmospheres: Philip Johnson's Open Glass," is forthcoming in the JAE. Her work has also been published by the Society of Architectural Historians Australia and New Zealand and has been presented at conferences including ACSA, CAA, and AHRA. She holds a Bachelor of Architecture from the Cooper Union in New York and a Master of Science in architectural history and theory from the University of Washington in Seattle.

smithelo@umich.edu

4.10-4.25

Michael Lee

Architect | Lecturer | Department of Architecture and Landscape | Kingston School of Art | London | UK

Drawings of Things You Cannot See

According to Vitruvius, drawings exploring proportion show eurhythmy, the ratios between the different measures of the same thing, and symmetria, corresponding measures of different things.²⁶ While certain ratios and measures once came with a celestial guarantee of decorum, the age of the Enlightenment threw this certainty into question. If the rise of modern science saw "the synthesis which had held microcosm and macrocosm together [...] disintegrate",²⁷ it was the Empiricist philosophy of Berkeley, Hume and Locke, and their questioning of the traditional understanding of knowledge that struck the knell for a pre-modern understanding of knowledge.

The publication of Hume's *An Enquiry Concerning Human Understanding* crystalized the fundamental scientific and philosophical crisis; a predicament prompted by the loss of the closed certainty of the known world and the revelation of the unknowable infiniteness of the newly unmasked universe. The result, Alexandre Koyré suggests is "the discarding by scientific thought of all considerations based upon value concepts, such as perfection, harmony, meaning and aim, and finally the utter devalorization of being, the divorce of the world of value from the world of facts."²⁸ So if Einstein is correct, and he often seems to be, this meant, "As far as the propositions of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality."²⁹

If certainty now only applies in the abstract then the concrete certainty that proportion imbued has lost its foundation. What do drawings of architectural proportion show? If their purpose of divining certainty has been lost then they are seemingly left with the sole purpose of systematizing intuition. Their value lies in themselves, drawings of something that will never be. Drawings of things we don't believe, yet on which we rely. Drawings of things that give no guarantee of success yet which can never be questioned.

The work of Peter Märkli, architecture of absolute material certainty, is underpinned by the development of a series of drawings that will seemingly never be built. The purpose of these drawings is not to give form to the fleeting, early inkling of how something may be, nor is it to give direction to the terms of its assembly. It is a drawing of something other; another no thicker than the slip of paper on which it is drawn.

²⁵ Jean Baudrillard, "The System of Collecting," in *The Cultures of Collecting*, ed. John Elsner and Roger Cardinal, (Cambridge, MA: Harvard University Press, 1994), 8.

²⁶ Vitruvius, *The Ten Books of Architecture*, translated by Morris Hickey Morgan, (New York NY, Dover Publications Inc., 1998).

²⁷ Wittkower, Rudolf, *Architectural Principles in the Age of Humanism*, 5th edition, (Chichester, Academy Editions, 1998).

²⁸ Koyré, Alexandre, *From the Closed World to the Infinite Universe*, (Baltimore MD, John Hopkins University Press, 1957).

²⁹ Einstein, Albert, *Ideas and Opinions*, (London, Souvenir Press Ltd., 2005).

Michael Lee is an architect in private practice and lecturer at Kingston University. He was educated at the University of Bath and University College London. His research focuses primarily in two areas: post-Enlightenment systems of proportion, and the development of a socially sustainable countryside.

ml@michael-lee.eu

4.25-4.40

Sophia Banou

PhD | DipArch | MSc | AFHEA | Lecturer in Architecture | University of the West of England | Bristol | UK

The Intimate Archive: Rural Excursions in Drawings

In the Summer of 2017, I spent a week in a barn in Shatwell Farm, situated in a North Somerset valley. Redesigned in 2014 by Hugh Strange in 2014, the barn is home to the collection of drawings, models and other architectural paraphernalia that Drawing Matter and Niall Hobhouse have collected. This paper will reflect and recount on my experience of the archive, which focused on the large volume of Superstudio material that Drawing Matter holds.

The paper recounts and reflects on the development of a line of inquiry as emerging at the crossover of research intention and the archive's own intellectual but also physical situation, drawing parallels between archival research and drawing practice. Drawing Matter's location and configuration is closely tied to the curatorial ethos of the collection, which puts equal emphasis on widely published and commercially acknowledged drawings as on personal objects and archives of the architect. These sketch out the 'infrastructural' background of the work and offer rich insight into the modes of production of the artefacts, contextualizing the work within personal spaces of the architect, as intimate as a sketchbook/diary or a collection of magazine cut-outs. This paper, however, is concerned not only with archiving but with the modalities of reading and retrieving that emerge from the understanding of the archive as a 'utopic' space of drawing (Marin), which relies on the juxtaposition of its own space with its spatially explicit, architectural content.

The physical configuration of the specific archive invites and encourages the researcher to inhabit the drawings by means of physically occupying its space, and the interior configuration of the archive welcomes the direct handling of the material as objects by means of the lateral and vertical surfaces of the barn. In this way, the space of the archive emerges as an intimate situation that bridges the personal spaces of intimate spaces of knowledge construction: the architect's spaces of production, the collector's space of curation and the researcher's space of analysis and composition. This is in turn articulated through a series of bilateral *readings* and *writings* of drawings, by means of both drawn and written, interpretations, translations and transcriptions. Through this intertwining of graphic and physical spaces, the drawing as well as the archive are revealed as spatial practices that require intimate occupation.

Sophia Banou is a Lecturer in Architecture at the University of the West of England. She has studied architecture in Athens, Edinburgh and Newcastle. She is interested in questions of representation, mediality and mediation in architecture and the city. Her doctoral research by design (University of Edinburgh, 2016) examined architectural representation and the status of architectural drawing conventions through a critical-historical approach to urban representation.

banous@gmail.com

5.30-6.00

Reception & Inauguration

Mary Vaughan Johnson & Nicholas Lobo Brennan

Aurelio Almeida Miranda, Anne Berit Bergstad, Delia-Mariana Coman, Joel Donoghue, Cai Hall, Mohammad Ali Noei

Inauguration of The Drawing House

7.00 -9.00

Dinner

June 28 2019

9.15-12.45

Tools of Making:

Relation Between Architectural Representations and Their Apparatus Over Time

9.15-9.50

Plenary Session | Invited Speaker **William Whitaker**

Curator | The Architectural Archives | University of Pennsylvania School of Design | Philadelphia | USA

I'll begin with the jar of empty pen caps

Introduction **Mary Vaughan Johnson**

A collection of design records represents a pattern of thinking and discovery that extends far beyond the job-site and the actuality of building. "Dead filing"—the act of putting these records into storage—initiates a process of devolution whereby associations present in design development slacken, disassociation occurs, the tools of making antique and, more often than not, the threat of lawsuits or a simple lack of space leads to a records purge. Even archiving, based on an assumption of lasting value, is no guarantee of usefulness.

And yet, architects— their preoccupations, responses and ideas— stimulate creative thought long after their working lives and the risk of legal jeopardy ends. This talk transects twenty-five years of experience to consider the active and motivated engagement with such records in efforts ranging from teaching to heritage conservation. Today, the engaged "activist archivist" works less on advancing the goal of getting the work of a great thinker into your mind than on getting you into the mind of a great thinker.

William Whitaker is the curator of The Architectural Archives of the University of Pennsylvania School of Design. Trained as an architect at Penn and the University of New Mexico, he has worked for over 25 years documenting and interpreting the resources of the Architectural Archives, most notably the collections of architect Louis I. Kahn, landscape architect Lawrence Halprin, and the partnership of Robert Venturi and Denise Scott Brown. Whitaker oversees all activities of the Archives, including exhibitions and public programs, collection acquisition, development, and strategic planning, and has lectured to national and international audiences on topics ranging from the creative imagination of Louis Kahn to the provocative use of vinyl, Plexiglas, and neon in Robert Venturi and Denise Scott Brown's transformation of St. Francis de Sales Church. Whitaker co-authored: *The Houses of Louis I. Kahn* (Yale University Press, 2013) with George Marcus, the first comprehensive study of the architect's house designs, recipient of the 2014 Literary Award of the Athenaeum of Philadelphia.

wwhitake@design.upenn.edu

Session 5 (part a) *Tools of Making*

Moderator **Mary Vaughan Johnson**

9.50-10.05

Paul Emmons

PhD | Registered architect | Professor of architecture | Virginia Tech | Associate Dean of Graduate Studies College of Architecture and Urban Studies | WAAC | Coordinator PhD Program in Architecture + Design Research | Alexandria Old Town VA | USA

Animate Instruments

By considering why architects inevitably have a favorite tool such as a pen or pencil, we can begin to pry open the way equipment works with the architectural imagination, how instruments are not merely instrumental. Architect's tools are derived from construction tools; they contain knowledge of geometry. We presume the drafter directs the pen, but occasionally we discover the reverse. Just as the hand moves the pen, so sometimes does the pen move the hand. As Donald Kunze suggests, the drawing becomes a site of exception where ordinary laws don't apply. In this way, the instrument, and by extension the drawing, can know more than the drafter so that designers can learn from their own drawings.

Rather than opposing the poetic and the instrumental, this reverie on architect's tools suggests that they are deeply intertwined by considering the origins of the instrumental cause in the Middle Ages. Thomas Aquinas developed the instrumental cause to explain how the human authors of the Bible could have free will, and at the same time God 'dictated into their pens'. They are animate instruments that can be moved by another and still move themselves. This could be Alberti's meaning when he describes carpenters as instruments of the architect. Animate instruments can be dangerous. Aristotle who coined the phrase used it to describe workers following the direction of an architect as well as Daidalo's walking statues that run away if they are not tied down. In ancient Greece, an axe from a building site that accidentally killed someone was tried in court with the same rights as any other human defendant.

The curious Double Portrait of an Architect (1556) attributed to Tomasso Manzuoli (in the Museo di Capodimonte, Naples) shows an older man guiding the hand of a younger man who in turn is walking a pair of compasses on a basilica plan. This painting is very similar to those of the Evangelists being guided by an Angel's hand while penning the scriptures. Is this a portrait of two people or of a single person of two minds? The younger man holding the compass looks away from the drawing to the older man whose finger is directing the younger man's hand and is looking at the drawing. Whatever the painting's intended meaning (perhaps prudence guiding genius?), it suggests, like the divinely inspired saints, that there are greater concerns than merely a designer's will. In the seventeenth century, when nature was first being conceived as a mechanism, the instrumental cause was reinterpreted to explain causation without active powers. According to Ivan Illich and Giorgio Agamben, this is the origin of the criticism of modern technology as reductive instrumentalism.

Paul Emmons is a registered architect and a professor of architecture at Virginia Tech where he is Associate Dean of Graduate Studies for the College of Architecture and Urban Studies. Dr. Emmons is based at the Washington-Alexandria Architecture Center and coordinates its stream of the PhD Program in Architecture + Design Research. His widely presented and published research includes recently co-editing *Confabulations*, *Storytelling in Architecture* and *Ceilings and Dreams: The Architecture of Levity*.

pemmons@vt.edu

10.05-10.20

Donald Kunze

PhD | Emeritus Professor | The Department of Architecture | Penn State University | State College PA | USA

Orthographic Melencolia & Purloined Palimpsests

Perhaps if the future existed, concretely and individually, as something that could be discerned by a better brain, the past would not be so seductive: its demands would be balanced by those of the future. Persons might then straddle the middle stretch of the seesaw when considering this or that object.

— Vladimir Nabokov, *Transparent Things*

The drawing in the head is a frequent graphic theme Marco Frascari employed in his depictions of the architect's thinking process. But, what if such "dream houses" actually occur all the time, in our everyday involvements with "literal" buildings? While the standard account has the "building idea" appear first in the form of sketches and later formal drawings, could these exist without a prior "primitive" connection between buildings and "mental drawings"? Do we not *draw* the house we see, but in a way that adds our desire to correct and complete it, to match what we see with our inner eye?

The process of experiencing architecture and drawing it, dreaming it through drawings, is more than idle conjecture. Conjecture itself is a necessary component of every experience of architecture — and conjecture always follows the drawing's desire to represent not just the reality of the particular building but the Real of

architecture itself. Often, the ludicrous conjecture (“ersatz”) is more productive than the sensible hypothesis. The ersatz provokes the luck of the lucky guess (*Ansatz*), to incorporate the necessary ingredient of chance.

The idea of mental drawing has been around since the 1960s. Re-packaging memories of each architectural “now” and guiding future actions is viable, but drawings already follow the analogy of thoughts. Within the literal building, which can be measured orthographically, there is also an architecture implicit within the building — an ortho-*psychic* truth. In the causal sequence of idea>sketch>drawing>building, there is *already a house*, making every actual house also a drawing of a dream house. The dream is implicit within each stage of the causal model.

I would like to play forward Paul Emmons’ idea of the orthographic eye (2013) by exploring how, in all types of drawing — *in drawing itself* — orthography functions as a radical primitive element. Drawings are fundamental, Frascari claimed; and I wish to find the fundamental of the fundamental by redeploing “instrumental” in its historic psycho-theological roles in automata and ritual, discover a hidden, palindromic instrumentality in the orthographic drawing. The conventions of the classical orthographic drawings (plans, elevations, and sections) function as a contronymic *caelum* — both a burin and sky, casting smooth figural shadows across a convoluted terrain. From orthographic to ortho-*psychic* (Bachelard’s term for an apparatus of self-correction), the plastic drawing reveals its dyadic relation to the dream. As Albrecht Dürer cryptically suggested in his MELENCOLIA§I (anagram: *caelo limen*), drawings are the orthographies of our mental fields of form.

Don Kunze has taught architecture theory and related stuff since 1984.

A longer biography would be to say what one hasn’t done.

To say what was accomplished might be the smallest of all.

The point is to get to where thought hasn’t quite reached.

Or, maybe, to subtract some things it only thought it reached.

Actually, it’s still the same old story; everyone tells me this.

But, I want to know if the story is really true.

Academia’s not the place to learn, but writing has its charms.

So, I write and write and talk and talk and still,

No bio says what it should, that life goes way too fast.

kunze767@gmail.com

10.20-10.35

Jonathan Foote

PhD | Associate Professor | Aarhus School of Architecture | Denmark

The retroactive Construction of Architecture: Michelangelo's New Sacristy Wall Drawings

Largely overlooked by scores of passing visitors to Michelangelo’s New Sacristy in San Lorenzo, a series of extraordinary, autographed wall drawings tell the story of a once dynamic construction site. Situated in a small apse to one side of the Medici tombs, these drawings are a palimpsest of over one hundred architectural sketches and drawn constructions in red and black chalk, frozen for centuries into the vertical intonaco surface. Two, true size drawings, depicting the interior and exterior window of the adjacent Biblioteca Laurenziana, are the largest architectural drawings in Michelangelo’s remaining drawing oeuvre.

While the drawings have been extensively examined in terms of their role in the project both before and during the execution of the library, there has been no subsequent examination questioning the impact of the drawings on the project after construction. In fact, only discovered during renovations in 1976, their unveiling has no doubt reoriented our relationship to the San Lorenzo complex. Within the New Sacristy itself, an entirely new space has been created by them, as one can no longer enter the apse without immersing oneself in the middle of Michelangelo’s confabulatory building methods, taking place in true scale, and accompanied by words, markings, and figural sketches (in addition to the glass protector and mounting brackets). At the same time, in their proximity to the depicted details of the library itself, the drawings instigate a cycle of memory and association that intensify the experiential ties between Michelangelo’s two projects.

The rather accidental preservation of the New Sacristy wall drawings reveals a magnificent exception to the assumption that construction drawings are useful only before or during construction. In this case, by being ‘used-up’ in construction and unwittingly archived at the same, the drawings have retroactively altered our encounter with the architecture. In other words, the drawings’ power to construct the architecture has endured way beyond their specific utilization by Michelangelo and his assistants in the 1520s.

By comparing this with other examples of on-site architectural drawings, preserved for a variety of reasons, the question of the retroactive impact of construction drawings is examined. (For example, Giacomo della Porta and Domenico Fontana inscribed a true scale section of the dome of St. Peter’s onto the floor of San Paolo fuori le mura, a drawing that was removed sometime in the 18th century. However, the drawing probably influenced the construction of seventeenth century domes in Rome, in particular, San Andrea della Valle.) Certainly, the notions of drawing scale and surface are central to these examinations, as well as their fixity to the architecture itself. By broadening the traditional understanding of a construction drawing as devices to translate drawing to building, this paper demonstrates how the life of such drawings can continue to have influence long after the building site has fallen silent

Jonathan Foote, Ph.D. is an associate professor at Aarhus School of Architecture, Denmark. Previously, he taught at Cal Poly San Luis Obispo and Virginia Tech’s Alexandria Campus (WAAC). His research concerns the architectural translation between ideas and materials and the significance of the workshop as a site for imagination, where he has published on the drawings

and workshop practices of various architects, including Michelangelo Buonarroti, Francesco Borromini, and Sigurd Lewerentz. In addition to his teaching and academic work, Jonathan runs a design research studio, Atelier U:W, which partners locally and internationally on special projects in design and fabrication.

jofa@aarch.dk

10.35-10.50

Marion Cinqualbre & Olivier Cinqualbre

Independent paper conservator, specialised in modern and contemporary art | Paris | France

Architecture curator / Head of the architecture collection / National Museum of Modern Art / Centre Pompidou / Paris

Industrial Graphic Products for Architecture Drawings: The Use of Zip Films

After the Second World War, the need for rebuilding destroyed edifices and rehousing an important amount of the population encouraged builders to turn to new construction techniques as well as new materials. These changes in construction also showed in the drawing practice. The development of industrial drawing supplies is to be understood within this context, in which zip films were popularized.

Zip or zipaton are nicknames commonly used by French architects and are derived from one of the first known brand, Zip-a-tone. They refer to color or screen overlays that are composed of a transparent plastic sheet covered on one side by a layer of pressure-sensitive adhesive. These films are pre-printed with colored transparent ink or opaque black ink.

Zip films have thin and flexible characteristics, making them difficult to dissociate from the paper they are stuck on. Their self-adhering properties made them easy to use and significantly time-saving. On top of these practical benefits, zip films were perfectly adapted to the architecture agencies' practice. Their transparency allowed their use on drawings and maps on tracing paper and their reproduction by a photographic process. The extensive array of textures available perfectly matched the technical drawing standards and the whole range of color attracted the imagination of creators. These particularities may explain its massive success.

Zip films are perfectly fitted for the practice of this time, and their use drastically contributed to transforming architects' renderings. At that time, zip films are newly available products and therefore undeniably modern. Their industrial nature made them the perfect media in the search for an invariably mechanical, straight, uniform and standardized aspect.

A new style emerged, a different aesthetic rose. The Californian architects experienced with zip right away including it in the Case Study Houses drawings. And following them closely, the European architects engaged in the reconstruction adopted the films. In France, Le Corbusier is the first one to grasp the potential, as made evident in the few pages dedicated to zip in *Le Modulor II*, 1955.

Our paper intends to present the material aspects of this material: its aspect (different kinds of textures and colors) and nature (as an industrial product its composition changed over time), how it was used and applied (tools and techniques) and for what aesthetics (presentation of a variety of drawings from the Centre Pompidou, the Fondation Le Corbusier and the MoMA collections). As well as a presentation of its influence on the way to conceive a drawing, we will draw guidelines to identify its presence in the architecture collections and recommend some preventive measures for conservation.

Marion Cinqualbre is an independent paper conservator, specialized in modern and contemporary art, based in Paris. In 2014, she initiated the ZIP Project, which studies architecture drawings from the second half of the 20th century using zip films, focusing on three collections (Centre Pompidou, Fondation Le Corbusier and the MoMA) and with the assistance of two research facilities (the French National Library and the French Cultural Heritage Institute).

cinqualbrem@gmail.com

Olivier Cinqualbre was trained as an architect and an architectural historian. Since 2003, he is the head of the architecture collection at the French National Museum of Modern Art, Centre Pompidou. As a curator, he has been designing architecture exhibitions and directed the associated publications for the last 30 years. Notable exhibitions include *Pierre Chareau (1993)*, *Renzo Piano, un regard construit (2000)*, *Robert Mallet-Stevens (2005)*, *Richard Rogers (2007)*, *Le Corbusier, Les mesures de l'homme (2015)* and *UAM, une aventure moderne (2018)*.

olivier.cinqualbre@centrepompidou.fr

11.10-11.25

Break

Session 5 (part b) *Tools of Making*

Moderator **Jodi La Coe**

11.25-11.40

Lisa Landrum

PhD | M.ArchII | B.Arch, MAA, MRAIC, AIA | Associate Dean (Research) | Associate Head & Associate Professor
Department of Architecture | Faculty of Architecture | University of Manitoba | Winnipeg | Canada

Tableaux Vivants: Tables and Stages of Architectural Striving.

"The charm of the table is to find yourself at it." - Francis Ponge³⁰

The more absorbed we become in our work, the more our worktable recedes from awareness. Yet, without its tacit support, resistance and receptivity, our work would be placeless, aimless and lifeless.

In an era of digital desktops, hand-held devices and hyperlinked routines, settling down to work at a physical table may seem an antiquated practice; but a table's delimiting space and focused occasion are all the more important amid today's limitless mobility and perpetual distractions. What we confess of our iPhones, the poet Francis Ponge once confided to his humble writing table: "Table, you're crucial to me."³¹

Worktables labored over by architecture students, year after year, are silent witnesses to a continuous life of learning and discovery – a *secret* life hidden in plain sight. These worn but stable surfaces receive and record efforts of heuristic making. The worktables' marks, drawings, doodles, scratches, scores and stains are tell-tale traces attesting to the pleasurable difficulty of design. These impressions chronicle the multitude of deliberate, tentative and serendipitous quests shared and accrued over decades. Students come and go; worktables linger, receiving, again and again, ever-changing yet repeatable creative processes. The table – "a memory placed at my elbow"³² – puts new students tacitly in touch with the work of students past.

This paper interprets the worktables of architecture students as sites of dramatic knowledge construction. Like a theatrical *chōra*, these tabletops are stages of striving, dramatizing events of deliberation and liberation, intention and mistake, reason and whimsy. They are, according to Marco Frascari, "eidetic surfaces,"³³ revealing the layered workings and reworkings of sustained design processes, potently intermingling descriptive constructs with speculative constructions.

This essay is guided by the author's scholarship on the origins of architecture's performativity in ancient theatre and by particular circumstances of summer 2018 – when the 60-year-old student worktables in the architecture school where the author has taught for a decade were replaced with new furniture. In this change, the universe of gestures enacted by generations of students was replaced by the *tabula rasa* of one Herman Miller. The challenge of re-inhabiting these "clean slates" as *tableaux vivants* will be demonstrated by two pedagogical experiments, whereby students appropriated their tabletops as transformative architectural sites: turning them into desktop theatres and cabinets of curiosities, as inaugural acts for designing public institutions of performance and musing.

Lisa Landrum is Associate Professor and Associate Dean (Research) in the Faculty of Architecture at the University of Manitoba in Winnipeg, Canada. She is a registered architect in New York State and Manitoba. She holds a B.Arch. from Carleton University, and an M.Arch. II and Ph.D. in the History and Theory of Architecture from McGill University. Her research on dramatic agencies of architecture and architectural theory has been published in several edited books, including *Architecture as a Performing Art* (2013), *Architecture and Justice* (2013), *Architecture's Appeal* (2015), *Economy and Architecture* (2015), *Chora 7* (2016), *Filming the City* (2016), *Confabulations: Storytelling in Architecture* (2017), and *Reading Architecture: Literary Imagination and Architectural Experience* (2018).

Lisa.Landrum@umanitoba.ca

11.40-11.55

Sofía Quiroga Fernández

PhD Lecturer | Department of Architecture at Xi'an Jiatong Liverpool University | Suzhou | China

The Model as an Experimental Tool: The Moholy Nagy's Lighting Devices

The Moholy-Nagy light device was built as a model for the scenography space to experiment space modifications through the mechanical movement, creating changes of light and colour. It incorporated the movement, the mechanical energy and the industrial aesthetics in the work of art. Moholy-Nagy worked in the "Light Space Modulator," also known as "the architecture of light," for eight years from 1922 to 1930, developing several sketches and designs and making the final drawings and model with the collaboration of the Hungarian Architect Stefan Sebök. The AEG Company built the Device, and it appeared for the first time in the Werkbund exhibition held in Paris in 1930, where the image appeared as an autonomous aesthetic object. He reduced the techniques of industrial production to an exercise of formal abstraction; filmed in the film "White, Black, Grey," Moholy-Nagy collected the kinetic quality of the device in the abstract films of the time. He would later use the knowledge acquired from it to achieve the effects reflected by the city of the future in the frames of the film "Things to Come," directed by William Cameron Menzies in 1936. Moholy-Nagy managed to transmit –in a 90 seconds' frame– the atmosphere and dynamism of the city of the future through images based on the objects included in industrial processes.

He defined the space light modulator as a mechanism to demonstrate the phenomenon of light and movement, trying to take to space the ideas that appear in his texts, where he poses new media as creative resources, not

³⁰ Francis Ponge, *The Table* [La Table, 1991], trans. C. Zamponi (Cambridge, MA: Wakefield Press, 2017), 50.

³¹ *Ibid*, 76.

³² *Ibid*, 9.

³³ Marco Frascari, "Horizons at the Drafting Table: Filarete and Steinberg" in *Chora 5: Intervals in the Philosophy of Architecture*, ed. Alberto Pérez-Gómez and Steven Parcell (Montreal and Kingston: McGill-Queens University Press, 2007), 179-200.

only capable of reproducing reality but as instruments of creation. Some authors refer to this type of work as a multimedia structure, concerning the implication of dimensions, optics, kinetics and time for its restructuring, continually altering the relationship of traditional static order. His studies and experiments currently constitute a solid base for numerous researchers regarding space and perception.

The electric stage suffered several alterations to keep it working in several exhibitions around Europe and America. After Moholy passed away, his widow, Sybil Moholy, donated it to the Busch-Reisinger Museum at Harvard in 1956. After suffering several damages, they were finally reconstructed in 1970 because of an exhibition held in New York at the Howard Wise Gallery led by Harvard art historian, and researcher Nan Piene, where others contemporary explorations around lighting were shown. Two copies were made, one for this exhibition and the other one for the Venice Biennale. These reproductions were kept and sent to the Bauhaus Archive in Darmstadt, and the Van Abbemuseum, where the original suffered several damages during a KunstLichtKunst (Tungsten Art) exhibition.

Dr. **Sofia Quiroga Fernandez** is an Architect, researcher and educator. Currently, she is a Lecturer in Architectural Design and the Professional practice in the Department of Architecture at Xi'an Jiatong Liverpool University. She taught previously in Madrid at CEU San Pablo University of Architecture. She collaborated with other universities as a guest lecturer, including UAM (Madrid Autonomy University), ETSAM (Theory and Practice of Projects, Architectural Projects Department, Madrid Polytechnic University). Her research is focused on the light technology development, the relationship between Architecture and Technology and how their inclusion in space have transformed the spatial perception.

Sofia.Quiroga@xjtlu.edu.cn

11.55-12.10

Bruno Silvestre and Armando Rabaça

Architect | MArch (DArQ UC) ARB | Course Leader, BA (Hons) Architecture | Department of Architecture and Landscape | Kingston School of Art | London | UK

Professor Auxiliar | Departamento de Arquitectura | FCT Universidade de Coimbra | Portugal

The Life of Secret Architectural Drawings:

Considerations on the Generative Power of the Sketch through Álvaro Siza's Archive

We tend to think of architectural drawings as rigorous representations of buildings. When disclosed to the world – a publication, a contractor, or the web – plans, sections, elevations, and perspectives represent the architectural artifact in its entirety, or a project nearing its completion. Rather than focusing on representational drawing, this paper will explore the use of drawing as a generative tool.

Representational drawings are a synthesis of a complex journey of project-making through which a multitude of aspects are addressed and coordinated – issues of functional, financial, regulatory, technical and topographical order. For many, sketching is a fundamental instrument to construct the path towards this synthesis. Sketches constitute, in this sense, the secret life of architectural production.

In some cases, as with Mies van der Rohe's, project-making is to a large extent a mental process, in which the axial one-point perspectives of sketches operate as a test to validate a previously established idea. In other cases, as in Le Corbusier's, sketches have rather a generative role, operating as a tool to reinterpret history, to explore and test spatial possibilities, and ultimately to rehearse architectural experience. It can be argued that this is also the case of Álvaro Siza, for whom sketching is a vital instrument of spatial and formal experimentation. What interests us here is the relationship between the way sketches operate in the process of architectural conception and the spatial and formal outcomes in the configuration of architecture. Álvaro Siza's creative process is a paradigmatic example of the use of drawing as a vehicle to inventiveness, illustrating the generative power of sketches and their speculative, investigative, adventurous and self-provocative role in the process of project-making.

This dichotomy between a process of mental conception and a process based on experimentation through drawing is of particular relevance today as it is widely acknowledged that the sketch has been losing ground in contemporary architectural production. By investigating the archives of Siza, this paper will argue for the comprehensive role of the sketch as the architect's most effective instrument of the intellect: generally uncommitted to convention and liberated from dimensionality the sketch operates as a reflective instrument in the study of historical references, a prospective tool in the surveying of a place and a generative apparatus in the conception and development of an architectural artefact. The paper will then conclude with a reflection on the instrumentality and currency of the sketch in architectural education.

Bruno Silvestre, Architect and Senior Lecturer in Architecture. Graduated in 2000 from the Department of Architecture at the University of Coimbra, Portugal. After seven years working with Henley Halebrown in London, in 2010 he founded brunosilvestreARCHITECTURE, a practice currently involved in projects in UK and Portugal. In 2013 the practice won an international competition for the largest social housing scheme in Lisbon for a generation, a project recently listed for the RIBA International Award 2018. Since 2007 Bruno has been involved in Architectural Education. He is currently the Course Leader for the Undergraduate Architecture Programme at Kingston School of Art, where he teaches Design Studio and History and Theory of Architecture.

B.Silvestre@kingston.ac.uk

Armando Rabaça is an architect and Assistant Professor of Design Studio and Architectural Theory at the Department of Architecture of the University of Coimbra, where he has taught since 1998. He holds a PhD in Architecture from the University of Coimbra with a thesis about Le Corbusier's formative years. He is editor of the book *Le Corbusier, History and Tradition* (Coimbra: Coimbra University Press, 2017), author of the book *Entre o Espaço e a Paisagem* (Coimbra: Dara, 2011), and has

contributed to a number of architectural periodicals. In 1910 he won the Fernando Távora Award (a travelling Fellowship). His main research interests are nineteenth- and twentieth-century architectural theory and urban design.

rabaca@uc.pt

12.10-12.25

Claudia Conforti, Maria Grazia D'Amelio & Lorenzo Grieco

Full Professor | History of Architecture | Department of Engineering | University of Rome Tor Vergata | Italy

Professor | History of Architecture | Department of Engineering | University of Rome Tor Vergata | Italy

PhD student | Department of Engineering | University of Rome Tor Vergata | Italy

"Grande come il vero"

Full-size architectural models in the modern period

"la lontananza era un inimico, con il quale bisognava combattere a campo aperto"
G.B. Bernini

Historical contracts and documents usually distinguish between the models made as a test and those to be exhibited. Trial models, constructed in real size, served as an important on-site instrument in controlling proportions and decorations, the reduction in scale being inappropriate when the measures of the project were considerable. For this reason, since modern times, architects have often been using full-size models, reproducing portions of buildings, to be placed on site and to be modified until the desired result. They guarantee a metric verification which is useful for a realistic cost analysis and, sometimes, they serve as a provisional completion of buildings.

For instance, while working on the Saint Peter's baldachin (1624-1635), Gian Lorenzo Bernini changed its project many times. At first, he realized a wooden full-size model of one of the four helical columns. It was used as a reference to sculpt the wax mold for the lost-wax casting. The final bronze columns were then crowned by two temporary wooden structures: real size models to test the sculptor's solutions for the covering. It was repeatedly modified on site by the artist and stood on the columns for years, before being translated into the definitive wooden structure, coated with copper and gilded. The cost of a such detailed model was justified by Bernini's need to deal with the gigantic dimension of the crossing of the basilica (about 100 meters high) and the considerable size of the baldachin (about 30 meters). He would have done the same, years later, while designing the innovative colonnade of Saint Peter's square (1656-1667).

The realization of detailed scenographic models, in wood, tow, plaster, iron wire, papier maché, fabric, straw or other light materials, easy to assemble and to modify, was not uncommon in early modern Rome. Bernini surely knew about a full-size model commissioned by Michelangelo and installed on site to evaluate his design for the cornice of Palazzo Farnese (1546). The practice of real-size models was adopted directly from sculpture, where it was very diffused. For example, around 1585, a clay model of saint Peter's statue was raised on the Trajan's column to "per vedere come tornava aloocchio per la grandezza in circa di detta colonna".

Requiring extraordinary artisanal skills, the construction of full-size models stems from the tradition of ephemeral architectures for triumphs and feasts. Its convenience will result for many years to come: during the building of the National Monument to Victor Emmanuel II (1885-1935) three wooden columns were mounted on site to check the proportion of the porch and to examine possible changes. This contribution considers, inter alia, the models for the propylaea of the EUR quarter and those set up to complete buildings during the visit of Hitler in Rome.

Full-size models are born as ephemeral products and their conservation is against nature. Due to their dimensions and materials, the major part could not be conserved and is now lost. We can only find their trace in site accounts. However, the tradition has partially survived: still in 1995 Renzo Piano built a 1:1 model reproducing a section of the wooden shell for the Jean-Marie Tjibaou Cultural Centre, currently conserved with other structures outside the architect's office in Genoa.

Claudia Conforti, is Full Professor in History of Architecture at Department of Engineering of the Enterprise, University of Rome «Tor Vergata». She is member of the National Academy of San Luca and of the Perugia Academy of Fine Arts; editorial board of «Casabella», «Rassegna di Architettura e Urbanistica», «ArtItalies» (Paris), «Abaton» (Madrid), «Città e Storia». Her works focuses on early modern and modern architecture in relation to construction, city and society: topics that she has discuss in numerous publications, articles, monographs, exhibitions and conferences.

conforti@uniroma2.it

Maria Grazia D'Amelio is professor on History of Architecture at the Faculty of Engineering, University of Rome Tor Vergata. Her studies are turned to the XVI-XVII Century in Italian Architecture and that of the first XX Century. She has published a volume on the obelisk of the Foro Italico in Rome and is currently working on a monograph on the project of Gian Lorenzo Bernini for Baldachin in St. Peter's Church in Vatican.

damelio@uniroma2.it

Lorenzo Grieco is currently a PhD student at the University of Rome Tor Vergata. His research focuses on church architecture and new neighborhoods in the second half of the XX century. He has published articles on XVI century arts and on contemporary architecture in Rome. He has worked for many architectural practices in Belgium, Spain and Italy.

lorenzo.grieco@uniroma2.it

Session 6 (part a) *Tools of Making*

Moderator **Rebecca Williamson**

9.50-10.05

Andrew Clancy & Colm Moore

Architect | PhD MRlA | Professor of Architecture | Director of REGISTER | Department of Architecture and Landscape | Kingston School of Art | London | UK

Architect | PhD | Senior Lecturer | Director MArch | Queens University | Belfast | Ireland

Between Strategy and Detail – Kay Fisker and the Conditions of Life

“A building should be a shell around the life to be lived within it, a shell that will satisfy material as well as intellectual demands. The architect creates not life, but conditions of life. Raymond Unwin once said: “We cannot create life, but we can form the channels of life in such a way that the sources of life will flow into them of their own accord.””
Kay Fisker ‘The Moral of Functionalism’ 1947.

This paper explores the relationship between the drawings and the buildings of Kay Otto Fisker, with particular reference to his seminal Hornbaekhus housing project in Copenhagen. This monumental block, measuring 200m x 80m, and comprising of 290 apartments about a vast internal garden proved to be a seminal moment in the evolution of Danish social housing and the city of Copenhagen, with the birth of what became called ‘The Kilometer Style.’ In both its scale and its economy of means, it opened up new horizons in the scale and nature of the housing projects that were to follow by Fisker and other Danish architects over the following half-century.

This was more empathetic functionalism than found elsewhere. The same year that the building was commissioned (1922) Corbusier published his plans for the *Ville Contemporaine* - a utopian community based around the avoidance of friction, and with functional efficiency as its maxim. Fiskers architecture establishes an infrastructure of encounter. It builds itself from life, from a humane consideration of neighborliness. The thesis might be put that ‘bigness’ (for want of a better word) does not preclude nuance. Indeed, with the scale offered by this project the tuning of the elevation and its relief represents the potential for something more. Nuance writ large offers a space for a gentle civic expression.

Despite its significance, only six drawings survive. A plan, bursting at the margins of the page. Two meticulously drawn elevations. Three sheets composed of window and door openings at various scales. These six sheets describe the making of a city as a conversation between strategy and detail. Their economy and precision describe the minimum required to enable inhabitation. Although not the entire set of drawings for the building these are representative of how Fisker worked and of the qualities that made his buildings so successful. Those who studied under him spoke of exercises that involved the repeated drawing and re-drawing of facades - a constant restless tuning and adjustment of detail and order.

This paper explores Fiskers drawings and work method, and posits that it is this oscillation between strategy and detail that Fisker sought the ‘conditions of life’ he aspired for his architecture to provide.

Andrew Clancy was educated in UCD, graduating in 2001. In 2008 he established Clancy Moore Architects, and the practice has gone on to numerous domestic and international honors including the Kevin Kieran Award for Practice Based Research (2013), the AAI Downes Medal (2014), and was included among the invited exhibitors in the 2018 Venice Biennale curated by Yvonne Farrell and Shelley McNamara. He completed his PhD by practice with RMIT in 2017. In 2015 he was Velux Visiting Professor in Aarhus School of Architecture. In Sept 2016 he was appointed Professor of Architecture at the Kingston School of Art.

A.Clancy@kingston.ac.uk

Colm Moore was educated in UCD, graduating in 2002. In 2008 he established Clancy Moore Architects, and the practice has gone on to numerous domestic and international honors including the Kevin Kieran Award for Practice Based Research (2013), the AAI Downes Medal (2014), and was included among the invited exhibitors in the 2018 Venice Biennale curated by Yvonne Farrell and Shelley McNamara. He completed his PhD by practice with RMIT in 2018. He is a Senior Lecturer in Queens University Belfast and is director of the M.Arch course.

c.moore@qub.ac.uk

10.05-10.20

Christoph Lueder

PhD | Associate Professor | Department of Architecture and Landscape | Kingston School of Art | London | UK

The Use and Abuse of Alexander Klein’s Graphical Method and Diagrams

During the 1920s the architect Alexander Klein devised an elaborate “graphical method” intended as a scientific tool to objectively evaluate spatial experience over time through corporeal mobility alongside economies of visual attention and “nervous strength”. Klein’s diagrams accrued meaning through their publication histories and the debates they provoked.

Amongst contemporaries, the “graphical method” was endorsed and promoted by Werner Hegeman, Leo Adler, Alexander Gins and Ernst Völter, but also elicited a series of precise counter-arguments by the functionalist architect Hugo Häring.³⁴ Ernst Löwitsch reframed Klein’s diagrams and arguments to found a new science of space that drew on psychoanalysis to embrace cultural dimensions of space and perception. Löwitsch argued “the floor plan of a house is “choreography,” a spatial notation of dance, composed by the architect and experienced by the inhabitant”.³⁵ In the English speaking world, the architectural theorist Catherine Bauer reduced the scope and nuance of Klein’s methodology to a singular paradigm, “House for Frictionless Living”.³⁶

From this point onwards, Klein’s diagrams lived contrasting lives in different cultures. In the 1970s Robin Evans³⁷ solidified Bauer’s misapprehension of the graphical method into an indictment of Functionalist ideology. On the other hand, Attilio Marcolli (1972) incorporated Klein’s diagrams into his “teoria del campo” and Giorgi Grassi (1967) into his definition of type. Concurrently, Myra Warhaftig appropriated, repurposed and inverted the graphical method for her feminist agenda, while, at the other end of the spectrum, Frank Gloor (1970) transformed and adapted it to conceive of a scientific method classifying degrees of flexibility. Throughout its disparate reception histories, the *graphical method* has oscillated between methodology of scientific evaluation; choreography of everyday life; emblematic indictment of Functionalist ideology; and catalyst to new working methodologies.

Alexander Klein was forced to emigrate from Germany and reinvented himself as an urban planner in Israel. His major text during this phase, “Man and Town” (1948) failed to produce the intense controversy and debate that the “graphical method” had provoked two decades earlier. Nevertheless, the young Kevin Lynch took note.³⁸ In his later work of the 1960s, Lynch, together with Donald Appleyard proposed perhaps the most radical antithesis to Klein’s architect as scientific choreographer: their diagrammatic interviewer registers, superimposes and consolidates trajectories and perceptions in search of a shared image.

Christoph Lueder is Associate Professor in Urbanism and Architecture at Kingston University London. He researches and writes on the 20th and early 21st century history of architecture and urbanism, with a particular concentration on the pervasive roles of diagrams as analytical, generative, narrative and critical devices. His theoretical work is complemented by field research on informal urbanism, most recently in collaboration with academic partners and communities in Jabal Al Natheef, Amman, Jordan; Ban Krua, Bangkok, Thailand; Navi Mumbai, India and Cerro de la Cruz, Valparaiso, Chile. He previously taught at University of Stuttgart and ETH Zürich and has practiced architecture and urban design since 1993.

C.Lueder@kingston.ac.uk

10.20-10.35

Elizabeth Deans Romariz

PhD Candidate | History of Art | University of York | UK

Presentation Albums as Architectural Documents and Objects

Humphry Repton is often credited as the first to produce presentation albums—popularly known as his ‘Red Books’—that fashionably packaged a series of design drawings to present as a gift to esteemed clients. However, such presentation albums that contain polished presentation drawings ordered in a fixed sequence of pages have a much longer history than is known. Since the late sixteenth century, architects have bound geometric drawings, contextual renderings, and written content to present proposed designs to clients in the form of the book. Indeed, architects conceived presentation albums to lead clients through an architectural experience that conveyed space and materials through artistic convention. In doing so, architects translated abstract ideas into formal and cohesive narratives by constructing a visual and textual language through drawings.

The essay aims to explore this ‘visual and textual language’ of architectural drawings in the context of presentation albums to reveal convention and continuity in professional architectural practices. I consult albums made by the hands of Britain’s most esteemed architects, like Sir John Vanbrugh, James Leoni, and James Gibbs, to trace analogous approaches for communicating design from about 1660 to 1740. I examine presentation albums through stylistic and formal analysis to juxtapose their significance as visual and textual documents that articulated spatial concepts through a series of aesthetic choices and as objects that embody cultural tradition and social meaning associated with the form of the book, or ‘book-ness’.

In considering albums as containers for thematic bodies of drawings, several important questions loom into view: how can we compare their authority and efficacy to other methods of presentation (e.g., large folio presentation drawings and scale models). How do presentation volumes capture and emit the ‘aura’ of the

³⁴ Hugo Häring, “Stellungnahme des Architekten zu den Forderungen der Hausfrauen und der Sozialhygieniker und die Grundrißbildung und Raumgestaltung,” in Reichsforschungsgesellschaft, Technische Tagung in Berlin 1929, 7.

³⁵ Franz Löwitsch, “Dynamik des Wohnens der Neuzeit und von der Rhythmik des Wohnens”, *Innendekoration: mein Heim, mein Stolz*, vol. XLI, no. 1, (January 1930), 31.

³⁶ Catherine Bauer, *Modern Housing* (Boston: Houghton Mifflin, 1934), 203–4.

³⁷ Robin Evans, “Figures, Doors and Passages,” *Architectural Design* 48, no. 4 (1978), 267–68.

³⁸ Kevin Lynch, “The Form of Cities,” *Scientific America*, Vol. 190, No. 4 (April 1954), 54–63.

architect; how does the architectural knowledge of the client influence production; and how does the physical location of drawings change the essential meaning and function of the architectural drawing? I argue that architects whose role as 'intelligent and conscientious translators' was to effectuate an impression of a building and its architect through the familiar experience of reading a book.

As practice and as a product, presentation albums carry significant meaning for architects whose professional reputation relied on relationships with clients. All of the works presented demonstrate a compelling unity of thinking and making that may bring us closer to understanding the British architect in a professionally ambiguous period. As a result of this essay, I hope to explicate presentation albums as clever devices by virtue of their style and form—as document and as object—to shed light on a new facet of architectural drawings through a wholly-integrated approach.

Elizabeth Deans Romariz is a PhD Candidate in the History of Art at the University of York. She is the recipient of the 2018 Society of Architectural Historians of Great Britain PhD Scholar Award for her dissertation on 'Architectural Albums: Educational and Professional Tools for British Architects, 1660-1740'. With a background in design history and material culture, Elizabeth looks at architectural drawings as objects that shaped architects' daily methods for articulating knowledge, skill, and identity. The period she examines is particularly exciting as it parallels the professionalization of the architect from the post-restoration period up until the academy movement from the 1740s onwards.

ed925@york.ac.uk

10.35-10.50

Samuel Korn

PhD student | Research Assistant | Universität Kassel | Architektur Stadtplanung Landschaftsplanung

How a Wrapping Paper Transforms its Contents

The talk's topic is the drawings for the design of O. M. Ungers' environment City Metaphors for Hans Hollein's exhibition MAN transFORMS (1976), its staging's typological origin that appears to hark back to a visual exchange with Rem Koolhaas and Madelon Vriesendorp as well as its artefacts' afterlife in Hollein's archive and in an exhibition at ETH Zurich in 2016.

MAN transFORMS – the opening show of the Cooper-Hewitt in New York – was conceived by director Lisa Taylor together with Hollein. It explored the potential of the newly founded design museum in a series of commissioned environments and configurations of everyday objects as well as collection exhibits in order to address design as a driving force of the environment. Within this framework, Unger's City Metaphors contribution acted as an environment of environments: as a street-like scene it manifested a setting to be experienced by the visitors; as a display device for a collection of image material it made Ungers' compiled atlas of the built environment come to the stage, and acted as a model for an architectural morphological methodology.

Ungers' contribution to the show was a constellation of architectural drawings, images and words, which reflected on architectural knowledge and design as a thinking and designing in images, metaphors, and analogies. The talk will focus on the drawings produced especially for the spatial environment. More specifically, the talk will discuss the relation of several designs discarded in the process that Ungers nevertheless sent to Hollein, including the photocopy of a large scale sketch that appears to be an architectural perspective of the larger spatial surroundings of a room, which is partly depicted in Madelon Vriesendorp's Freud Unlimited (1975). The photocopy was used as wrapping paper to transport Ungers' design and text materials from New York to Vienna in January 1976 and since then lived a secret life in a cardboard box – until it was put on display together with drawings from the Ungers' Archive in Cologne, exactly 40 years later in Zurich.

Beginning with the photocopy, apparently nothing more than debris of the creative exchange between colleagues that was used to transport the actual designs, the presentation traces the origins and the further migration of imagery, forms and structures found in Unger's disjointed materials. The drawing, first and foremost an instrument for imagination and communication, is reactivated as a springboard to bridge an undocumented gap and approximate the relation of design approaches involved in City Metaphors' history of thought. Thus, the talk will shine a light on the interplay between various forms of individual and shared as well as unclaimed authorship that form the invisible foundation for City Metaphors' spatial design.

Samuel Korn is a researcher in architectural and curatorial design, focusing on postwar architecture, art and architecture exhibitions as well as the development of the exhibition and museum culture as we know it today. He is a research assistant at the University of Kassel (ASL, Theory of Architecture and Architectural Design), where he also teaches. His PhD research is focused on the development of the exhibition series documenta and its expansions into the urban fabric. Curatorial projects include MAN transFORMS: The Documents (co-curated with Laurent Stalder) at ETH Zurich in 2016 and a collaboration with Wilfried Kuehn for Alles ist Architektur at Museum Abteiberg and Hollein at MAK Vienna in 2014.

samuel.korn@asl.uni-kassel.de

11.10-11.25

Break

Session 6 (part b) *Tools of Making*

Moderator **Eleanor Suess**

11.25-11.40

Anđelka Bnin-Bninski

PhD | Architect | Teaching Assistant | Faculty of Architecture | University of Belgrade | Serbia

Working with the Gap: Measuring and Continuous Drawings

This work looks at translational and transitional gaps within the drawing process as a potential of its peculiar continuity while examining whether these endings, interruptions, and discontinuities contain a paradox of continuous, delicate and active life of drawing. We consider the translational gap between drawing and building, as explained by Robin Evans, but we also point out inconsistencies, differences, and the distance between drawings and models, within the process of project design. We emphasize the instability as a dynamic force of architectural drawing contained in the activities of measuring and dimensional analysis. Measuring is here fundamental for architectural drawing, its inhabitation and space studies. We search for continuity of drawing beyond material objecthood. A drawing is omnipresent in gestures on site, in drawing gestures, and in gestures of drawn space usage.

The argument is built on a complex research platform that includes philosophical, theoretical and drawing based investigations, relying on Marco Frascari's explanations of two key terms: technometry and embodiment. The technometry is setting a drawing right in-between disciplinary domains, in the field of tensions between architect and builder, as a measure of both – theoretical and practical representational approaches. We consider the notion of the embodiment as an essential concept that reflects various modalities in relational chain drawing – dimensioning – measuring – inhabiting. To examine possibilities of work with(in) the gap in architectural production we look at specific drawings of architect Branislav Milenković.

This Milenković's study is based on his criticism of housing standards in Yugoslavia after the Second World War, and it goes over and above to question time relations in the design process regarding changeability of the space usage. It is a part of the architect's research started during the sixties and seventies when he worked as a practicing architect, researcher, and professor. His dimensional instrumentarium is a theoretical apparatus that gathers five drawings, and it is particularly on several grounds. It is a result of project design, theoretical and philosophical examinations, conceived as a design tool for dimensional reasoning. Milenković researches body scales and proportions and claims that dimensional analysis is a permanent, on-going procedure in project design. We take this idea further to discuss observing, studying and measuring spatial relations within inhabitation movements and spacing between objects and gestures of usage.

Milenković's dimensional drawings are published in his book for educational purposes Introduction to Architectural Analysis 1, that presents his broader architectural research and teaching methodology. This book is seminal for our professional context, and it's been reissued in six editions (from 1972 to 2009), while these dimensional drawings were kept, copied in their original form. In this investigation, we underline their potential for a present-day drawing research methodology. By analyzing in a parallel the notion of the gap in architectural production and the concept of dimensioning the gap in spacing relations, we aim to discuss measuring activities as an opening towards the idea of continuous drawing.

Anđelka Bnin-Bninski, PhD, is an architect and interdisciplinary researcher. She is teaching studio design and methodology courses at the University of Belgrade – Faculty of Architecture and she is an associate researcher in the laboratory Gerphau in Paris. She specialized in the theory of arts and media (University of Arts in Belgrade, 2009) and philosophy of architecture (as a French Government grant recipient, École Nationale Supérieure d'Architecture de Paris La Villette, 2014). Her recently defended PhD thesis The role of the architectural drawing in the dynamics of living space partition is in the fields of philosophy and theory of architectural drawing and drawing practice in structural analysis. Her current investigations are focused on strategies and tactics of architectural drawing research.

a.cirovic@arh.bg.ac.rs

11.40-11.55

Aaron Tobey

PhD Student | Yale School of Architecture | New Haven | USA

Promiscuous References and the Becoming Discontinuous of the Architectural Drawing

Since the codification of the modern discipline of architectural drawing in the West with the split between drawing and building as distinct forms of knowledge and practice as epitomized in Alberti's *De Re Aedificatoria*, the two-dimensional representation of buildings has required two systems of reference; one between the representation and the building being represented; the other internal to this representation, connecting its elements and translating across viewpoints to produce a coherent, whole image.

More than any other aspect of architectural drawing, it is the changes to how systems of internal reference are

formed and used that trace the changing ways architects have imagined space, materiality, labor, and their interrelationship in drawing, design, and construction. Focusing on the conceptual and practical shift in drawing production that occurred alongside the widespread introduction of CAD software in the 1980s, this paper will follow how systems of reference used for the production and reading of drawings were co-constructed with a broader technical and epistemic shift.

Though the means of referencing one drawing while producing another and relating two distinctly scaled drawings are respectively as old as translucent paper and codified systems of naming and measurement, these operations, the means by which they are achieved, and their implications for design began to be understood and applied differently with the introduction of computers into architectural practice. Existing since the earliest CAD software, the capability to dynamically reference other drawings as they were updated, was talked of by many at the time as providing radical time-savings over traditional drafting, or the prominent pin-bar whiteprint method, but also as something that fundamentally transformed how architecture was conceived and drawings were produced. In this transformation, the relational system that had existed to connect the types and scales of drawing used to describe a single building was internalized into the practice of drawing itself.

This transformation is indicative, not of a reversal, or overcoming of the Albertian split, but rather of its gradual displacement into techno-informational apparatuses, as the internal and external reference systems of architectural drawings began to merge. As drawings became relations of other, referenced drawings, references proliferated, nested, concatenated, and created new informational ecologies, that nonetheless maintained drawing as a separate, even if radically redefined form of knowledge and practice spread across a globalizing field of architecture and its building projects. Following the proliferation and entanglement of references through the more recent superseding of drawing by parametric modeling using families of referenced components that change depending upon their meta-informational relational context, and from which any necessary drawing can be preferentially produced, this paper traces the prehistory of how, notwithstanding the diffuse nature of digital information networks and international divisions of labor, providing singularly coherent answers to the questions “where is your drawing?” and “who authored this drawing?” has become a proposition fraught with social and material implications.

Aaron Tobey is a PhD student at Yale University studying architectural history and theory, currently researching the relationship between digital tools, forms of representation, and political agency. He attended the Rhode Island School of Design for his Master of Architecture and obtained his Bachelor of Science in Architecture at the University of Cincinnati during which time he also attended the *École Spéciale d'Architecture* in Paris. His academic work has explored the intersection of global trade, new media, and perceptual psychology in the social dimensions of architectural space. He has worked professionally for the architectural visualization firm, Studio AMD, and for a number of small architecture firms around the United States.

aarontobey@gmail.com

11.55-12.10

Tim Gough

Senior Lecturer | MA(Cantab) DipArch RIBA | Department of Architecture and Landscape | Kingston School of Art | London | UK

Beyond the Closure of Representation: How to do Things with Drawings

“Le concept de mimesis n'est pas seulement insuffisant, mais radicalement faux... Aucun art n'est imitatif, ne peut être imitatif ou figurative...”

Gilles Deleuze and Félix Guattari, *Capitalisme et schizophrénie - Mille plateaux* (Paris: 1980), 374.

Robin Evan’s essay on the translation of drawings is a liminal symptom of what in the sciences (with Kuhn) would be called a paradigm shift. The text plays on the edge of an outmoded “image of thought” (in Deleuze and Guattari’s terms). That gives it its continuing interest, but it also marks its limitation. The text hints at another way of thinking but draws the resources of its arguments from remaining within the existing one.

The image of thought in question is that of representation. Like much other writing on representation both inside and outside architectural theory - from Husserl’s “crisis” through Vesely’s “conflict” to Carpo’s “identity” – Evans questions representation without drawing any fundamental conclusions from that questioning. He analyses drawing and building as if the former is essentially representational, even if the evidence he deftly summarises points to the inadequacy of this philosophical position.

This paper will propose a different ontology of architectural drawing. It is precisely by respecting the specificity of what architecture *does* with drawings that the representational prejudice can be questioned. Instead of translating into architecture an outmoded ontology of the artwork-as-representation, architecture’s essentially non-representational use of drawing shows on the contrary what art, beyond or before representation, in fact, is. This repositions architecture as paradigmatic for art, instead of its compromised off-spring.

Following Deleuze and Guattari’s philosophy of assemblages, the pertinent question is not “What do architectural drawings represent?” This implies (as does all representation) that they therefore somehow fall short of that thing; it is this supposed “falling short” which is the driving force of Evans’ text. The pertinent question is instead: what do drawings *do* within the assemblages and multiplicities with which they engage and within which they help to create the new?

These assemblages include the architect's office, the building site, the archive and buildings themselves in their after-lives. As Whitehead has shown, it is not a question of returning to the essence - for instance, the building as an idea that comes to be represented in drawings (Panovsky's *Idea*). Instead we ask: what are the conditions under which the new is produced? This is a question of the conditions of creativity.

If the concept of mimesis and the philosophy of representation is, as Deleuze and Guattari have it, radically false; if art is never imitative; then attempting to continue using those concepts to explain the drawing of architecture will fail to be true to the real [...].

Tim Gough teaches Design Studio 3.2 with Lena Emanuelsen at Kingston University Department of Architecture and Landscape, and lectures in the history and theory of architecture. He is partner in Robertson Gough, an artist-architect collaborative based in London. His research interests include the work of Gilles Deleuze, phenomenology and Roman Baroque architecture; he is currently working on a book about the ontology of architecture. Recently published papers include *Flows of Capitalism, Flows of Architecture* (Ardeh #3, 2018); *The Voids of Eisenman's Fin D'Ou T Hou S* (Kritische Berichte, 3/2018) and *Trans-architecture* (Footprint # 21, autumn 2017).

Tim.Gough@kingston.ac.uk

12.45 -1.45

Lunch Break

1.45-5.00

*The afterlife of drawings and models:
collecting, archiving, exhibiting and teaching*

1.45-2.20

Plenary Session | Invited Speaker **Olivia Horsfall Turner**
Senior Curator, Designs, V&A, and V&A Lead Curator for the V&A + RIBA Architecture Partnership, London, UK

Chance and change in the survival and significance of architectural drawings and models

Introduction **Matthew Wells**

Over the lifetime of an architectural design the way in which it is valued can change dramatically. A once-promising sketch can be tossed aside, an abandoned model can be cannibalised for a future possibility, a drawing can be preserved as personal memento of a specific moment, and a representation can be elevated to masterpiece status. Drawings and models can shift from being practical tools and expendable working materials to privileged and sometimes costly objects of aesthetic admiration and intellectual attention. Institutions play a particular role in this process of transformation through their practices of archiving, collecting and exhibiting, but despite their projected authority and ethos of immutability, even they are not immune to the changes and chances that help to determine significance. Through a series of examples from the holdings of the Victoria and Albert Museum, this paper will chart the unpredictable and unexpected ways in which value is ascribed and re-ascribed to drawings during their working lives and afterlives. From anonymous medieval and early-modern designs to a monumental drawing by Charles Robert Cockerell and annotated prints by Alison and Peter Smithson, the fortunes and misfortunes of some of the collection's drawings and models will expose the fluctuating status of these acquired and exhibited architectural representations.

Dr. **Olivia Horsfall Turner** is Senior Curator of Designs at the V&A, and the V&A's Lead Curator for the V&A+RIBA Architecture Partnership. She studied at Cambridge, Yale and University College London and held a post-doctoral fellowship at Trinity College Dublin. Subsequently, she worked as an Architectural Investigator at English Heritage and as a Historian with the Survey of London. In 2014 she joined the V&A where she looks after the national collection of design drawings, which documents the creative process in the applied arts and architecture from the fourteenth century to the present day. She lectures and publishes widely and has curated shows at the V&A, the Venice Biennale and the Tchoban Foundation Museum for Architectural Drawing, Berlin. A specialist in early modern architectural history, she is currently undertaking research on the Robert and John Smythson drawings in the RIBA collections. She is interested in the connections between drawing and thinking in the design process and the role of visual representation in exploration, documentation and communication.

o.horsfallturner@vam.ac.uk

Session 7 (part a) *The Afterlife of Drawings and Models:*

Archiving, Collecting and Teaching

Moderator **Matthew Wells**

2.25-2.40

Weiling He

PhD | Associate Professor | Director of the Academy for Visual and Performing Arts | Department of Architecture | College of Architecture | Texas A&M University | USA

Drawings for Interpretations:

Speculating on John Hejduk's Drawings in Relation to His Claims about Architectural Pessimism

This paper investigates John Hejduk's selected drawings archived at the Canadian Center for Architecture (CCA). The drawings were created between 1974 and 1984, a period of his work that overlaps with his interest in a condition he names architectural pessimism. The CCA acquired these drawings among "Hejduk's entire surviving fonds in 1998", which were "processed and described in 2009."³⁹

This paper asks two central questions; one an architectural conceptualization through specific characteristics established in architectural drawings: What are the visual properties in these drawings that may speak about architectural pessimism?; and another on post architectural conceptualization through the archiving process, both by the author and by the archive: Are there any specific events or dispositions related to these drawings that may speak about architectural pessimism, or its opposite? Comparing the findings, the paper presents a map of interpretations of these drawings. The author has conducted preliminary research addressing the first question; she will continue the research to address the second question.

In Hejduk's terms, his architecture entered a new stage of architectural pessimism with the making of The Element House.⁴⁰ Hejduk's drawings that were produced after this point possess ambiguous gestures and textual associations. In Cemetery of the Ashes of Thought (1974) and Silent Witnesses (1976), drawings elaborate oblique projections. In The 13 Watchtowers of Cannaregio and The House for the Inhabitant Who Refused to Participate (1979), colored sketches emphasize mystic sites. In Berlin Masque (1981), drawings appear in refined and rigid mechanical lines, or in stark and sketchy lines that seem repeatedly traced. As Eleni M. Constantine summarized, these drawings "become merely illustrations of a complex story."⁴¹

Is this "complex" story about architectural pessimism? Hejduk claimed that architectural pessimism was both a condition and a feeling of being trapped.⁴² His drawings are controlled rather than spontaneous, rigid rather than free, illustrating a condition of imprisonment. Meanwhile, Hejduk manipulated and intensified tactility in his drawings, to not only trigger but also trick perception and imagination. What appears in the drawing space suggests a mental labyrinth that has no escape.

This paper will speculate on the meaning of architectural pessimism in Hejduk's framework, compare it to the discourse on pessimism in philosophy, and interpret a series of distinct characteristics represented in Hejduk's drawings and their archiving process in relation to his claims about architectural pessimism. These discussions represent a minute facet of the afterlife of Hejduk's drawings.

Weiling He is a Chinese, US-based designer, an associate professor at the College of Architecture and director of the Academy of Visual and Performing Arts at Texas A&M University. Her scholarly research focuses on spatial metaphor, diagramming and visual thinking, and John Hejduk's early architectural work in relation to painting, poetry, and drawing. Her installation work focuses on transformations and illusions of disposable everyday objects.

weiling.he@tamu.edu

³⁹ www.cca.qc.ca

⁴⁰ John Hejduk. *Mask of Medusa: Works, 1947-1983*, ed. Kim Shkapich, intro. by Daniel Libeskind. (New York: Rizzoli, 1985): 63.

⁴¹ Eleni M. Constantine. "John Hejduk: Constructing in Two Dimensions," *Architectural Record* 167, no. 4 (April 1980): 111.

⁴² John Hejduk. *Mask of Medusa: Works, 1947-1983*, ed. Kim Shkapich, intro. by Daniel Libeskind. (New York: Rizzoli, 1985): 134.

Jean-Pierre Chupin & Carmela Cuccuzella

PhD | Architect | Université de Montréal | Professor | Director of the Université de Montréal Research Chair on Competitions | Co-director of interuniversity Laboratoire d'étude de l'architecture potentielle (L.E.A.P) | Canada

PhD | Concordia University Research Chair (IDEAS-BE) | Associate Professor | Design and Computational Arts | Montréal | Researcher at Laboratoire d'étude de l'architecture potentielle (L.E.A.P) | Canada

108 Embodiments of Potential Architecture: Sisyphus Building Databases of Competition Projects

The Canadian Competitions Catalogue (CCC) is the bilingual digital archive for architecture, urban design, and landscape architecture projects designed through a competition process in Canada (www.ccc.umontreal.ca). As of February 2019, the CCC contains more than 5000 projects, 45 000 documents, mostly drawings in digital format. Unsurprisingly, our stats reveal that only a small percentage of projects in a competition will be built; leaving, in our case, 97% of the database as unbuilt architecture. Referred here as “potential architectures,” these drawings have a peculiar afterlife, as they can endure various embodiments in many other projects, some of which might in their turn be built. Although this type of database can appear as a simple digital depository, its first mandate is not so much to preserve drawings as entities, as it is to preserve ideas and comprehensive representations of projects. A competition database is closer to the notion of a library of projects. If we consider that a library will never contain every single published book, each book nevertheless is a world in itself that connects somehow both to past and future books.

How far then can we keep the analogy between unbuilt projects and books? In fact, a great deal of non-winning projects has great architectural value beyond their selection by a competition jury. The history of competitions is marked by many unsuccessful proposals, which have influenced practices and the discipline as a whole, sometimes in a more profound way than some built winning schemes. Le Corbusier's Palais des Nations project in 1927 or Rem Koolhaas's Parc de la Villette project in 1982 are well-known modern paradigms of this phenomenon: both cases have experienced many embodiments throughout the 20th century and cannot be denied a pivotal role for the redefinition of architecture. However arduous, predicting the level of architectural potentiality is a real possibility in libraries of competition projects as these allow for parallels and comparisons: both proven methods for the production of knowledge in architecture. It is our hypothesis that all projects designed through competitions should be considered as architectural heritage. Although often poorly acknowledged, these projects constitute a reservoir of ideas and solutions.

How can we navigate in such a labyrinth of ideas? Jose Luis Borges, whose definition of paradise was akin to a library, has reflected these issues in a very poetic manner. Inspired by the incredible intellectual ambitions of Paul Otlet and Henry Lafontaine, inventors of the Universal Decimal Classification now in use in thousands of libraries throughout the world, Borges imagined a non-decimal system of classification in an improbable Chinese Encyclopaedia (Borges, Jose Luis (1967), *Otras Inquisiciones*). It's incomprehensible, yet orderly way of classifying both real and imaginary things so amused Michel Foucault, that he used it to open his archaeology of knowledge in *The Order of Things* (1966). Although strangely omitted by Foucault, the Chinese Encyclopedia had a name in Borges's novel, “The Celestial Emporium of Benevolent Knowledge” and it can be seen as a paradigm for libraries of competition drawings. This magnificent emporium strangely found an architectural embodiment in a lesser known project by Le Corbusier in 1929, for a world repository of knowledge to be built in Geneva, the *Mundaneum*. Needless to say, Le Corbusier had responded to a call by Paul Otlet, whose Sisyphus-like endeavor for the building of a “Mondothèque” is rightly considered as one of the first embodiments of the Internet, while his hand drawing for a personal cabinet giving access to all sources of documentation will easily be understood, by all designers, as architectural potentiality at its best!

Professor **Jean Pierre Chupin** holds the Research Chair on Competitions and Contemporary Practices in Architecture at Université de Montréal and co-directs the interdisciplinary interuniversity Laboratoire d'étude de l'architecture potentielle (www.leap-architecture.org). His long-term research program probes the role of analogical thinking in architecture – be it historically, theoretically or pedagogically and his first series of essays, *Analogie et théorie en architecture (De la vie, de la ville et de la conception, même)*, was published by Swiss Infolio, in 2010 and in a revised edition in 2013. The chief editor of the *Canadian Competitions Catalogue* database (www.ccc.umontreal.ca), he recently directed the collective book: *Competing for Excellence in Architecture (Editorials from the Canadian Competitions Catalogue, 2006 – 2016)*, Montreal, Potential Architecture Books (2017).

jean-pierre.chupin@umontreal.ca

Dr. **Carmela Cucuzella** is an Associate Professor in the Design and Computation Arts Department at Concordia University. She is also the director of the research chair on Integrated Design and Sustainability for the Built Environment (ideas-be.ca). In 2015, she was co-editor, along with Dr. Jean-Pierre Chupin and Dr. Bechara Helal of, *Architecture Competitions and the Production of Culture, Quality and Knowledge: An International Inquiry*. Her research focuses on the interrelated dimensions of the formal, the experiential, the perceptual and the practical considerations of sustainable design practices. Her work is also articulated around the needs of the community, where her CoLLaboratoire initiative studies how installations in the public realm can contribute to a deeper comprehension and embodiment of sustainable urban living and practices.

Carmela.Cucuzella@concordia.ca

Lizzie Muller & Ainslie Murray

PhD | Senior Lecturer | University of New South Wales | Sydney | Australia

PhD | Senior Lecturer | Built Environment | University of New South Wales | Sydney, Australia

Under the Dust and Dirt: A Discussion About Architectural Models with Allan Wexler

This paper examines the practical, philosophical and symbolic capacities of models, and demonstrates the many ways that architects, artists, and designers use models to contemplate, experiment, invent and teach. It builds upon the critically acclaimed 2017 exhibition: *A Working Model of the World* at UNSW Galleries, Sydney and the Sheila C. Johnson Design Centre, New York, in which a diverse collection of models was considered within a unique typology of modeling practice. The models were positioned in one, or more of six segments of this ‘modelling world’ – The Ideal (archetype, perfection, measurement, museum), Belief (Talisman, magical object, world view), Becoming (maquette, prototype, utopia, manifesto), Scale (micro, macro, 1:1, big data), Simulacra (virtual, copy, fiction, diorama) and/or Proof (mathematics, law, forensics, rhetoric).⁴³

Within this framework, we consider in this paper the distinctive practice of renowned artist-architect Allan Wexler and draw on a recent interview we conducted with Wexler in his New York studio. An artist trained as an architect, Wexler has interrogated the ‘resolute qualities’ of architecture by focusing his attention on scenarios in which architecture is an animating subject or context of curiosity rather than a goal or outcome.⁴⁴ This disposition alone radically alters the traditional role of the model in ‘architectural’ practice, in that the expectation of translation across scales and the conviction that the model is a static artifact are thoroughly disrupted. Wexler’s preoccupation with ordinary objects and habits further reorients his relationship to architecture – in the wake of these strategic turns he leaves an extraordinary collection of models that en masse propel both thought and practice, and simultaneously unpick the conventions of architectural modeling.

Wexler’s studio presents itself as a wondrous ‘living archive’ in which every available surface is occupied by models in various states of becoming and collapse, all shrouded in decades of dust and dirt. In the accumulation of models of chairs, stairs, shirts, shoes, books, bricks and timbers, Wexler describes his attempts to maintain an unflinching belief in the reality of a model. He asks: “Would you call this a model or would you call it sculpture? Is it necessary to build the ‘real’ thing? Would it be good to build the ‘real’ thing? Would it change or become something else if you did?”⁴⁵ Surrounded by models and enveloped in clouds of blown-off dust as we pick through and discuss the collection, we wish not for the translation of the models into works of architecture – ‘real’ things – but instead for our shift in scale that enable us to inhabit Wexler’s condensed and curious modeled worlds.

Lizzie Muller is a curator and researcher specializing in audience experience and interdisciplinary collaboration. Her research explores the relationship between curatorial practice and shifting disciplinary boundaries, the impact of science and technology on aesthetic experience, and the role of museums as sites of knowledge creation. She has developed new forms of audience-centered curatorial methods informed by participatory design. Recent curatorial projects include *Human Non Human*, co-curated with Katie Dyer at the Museum of Applied Arts and Science, Sydney (2018) and *A Working Model of the World* with Holly Williams, shown in Sydney, New York and Dundee (2017) and *Lively Objects* at the Museum of Vancouver, curated with Caroline Langill (2015).

lizzie.muller@unsw.edu.au

Ainslie Murray is an interdisciplinary artist and academic. Her practice-led research explores the augmentation of architectural space through subtle realizations of forgotten and intangible spatial forces. The atmosphere and its relation to the lived experience are areas of special interest which have focused her practice for over ten years. Her work has been exhibited throughout Australia and internationally in Canada, China, Denmark, Japan, and the UK. Recent projects include *Breathing Buildings*, curated by Julian Worrall, at the Japan Foundation in Sydney (2017) and a new book *Hand & Mind: Conversations on architecture and the built world*, with Xing Ruan (2018).

ainsliem@fbe.unsw.edu.au

Break

⁴³ See <http://workingmodeloftheworld.com/Download-Exhibition-Guide>.

⁴⁴ Sean Anderson, ‘Process as Performance’, in Allan Wexler, *Absurd Thinking: Between Art and Design*, Zurich: Lars Müller, 2017, 11-12.

⁴⁵ Allan Wexler, from interview between authors and Allan Wexler, Sept 27, 2018.

Session 7 (part b) *The Afterlife of Drawings and Models:*

Archiving, Collecting and Teaching

Moderator **Paul Emmons**

3.40-3.55

Maria Elisa Navarro Morales, Alejandro Henriquez Luque & Cristina Albornoz Rugeles

PhD | Profesora Asistentel Facultad de Arquitectura y Diseño | Universidad de Los Andes | Bogotá | Colombia

Architect | Bogotá | Colombia

Architect | Associate professor | Facultad de Arquitectura y Diseño | Universidad de Los Andes | Bogotá | Colombia

German Samper, A Life Among His Drawings

Germán Samper (b. 1924) studied architecture at the National University in Colombia. After graduating in 1947, Samper traveled to Paris where he worked with Le Corbusier from 1948 until 1954. Among the many projects German Samper has designed are the Luis Angel Arango Library (1962), the Avianca tower (1968) and the Gold Museum (1963 and 2003). His works represent the process of modernization in Colombia and over time, they have become landmarks of Colombian architecture. Samper's projects have received multiple national and international awards and they have been published in many books where his research in housing and urban architecture is reviewed. In 2015 his work was part of the exhibition Latin America in construction, Architecture 1955 -1980 at the MoMA in Nueva York.

Alongside his projects, Samper developed a habit of free-hand drawing. For seventy years, he has rigorously drawn and compiled more than five-thousand drawings in sketchbooks. These drawings reveal Samper's way of looking at and thinking about the world, a habit he learned from Le Corbusier in Paris and that he has practiced constantly since his youth. Germán Samper recently donated all the drawings and documents pertaining his practice to Bogota's Civic Archive except his sketchbooks. They are stored in a cupboard in specially made boxes in Samper's home office. These boxes are full of travel sketchbooks, agendas and construction logbooks that serve as evidence of drawing as a media Samper uses constantly to communicate his ideas to others.

Free-hand drawing is for Samper a way to capture the world around him, to understand architecture and a source of knowledge. This presentation will look at the free-hand drawings that Samper treasures and the way he keeps them. The cataloging and organization of his drawings reveals relationships between what Samper has seen and drawn while traveling and what he has designed and built in his projects. The cupboards and the sketchbooks in German Samper's office are more than memories, they are a powerful tool to enter into German's Samper particular way of understanding the world, they allow us to understand how he saw his role as an architect and are a vehicle for the transmission of knowledge.

Alejandro Henríquez is a practicing architect who graduated from Universidad de Los Andes (1987). From 1993 to 2008 he lived in Barcelona, where he worked mainly in the development of public squares and housing. He taught second-year design studio at the Department of Architecture at Universidad de Los Andes from 2009 to 2011. He completed a Master's program in architecture at Universidad Los Andes in 2016. His thesis explores the architect's sketchbooks and particularly those of German Samper. During his thirty years of professional practice, Alejandro has used free-hand drawing as a tool to communicate ideas.

ahenriqu@uniandes.edu.co

Architect **Cristina Albornoz** finished her undergraduate studies at Pontificia Universidad Javeriana (1990) and her master's degree in architecture at Universidad de Los Andes (2012) in Bogotá, Colombia. Her research focuses on architectural education. She has explored the relationship between the work of Colombian architect Rogelio Salmona and his study of the history of architecture. She is interested in modern architecture in Colombia as a way to expand our knowledge of the Modern Movement. She is an Associate Professor at the Department of Architecture of the University of Los Andes, where she has taught design studio, free-hand drawing, and architectural history. She directs the research group Pedagogias del Habitat y de lo Público.

calborno@uniandes.edu.co

Maria Elisa Navarro Ph. D. is Assistant professor at the School of Architecture at the Universidad de Los Andes in Bogotá where she directs the research group Formas de la Producción Arquitectura. Junior scholar in the Getty Connecting Art Histories project Spanish Italy and the Iberian Americas, an international and interdisciplinary research group led by Columbia University. Her research focuses on the history and theory of architecture in the Early Modern period. Through her research, Professor Navarro Morales seeks to elucidate the importance of architectural projects that lie outside the traditional scholarly canon to arrive at a better understanding of the world of ideas in the early modern period and beyond.

me.navarro@uniandes.edu.co

Fabio Colonnese

PhD | Architect | History, Drawing and Restoration of Architecture Department | Sapienza University | Rome | Italy

Tear it Down! Agency and Afterlife of Full-size Models

The history of architecture design might be told as a quest for the most exhaustive and involving envisioning tool, able to offer architects multisensory anticipation of the design space and to provide the clients with a heartening confirmation of their economic efforts. Drawings, models and even 3D digital models animations can only partially fulfill these different expectations. Sometimes more significant doubts require bigger models, even full-size models. These are occasionally built to study experimental elements and structures, to involve and persuade people in project development or to judge at least a piece of the building in its planned context. While the cost has generally limited the use of 1:1 models, the diffusion of rapid prototyping techniques is today fostering their spread. At the same time, their nature is questionable as they offer a mediated physical experience of design space suspended between representation and building.

Full-scale models are part of a consolidated design practice often linked to the art of scenography and ephemeral architectures for public events: from Gian Lorenzo Bernini's "direct forming," to the picturesque English gardeners' practice of making temporary models of wooden rods and white clothes. They have contributed to give the work of architects a spectacular character, as testified by the success of Jacques-Germain Soufflot's mock-up of the façade of Saint Genevieve in Paris in 1764. At the same time, their effect on a client, a commission and the architects themselves may be unpredictable, especially when they are conceptual models made of poor materials. The experience of a mock-up model made of different materials may disappoint people called to judge design. On the other hand, as a physical interface between the body and the virtual dimension of the project, full-size models both fulfill architects' secret desire to exert complete control on their work and reorient it as well. For example, the Italian architect Umberto Riva expressed the desire to build a project, to experience it, and then to demolish it to later design and build a perfected version of it. Rem Koolhaas conjectured that Mies van der Rohe's architecture was radically readdressed in 1912 by the experience of the wood-and-canvas mock-up of the villa for Madame Kröller-Müller that he had conceived in brick and stone.

Despite the high cost and importance in the decision-making process, any 1:1 model is going to be destroyed after use, eventually depriving historians of a fundamental step of the design process. While the tactile and kinesthetic experience of models is limited in time, generally to a short number of people, their image may enjoy a visual afterlife in the surviving pictures or films. What Koolhaas suggested from a single image of Mies' model, is an example of how the after-life of full-size models may affect the development of architectural knowledge. Sometimes, the after-life is the only life of models, like the 1:1 moveable model built by Marcello Piacentini to perfect the design and show the effects of the *nobile interrompimento* in front of St. Peter's square, which had been destroyed before Mussolini could see it. Through the photographs, it challenges not only cinematic scenography, but also offers unpredictable fragments of an alternative city demonstrating that the photography mediation may help full-size models provide effects far beyond the original intents.

Fabio Colonnese is an architect and Ph.D. in Drawing and Survey of Architectural Heritage at Sapienza University of Rome, Italy, where he taught Descriptive Geometry, Architecture Survey, and Architecture Drawing. He took part in major survey campaigns, such as Castel Sant'Angelo, the Royal Palace of Caserta and some Rupestrian Monasteries in Cappadocia, Turkey. His Ph.D. dissertation on the labyrinth and its various relationships with art, architecture, and the city was published in *Il Labirinto e l'Architetto* (2006). While attending his post-doc fellowship in Digital Survey and Representation of City, he focused on the relationship between the multisensorial experience of space and the image of architecture, whose early results can be read in his book *Movimento Percorsi Rappresentazione* (2012). His latest articles and papers have focused mainly on perspective illusory devices in Baroque architecture, digital reconstruction after literary architectures, and architecture modeling.

fabio.colonnese@uniroma1.it

Tina Di Carlo & Niall Hobhouse

Editor | Drawing Matter | Somerset | Visiting Tutor | Architectural Association | London | Geddes Fellow | University of Edinburgh | Edinburgh

Drawing Matter Collection | Shatwell | Somerset | UK

Drawing Mobility and Cultural Transference: Charles Robert Cockerell's Pavement plan of the Parthenon

Robert Cockerell's drawing of the pavement plan of the Parthenon – initially thought of as the arrival of the Greek Revival to Britain – rather attests to the afterlives of drawing, their uses and reuses inscribed in mobility and cultural transference.

Thought to have been done during Cockerell's Grand Tour (1810-17), a large portion of which was spent in Athens, the drawing itself is complex: Comprised of four sheets, glued together at two seemingly different

times, it bears at least three different types of inscriptions (two different types of pen and pencil), with pink and grey washes over- and underlaid. On the verso, two of the segments contain a cropped drawing for the Temple of Aegina – and the two pieces likely fragments from the same drawing.⁴⁶ Such complexity raises questions of dating and assembly, of the relation to Cockerell's general working methods and the eventual use and reuse of the drawing within in his overall oeuvre, during his Grand Tour, for publication, and during his post at the Royal Academy for his yearly lectures. It also enters into the discourse on the reconstruction of the Parthenon. The drawing attests to the importance of the document as a survey drawing, travel sketch, an archaeological excavation, and a proposal for preservation, using the basic diagram of the plan. This paper will seek to trace the afterlives of Cockerell's drawing, placing it in the context of his diaries and Grand Tour, his letters during the same period, other Cockerell drawings in the collections of the British Museum and RIBA, his Royal Academy Lectures and F.C. Penrose's reconstruction of the Parthenon in the mid-nineteenth century.

Tina di Carlo is an editor at Drawing Matter, where she recently edited *Opening Lines*, a series on the sketchbooks of Alvaro Siza, Adolfo Natalini, Tony Fretton and Niall McLaughlin and co-curated the eponymous exhibition. She was formerly of curator of architecture and design at the Museum of Modern Art and Director of Lectures and Exhibitions at the Princeton University School of Architecture. She holds degrees in art history and architecture from the Courtauld Institute of Art, London and Harvard's Graduate School of Design, and a PhD in exhibitions from the Oslo School of Architecture. She teaches at the Architectural Association and is a Geddes Fellow at the University of Edinburgh.

tdc@tinadicarlo.com

.

.

Niall Hobhouse collects drawings by architects. He curates exhibitions, and writes about buildings, landscape and museums. He established Drawing Matter Trust to explore the role of drawing within architecture, architectural memory and exhibitions. He is formerly a Governor of the London School of Economics (and Chair, Advisory Board, Cities Programme), Trustee of the Sir John Soane's Museum and of the Canadian Centre for Architecture, Montreal.

.

niall@niallhobhouse.com

.

.

4.25-4.40

Neil Levine

Emmet Blakeney Gleason Research Professor of History of Art and Architecture | Harvard University | Cambridge MA | USA

.

The Move of the Frank Lloyd Wright Drawings and Models from Private Archive to Public Collection and Its Promotion of Use and Deterrence of Abuse

.

The transfer of ownership of the nearly 60,000 drawings, 45,000 photographs, 60 models, and other materials by the Frank Lloyd Wright Foundation to the Avery Architectural & Fine Arts Library at Columbia University and New York's Museum of Modern Art in 2012 was by any account one of the most significant events of its kind in the history of modern architecture. The story of the transaction has never been told; nor have its effects on scholarship, criticism, and architectural production been examined. Many if not all of the facts regarding the "transfer," the word preferred to "sale" by its actors, have remained unspoken. The story has implications for the preservation of architectural archives that speak to a wide range of concerns well beyond the specific case of the Wright archives.

.

The first part will trace the extended and often sordid tale of the Wright Foundation's maneuvers to put itself on a firm financial basis, following the architect's death in 1959, by monetizing its holdings. This involved everything from piecemeal deaccessioning to commercial exploitation, the latter in a notably ill-conceived licensing program including the sale of unbuilt designs for posthumous construction. Issues of access, management, and priorities will be addressed in describing how the purposes of scholarship and critical reflection can be denied by an organization determined to remain apart from the mainstream and with little awareness of contemporary architectural debates.

.

The second part will suggest how such activities by a private archive can result in the diminishment of the legacy its creation was established to promote. The most egregious example is surely the building of unbuilt designs, invariably altered to fit new conditions and client needs. Authenticating such works ultimately leads to questioning the accuracy and value of the original drawings on which they were based. Although the Wright Foundation maintained intellectual property rights to the drawings in the "transfer" agreement, it is much less likely to continue this malpractice now that the Avery owns the drawings and controls access to them. This ownership by a recognized, non-partisan public institution will correct the balance between scholarship and commerce in favor of the former. Its location in a major city has finally made the archive easily accessible to graduate students on tight budgets as well as professionals on tight schedules, for whom neither a short trip nor a long stay at the former desert location was feasible. Exhibitions of the Wright material will no longer be curated by insiders for the purpose of proselytization but will be organized instead for scholarly, educational, and critical reasons. Finally, the conservation treatment of the drawings will no longer remain under the radar but can be openly discussed and censured as necessary. The conclusion will entertain comparisons with how other art and architecture foundations, such as those of Aalto and Le Corbusier, have dealt with such issues.

.

Neil Levine is the Emmet Blakeney Gleason Research Professor of History of Art and Architecture at Harvard University. In addition to many articles on eighteenth-, nineteenth-, and twentieth-century architecture, he authored *The Architecture of Frank Lloyd Wright* (1996), *Modern Architecture: Representation and Reality* (2010), and *The Urbanism of Frank Lloyd Wright* (2016). He has received grants from the Solomon R. Guggenheim Foundation, the Graham Foundation, the American Council

⁴⁶ Victoria Button, Senior Paper Conservator at the V&A, in a consultation with Niall Hobhouse and Tina di Carlo, 25 March 2019.

of Learned Societies, and the National Endowment for the Humanities. In 2010 he was inducted into the American Academy of Arts and Sciences, and in 2018 he was awarded the Gold Medal in History of Art by the French Academy of Architecture.

nlevine@fas.harvard.edu

Session 8 (part a) *The Afterlife of Drawings and Models:*

Collecting and Exhibiting

Moderator **Marcia Feuerstein**

2.25-2.40

Jordan Kauffman

PhD | Research Fellow | MADA | Monash University | AUS - Research Affiliate | Massachusetts Institute of Technology | USA

Perceiving Architectural Drawings and Models in the Postmodern Era: Art Markets and Their Effects

During the 1970s and 1980s, a unique economic condition arose in which conceptual architectural tools began to be sold in the art market. Both architectural drawings and models were shown and hung on walls, like traditional art, and were displayed at some of the foremost art galleries in the world.

Architectural drawings became perceived as “art gallery art” (Ada Louis Huxtable) and “documents . . . and creations in their own right” (Paul Goldberger), and fell between and among aesthetic, artistic, architectural, commercial, conceptual, cultural, and historical understandings. Such questioning, at an extreme, provoked questions about what defined architecture at its core. Some theorized that what is most “architectural” about architecture lay not in buildings, as was commonly thought, but rather in the drawings – the direct objects of architects’ practices.

At the same time, architectural models began to be theorized as having value in themselves, as “generat[ing] their own truth” (Arthur Drexler) and as having “an artistic or conceptual existence [...] independent of the project they represented” (Peter Eisenman). However, unlike drawings, models did not drive similar questions about architecture’s center and were not understood as art. Publications, press, and the public largely ignored models in the sale shows that were mounted. In fact, only institutions already concerned with architecture, such as the Deutches Architekturmuseum, the Canadian Centre for Architecture, and the Netherlands Architecture Institute, appreciated them and collected them. Thus, while they became understood as autonomous objects within architecture, they resisted it outside of the discipline and never fully emerged as a form of aesthetic art in their own right.

This paper will investigate why this was the case: what affected the perception of these objects and why certain architectural tools do, or do not, easily cross disciplinary borders based on those perceptions. To do so, it will bring together archival images of sale exhibitions, oral histories conducted with collectors and gallery owners, and critical responses to exhibitions in the press to reveal how these events impacted the perception and understanding of architectural drawings and models.

Jordan Kauffman is an architectural historian whose work spans from the Renaissance to the late twentieth century. He is a research fellow in the history, theory, and criticism of architecture at Monash University and a research affiliate at the Massachusetts Institute of Technology. His book, *Drawing on Architecture, The Object of Lines, 1970-1990* was recently published by the MIT Press (2018), and his writing has been published widely in journals such as the *Journal of the Society of Architectural Historians*, the *Journal of Architectural Education*, *Architecture Theory Review*, *Livraisons d’histoire de l’architecture*, and *Log*.

jordankauffman@gmail.com

2.40-2.55

Thordis Arrhenius & Christina Pech

PhD | Architect SAR | Professor | School of Architecture | Royal Institute of Technology (KTH) | Stockholm | Sweden

PhD | Research Coordinator, Architectural History | Swedish Centre for Architecture and Design (ArkDes)

The Asplund Collection and the Swedish Museum of Architecture

The Swedish Museum of Architecture constitutes an intriguing and understudied pre-history to the international museum boom of the late twentieth century that saw the proliferation of architectural institutions collecting the heritage of modern architecture. With the Finnish Museum of Architecture (1956) as its model the Swedish Museum of Architecture was formed as a foundation on the initiative of the Svenska Arkitekters Riksförbund, SAR (Swedish Association of Architects), in 1962. After more than a decade, in 1978, the museum was elevated to a public state museum. The transfer from a foundation initiated by a professional organization to a state institution was driven in part by new challenges facing institutions collecting architecture that resonated internationally. In the late 1970s The Swedish Museum of Architecture experienced the growing international interest in their collection. Beginning with the major show on Gunnar Asplund at the Museum of Modern Art in New York in 1978 and later during the 1980s the repeated displays and sales of Asplund’s drawings – among them the now iconic Woodland Cemetery drawings - by the New York gallery Max Protetch, the Swedish Museum of Architecture suddenly found itself in the forefront of an architectural museum’s new reality with architecture drawings as collectable and marketable objects of art.

The international sales from the Asplund collection, deposited in the museum since 1966 unleashed an unprecedented conflict of provenance between the museum and the Asplund family involving the Swedish government that in vain tried to stop the export of what was to an increasing extent considered national heritage. Through its active founding membership in the International Confederation of Architectural Museums, ICAM, the museum forcefully acted during the 1980s to establish international policies and agreements of acquisitions. This engagement in ICAM and the so called 'Asplund affair' that would dominate the museum's international exchanges for years to come coincides with a strong expansion of the museum's operations crowned by the dramatically enlarged premises designed by Rafael Moneo that opened in 1998. In this new museum building the archival facilities were given proper treatment on site and it offered for the first time a location for a permanent exhibition on architecture in Sweden.

This paper will take the complex history of the Asplund estate as a starting point to discuss the role of a private drawing collections in relation to the founding of a public museum of architecture. We will argue that the 'Asplund affair' represents an intriguing tipping point in the institution's biography, from its initial experimental young years to a mature museum protecting the legacy of Swedish modern architecture and guarding a collection of great attractiveness and value. In relation to the fact that the Asplund drawing collection continues to be the most sought-after material in the museum's holdings and was the first to be digitized in its entirety, we will speculate on the interdependency between the public museum, the private collection and the market.

Thordis Arrhenius, architect SAR, PhD, professor in Architecture, Method and Theory at the School of Architecture, Royal Institute of Technology (KTH), Stockholm. Arrhenius' research interests concern the exhibition of architecture in mass culture, the relation between architecture and the museum, and the curatorial aspects of preservation. Recent publications include, *Place and Displacement, Exhibiting Architecture*, (eds. Arrhenius, Lending, McGowan, Wallis) Lars Müller Publisher, Zurich, 2014 and *Experimental Preservation* (eds. Arrhenius, Langdalen, Otero-Pailos) Lars Müller Publisher, Zurich, 2016.

thordis.arrhenius@arch.kth.se

Christina Pech, PhD, is an architectural historian, research coordinator at the Swedish Centre for Architecture and Design (ArkDes) and lecturer at the Royal Institute of Technology School of Architecture, Stockholm. Research topics include the historiography and institutional setting of modern architecture as well as the interrelatedness of scientific practice, architectural design and urban development in the modern era. In 2017-18 she was a research fellow of the Brussels Centre for Urban Studies.

Christina.pech@arkdes.se

2.55-3.10

João Miguel Couto Duarte

PhD | Architect | Assistant Professor | Faculdade de Arquitectura e Artes da Universidade Lusíada de Lisboa | Research Fellow at Centro de Investigação em Arquitectura Território e Design | Lisbon | Portugal

The Singular Afterlife of What Was Once an Architectural Scale Model

In 1716 the Portuguese King, João V (r. 1706-1750), commissioned from the architect João Frederico Ludovice (1673-1752) a design for a new chancel for Évora Cathedral to replace the then existing Gothic one. Much to the delight of the King, a painted wooden model of the design was built at a scale of 1:25, making it large enough to be walked through. The model was approved by the King in Lisbon and sent to Évora, where it fell into neglect after the conclusion of the construction of the chancel. In the 19th century it was reassembled, repurposed as a niche built to house a figure of Our Lord of the Stations of the Cross in the Monastery of St. Francis, also at Évora. It has remained as such ever since. What was once a scale model thus became an object of architecture.

Remaining at the architects' offices or becoming part of a museum collection may well be the most common destiny for the architectural scale models that have avoided destruction. Becoming an actual object of architecture, and therefore entering into the world of the objects it is meant to represent, is unquestionably a rather uncommon and, thus, unique afterlife for a scale model. Unusual as it may be, the afterlife of the Évora Cathedral scale model nevertheless challenges our observation of the relations between the architectural scale model and its supposed object, calling into question the possibility of envisioning the latter through the former. No matter how appealing this afterlife may seem, the discontinuation of the very existence of this object as a model is something that must be acknowledged. By becoming an actual object of architecture, it ceases to be an architectural scale model, as no such simultaneous double signification would be possible.

Departing from this rupture, this paper will discuss the limits imposed on the existence of the architectural scale models that are granted an afterlife. What enters the archives as an architectural scale model might no longer remain such an object.

João Miguel Couto Duarte (1966) Architect by Faculdade de Arquitectura da Universidade Técnica de Lisboa (1990); MSc in Art Theories from Faculdade de Belas-Artes da Universidade de Lisboa (2005); Ph.D. from Faculdade de Arquitectura da Universidade de Lisboa (2016). Assistant Professor at Faculdade de Arquitectura e Artes da Universidade Lusíada de Lisboa. Research Fellow at Centro de Investigação em Arquitectura Território e Design – CITAD. The relationship between architectural representation – drawing and scale models – and design practice has long been his main research field, authoring several essays and presenting multiples communications on the subject both in national and international conferences. Aires Mateus: *Matter in Reverse*, directed by Henrique Pina, is his debut in film production.

joao.mc.duarte@gmail.com

3.25-3.40

Break

Session 8 (part b) *The Afterlife of Drawings and Models:*

Collecting and Exhibiting

Moderator **Tracey Eve Winton**

3.40-3.55

Carolina B. Garcia Estévez

PhD | Architect | Serra Hunter Fellow, Theory and History of Architecture | Polytechnic University of Catalonia UPC | Barcelona School of Architecture ETSAB | Spain

Monuments in Motion. Exhibiting the Full Scale Replicas from the Barcelona School Collection (1817-1929)

Antoni Cellers (1775-1835), architect and founder in 1817 of the first Class of Architecture in the Barcelona Academy of Fine Arts, spent the last years of his life redrawing the ruins of the Temple of Hercules in the city. Among the several documents he produced, the full-scale plaster cast of one of its columns was the first ideological model for the future Barcelona School collection.

Following his steps, architects like Elias Rogent (1821-1897) and Lluís Domènech i Montaner (1850-1923) used the scientific trip to catalogue the unknown Catalan heritage through photographs, draws and the plaster casts as a double-edged sword: the models were advocated by these scholarly elites as a medium for teaching and disseminating historical architecture, and also like a register to question the significance of the lives before, during and after their construction.

During their stay at the Barcelona School, the artifacts accumulation at the Hall of Models became a oneiric symptom of time. The tribune in the Romanesque monastery of Sainte Maria in Serrabona (France), the fragments from the Choir of the Barcelona Cathedral, or the keystones in the triumphal arch from the Holy Chapel of the Saviour in Úbeda (Spain), were only some examples of models that, out of time and place, reproduced buildings parts on a new anatomy of a hypnotic space. A dark room awaits for new meanings.

Arabian, Romanesque, Gothic and Renaissance style were displayed in a universal and perfect atmosphere, similar to one that Marcel Proust experienced coming into the Musée de Sculpture Comparée in Paris (1879-1882). In Barcelona, the diversity of styles had their equivalence between the pages of fundamental treatises, blowing-up the Owen Jones's illustrations from «The Grammar of Ornament» (1856), or the Antoni Rovira i Rabassa studies from «The Stereotomy of Stone» (1897). The limit between the teaching imaginaries and the invention of modern heritage became a very thin threshold under the ideas of Eugène-Emmanuel Viollet-le-Duc.

A threshold where to interpret the afterlife of these models through the four exhibitions that featured the historical collection: The Philadelphia World's Fair (1876), the Spanish Monumental Art Exhibition (1904), the National Salon of Architecture in Madrid and Barcelona (1911, 1916) (Image 2), and The Art of Spain in the Barcelona International Exhibition (1929), are only some examples of these ideological displacements in the search for a national identity style during almost half a century of revivals.

The Barcelona casts collection teach us an anachronistic lesson: that the monuments and their representations are in constant motion, and their change in meaning depends on the ways they worked or meant to work. The paper aims at anatomizing the documents, books, catalogs, and exhibitions that allow us to illuminate the afterlife collection, fostering of future imaginings beyond their original contexts. Currently, some of them still can be read between the walls of our School.

Carolina B. Garcia Estévez, PhD, Architect in Theory and History of Architecture (2012), with the thesis «Opus Angelicum. The architectural imaginary of Duino Elegien, 1912-1922», Extraordinary Award in 2014. Adjunct Lecturer at the ETSAB since 2005, she has been Visiting Scholar at the Heidelberg University, the Accademia Nazionale di San Luca and the University of Illinois Urbana-Champaign. Her works on the art and architecture of the 19th and 20th centuries in Spain have been published in several monographs and journals like «Casabella» or the «ILE Bulletin.» Her recent research insists on the necessary correspondence between literature and architecture in search of another history for Spanish architecture as moving images and artifacts based on ideology.

carolina.garcia@upc.edu

3.55-4.10

Gavin Keeney

PhD | Independent Scholar | USA

Doshi's Other Legacy

Now that B.V. Doshi has received the Pritzker Prize, at the age of 90, a series of theatrical-cinematic events performed at CEPT University in association with Archiprix 2017 has gained added significance. The events were staged in an old badminton building at the edge of the CEPT campus, one of three locations Doshi used for his School of Architecture in the early 1960s prior to building the campus CEPT currently inhabits in

Ahmedabad. Guest lecturers at the School of Architecture in the early to mid-1960s included Louis Kahn. The homage to CEPT's early days, "C'est la CEPT" (2017), was produced by using projections of 18 archival images from CEPT Archives – images of faculty and students, at work and at play inside and outside of the badminton building in the mid-1960s – and interacting with them.

A video with excerpts from the five key sessions, conducted between January 30 and February 7, 2017, has been subsequently screened in various venues and an editioned DVD produced. The sessions ended with the tragi-comic, "Waiting for Doshi." All sessions were conducted from 6:30 to 9:30 pm to take full advantage of the dusky interior of the concrete badminton building.

This performative paper – mixing video projection, live spoken word, and recorded sound – confronts the conference theme of "the afterlife of drawings and models: collecting, archiving, exhibiting and teaching" through both its appropriation of CEPT archival imagery and the semi-abandoned badminton building. Notably, the grounds of the badminton building (a subtle Brutalist structure designed by Doshi) were populated during the period under study with experimental architectural structures.

This presentation includes a discussion of the value of experimental processes in architectural design education through an elaboration of the justification for the "transmedia" project shown, yet linked to selective comments made by Doshi at the Royal Academy, London, in July 2017, and elsewhere, regarding "innovation" versus mere production. The presentation includes an excerpt from a 2017 audio recording of an interview with Krishna Shastri, founder of CEPT's School of Interior Design, regarding her own role in the 1960s version of CEPT and her touring Ahmedabad with architect Louis Kahn in search of trees that cast just the right colour of shadow for his Indian Institute of Management, Ahmedabad (1962-1974). In the case of Doshi's other legacy, architectural science includes an interest in the color of shadows. Thus does the non-rational inform the rational, and vice versa.

Gavin Keeney is an independent scholar with a research doctorate in Architecture from Deakin University, Australia. Recent publications include *Knowledge, Spirit, Law: Book 1, Radical Scholarship* (2015); and *Knowledge, Spirit, Law: Book 2, The Anti-capitalist Sublime* (2017). He has taught and lectured in architecture schools in the US, England, Slovenia, Australia, and India. A 2016-2017 Teaching Fellowship in the Faculty of Architecture, CEPT University, Ahmedabad, India, plus a 2017 Co-funded Research Residency at the Giorgio Cini Foundation, Venice, Italy, and a 2017 Visiting Research Fellowship at Birkbeck Institute for the Humanities, University of London, London, England, have served to launch his current study of transmedia as a form of "lived law".

agencecx@gmail.com

4.10-4.25

Stefaan Vervoort

Stefaan Vervoort | PhD Candidate | Department of Architecture and Urban Planning | Ghent University | Belgium

Idea as Model (and its Discontents)

This paper discusses the exhibition *Idea as Model*, organized at the Institute for Architecture and Urban Studies (IAUS), New York in 1976. Then-director Peter Eisenman and curator Andrew MacNair proclaimed to examine scale models as architectural representation having an 'artistic or conceptual existence of their own.' Twenty-two architects and architects' team were invited to contribute scale models, once, to the exhibition, and once more, for documentation in the published catalog, which appeared belatedly in 1981. The result reads like a catalog of how postmodern architects—from Eisenman, Diana Agrest, and Michael Graves to Léon Krier, Massimo Scolari, Rafael Moneo, Oswald Mathias Ungers, and many others—conceived of the scale model and related it to their practice.

While, in the architecture-theoretical literature on scale models, *Idea as Model* is widely acclaimed as having demonstrated an 'independence' or 'autonomy' of scale models, this paper argues precisely the opposite: conceptualizing scale models as material embodiments of preconceived ideas, the show and book ignored how the form and materiality of scale models partake in the production of architectural meaning. In fact, *Idea as Model* needs to be understood as contributing to the long-standing wariness of architects over the disciplinary status, type of authorship, and mode of experience of scale models.

This suspicion traces back to classic passages on models of Leon Battista Alberti's *De Re Aedificatoria* (1485), which warn against overly dressed models, the craftsmanship they exemplify, and the pictorial experience they issue. Analogous to Alberti's discussion, *Idea as Model* and Eisenman's contributions specifically shaped attempts to curb and control the disciplinary, epistemic, and aesthetic slipperiness of scale models, that is, to make them 'fit' the authority of the architect. As an alternative view, this paper dwells on the writings of art historian Rosalind Krauss, a colleague and intellectual interlocutor of Eisenman's. In *Passages in Modern Sculpture* (1977), published a year following *Idea as Model*, Krauss crystallized a method—at once phenomenological and structuralist—for approaching objects in all their opacity and stubbornness, and to understand how this hardness contributes to signification. It is this deftly sculptural perspective, I hold, which is seminal for understanding the lives and meanings of scale models, at least when released from the studio and presented in public.

Stefaan Vervoort (born 1986) is a Ph.D. candidate at the Department of Architecture and Urban Planning, Ghent University. His research focuses on the exchange between postwar art and architecture, specifically on architectural scale models and postmodern architecture theory in the 1980s visual arts. Recent publications include *Aglaiia Konrad from A to K* (co-edited with Emiliano Battista) (2016); *Raymond Barion* (co-edited with Mihnea Mircan and Stijn Maes) (2014); and *Luc Deleu - T.O.P. office: Orban Space* (co-edited with Wouter Davidts and Guy Châtel) (2012). Vervoort lives in Antwerp and works in Ghent.

stefaan.vervoort@ugent.be

4.25-4.40

Adam Sharr

Professor of Architecture | Head of Architecture, Planning and Landscape | Newcastle University | UK
Principal of Adam Sharr Architects | UK

The Secret Afterlife of Three Drawings and the Replica They Spawned

Plan, section and elevation drawings can be: prospective, setting-out architectures not yet made; descriptive, surveying existing architectural edifices; or analytical, made to tease-out intellectual ordering strategies. Normally, prospective drawings for a building precede post-hoc survey and analytical drawings made of it.

This paper is about the plan, section and elevation drawings that I made in HB pencil on three A4 sheets of 90gsm trace in 1998. They were produced for my PhD research, to document the configuration of philosopher Martin Heidegger's mountain hut at Todtnauberg. They were survey drawings – made using site dimensions of the exterior of the hut, and estimated interior dimensions based on counting boards from photographs and video footage– although they also had an analytical purpose. The hut was built without formal documentation, so they comprised its first ever measured drawings. I made them carefully, respecting the standards we should hold ourselves to as architects, but they were made primarily for my use, without anticipating any afterlife.

I had assumed that I would have made final presentation drawings when I submitted my PhD, but the pressures of the looming deadline and my first academic job prevented me from doing so. By the time I finished the manuscript of my subsequent book on the hut, the drawings were so familiar that I could no longer imagine remaking them, and they appeared in print.

Books -and their plates- have afterlives their authors can't anticipate. In 2017, I was contacted by Dieter Roselstrate, a curator with the Prada Foundation in Venice, about an exhibition he designed to coincide with the 2018 Architecture Biennale, titled *Machines à Penser*, which sought to compare Heidegger's, Wittgenstein's and Adorno's huts. Asked if I could supply my drawings for the show, I spent days tracking them down to an envelope in a folder at the back of a cupboard. Subsequently offered a professional art courier to transport them to Venice, and the services of Prada's picture framer, the drawings took me aback by having somehow acquired themselves the status of artifacts. Moreover, the drawings –secretly– became prospective. Unbeknown to me, they supported the construction of a replica of the hut, an MDF model built at 7/8 scale on the piano nobile of Prada's Venetian palazzo. The framed drawings were eventually hung on the back of this replica, surveying the Grand Canal. Like a proud parent, a little surprised by their offspring's success, I traveled to Venice to visit my drawings and their own replicated child.

This story provides the opportunity for a series of reflections: on the slippage of drawings between descriptive, analytical and projective modes; on relations between drawing and replica-model; on the idea and practices of replication; on authorship, its multiples and absences; and the multitemporal and multi-directional qualities of drawings and their referents.

Adam Sharr is Professor of Architecture and Head of Architecture, Planning and Landscape at Newcastle University, UK; Editor-in-Chief of *arq: Architectural Research Quarterly* (Cambridge University Press); Series Editor of *Thinkers for Architects* (Routledge); and Principal of Adam Sharr Architects. His book *Heidegger's Hut*, in which the three drawings described in this paper were printed, was published by MIT Press in 2006. He is author or editor of seven books on architecture. The list also includes *Reading Architecture and Culture: Researching Buildings, Spaces and Documents* (Routledge, 2012), which proudly includes Marco Frascari's last published text. His *Modern Architecture: A Very Short Introduction* will be published by Oxford University Press in November 2018.

adam.sharr@newcastle.ac.uk

Session 9 (part a) *The Afterlife of Drawings and Models:*

Collecting and Archiving

Moderator **Carolina Dayer**

2.25-2.40

Izumi Kuroishi

Professor | School of Cultural and Creative Studies | Aoyama Gakuin University | Tokyo | Japan

Avant-Garde Quality of the Reality Sketches by Kon Wajiro: Ever-lasting Inspirations of the Archival Architectural Drawings in Japan

In the modernization of architecture and society in the nineteenth century, the images of rural houses and landscape played multiple roles, such as a source of nationalistic images, as the archetype of architecture, or as scientific evidence indicating the problems of the people. In particular, as a result of the requirement for romantic quality to preserve and publish the drawings and images of rural houses and landscape, their aesthetic expressions were highly elaborated, but on the other hand, the non-aesthetic part and the

deformations resulted from the real living conditions were simplified in their records. Also, the act of surveying and recording architectures, landscape and people's ways of life inevitably accompany certain manipulations according to the author's interpretations, skills and the characters of their medium. Due to the repeated abstractions and such instrumentalizations, the everyday rationality and contextual meanings of people's life in architectural space and landscape depicted by sketches became relics of the past, and less and less understandable for later generations. However, why do some drawings of historical architecture recording the everyday life of the people in architecture and landscape in the past keep inspiring us even in our highly digitalized society, how can we sustain such creative dialogues between generations via the historical drawings? By referring to the cases of Kon Wajiro's sketches and of his descendants, this research will explain that the meaning of drawing depends not only on the depicting methods and architectural quality but also on the architects' intention to reject conventional understanding of the reality, which continues to create new architectural perspectives beyond the time. Also, this research explains how the digitization of the sketches and their usage in diverse areas have been enabling them as the source of inquiring about the meaning of architecture.

At the beginning of the twentieth century, surveying and recording of rural houses and landscape in Japan were primarily carried out by ethnographers, economists, geographers, architects, and others in response to the European movements appreciating old rural landscape and lifestyle as its national and cultural foundation, and as the way opposing to the rapid modernization and westernization in Japan. The sketches by Kon Wajiro covered the themes of ethnographical studies of rural houses and villages, urban phenomenological studies, housing surveys and lifestyle analysis, and had kept giving diverse influences on the later generation of Japanese architects and designers. By referring to Kon's drawings, later generation architects developed comparative typological housing study, complete enumeration study of houses, detailed survey of the entire environment to draw the regional structure, semiotic and ethnographic readings of busy urban scape, including Japanese Neo Dadaist's depictions of forgotten contexts and lost meaning of the objects in cities, and Behaviology of architecture. These approaches were inspired by Kon's avant-garde and critical attitude to propose an alternative paradigm of architecture and design by exploring new ways of looking at the reality, the importance of inventing devices of expressions to communicate with viewers and to adapt to the fluctuations in values of the society. For these diverse interpretations of Kon's drawings, their wide cultural and popular themes, as well as their exposures to various areas' audiences via exhibitions, publications, and digital promotions beyond its archive, have contributed significantly. The primal objectives of Kon's drawings, which were not making artworks but addressing to the society, have been accomplished in a sense, but on the other hand, their authorship and archival system has always been in a stake and suggesting the contradictions between the roles of drawings and their archival preservations, and a potentiality of their digitalization.

Izumi Kuroishi is a professor of the School of Cultural and Creative Study, Aoyama Gakuin University.

Her expertise is architectural and urban theory and history. Recent publications are *Constructing the Colonized Land: Entwined Perspectives of East Asia around WWII* (Routledge, 2014), *Tohoku Shinsai Fukko to Kon Wajiro* (Heibon - sha, 2015), "Urban Survey and Planning in Twentieth Century Japan" in the *Journal of Urban History*, 2016, "Object talks "in *Confabulations: Storytelling in Architecture* (Routledge, 2017), "Rethinking the Social Role of Architecture in the Ideas and Works of the Japanese Architectural Group NAU" in the *Review of Japanese Culture and Society*, 2017, "Shibuya: Reflective Identity in Transforming Urban Space," in *Introducing Japanese Popular Culture* (Routledge 2017), "Archaic Water" in *ADAPTIVE STRATEGIES FOR WATER HERITAGE* (Springer 2019), and "Social Resilience in Disaster Recovery Planning for Fishing Port Cities" in the *Journal of Urban History*, 2019. CCA 2015 research fellow.

izumi-k@sccs.aoyama.ac.jp

2.40-2.55

Ashley Mason

PhD candidate in Architecture by Creative Practice | School of Architecture, Planning & Landscape | Newcastle University | UK

THIN SHEETS: Afterlives and Traces of Handling Within the Archival Drawings of A+PS

Within the RIBA Drawings Collection held at the V&A there is a folder, titled PA324. Within this folder can be found the original drawings from the Economist Building and Plaza (Econ.) project, completed by architects Alison and Peter Smithson (A+PS) in 1964. The material surface for most of these drawings is trace; hands are left blackened from the residue of pencil and ink, even after carefully handling the edges of these delicate sheets. In some cases, the accidental fingerprint smudges of others have been left in place. Some layers are masked at these edges, bordered in an attempt to eliminate tears. Yet, the aged tape is often found loose, wandering in amongst the drawings, leaving the edges worn and bare.

A building under construction is often bordered, protected at its extremities by protective layers of hoarding and scaffold, to stop the dust and intruders seeping in. Within the National Archives (NA) there is a folder, titled CRES 35/3767, which acknowledges receipt of drawings from A+PS indicating the hoardings to surround the site of the Econ. project; this drawing has not been found within the NA, it is presumed missing. I have encountered missing drawings within archives before – at Tate Archive there are several folders containing empty folders, nothing more –further evidence of traces of handling, of loss, within the afterlives of architectural drawings where fantômes are often needed to fill the spaces between.

Handwritten notes are often encountered within archival drawings, scrawled additions in the gaps and margins. I've often wondered how one might know for certain when these fragments were inserted, and who the authors are. Today, the answer would appear to lie in the ceaselessly monitoring eyes of CCTV within the archive viewing space, overlooking. This doesn't prevent the existing errors, such as within NA folder CRES

35/4919 where 'thin sheet' has been mistaken for 'thin street' within a drawing for the Econ project. It is often the anomalies which are most thought-provoking, yet, they are often overlooked.

This presentation takes footsteps through the archival drawings of A+PS, wanders through the ephemeral evidence within the enveloping folders in which these intangible outlines are held. It is these traces of absence and presence, which conjure imaginative retellings of sites beyond their construction, most especially when these supplementary marks are later transferred to the copies of these drawings kept for prosperity within the digital realm. These thin sheets reveal an afterlife of architectural drawings usually hidden and tidied from view. These traces of handling are the traces with which all sites are imbued.

Ashley Mason is currently a PhD candidate in Architecture by Creative Practice at Newcastle University, UK. Her research is engaged with creative-critical and textual-spatial practices and has most recently involved Alison and Peter Smithson as central protagonists.

ashley.mason@newcastle.ac.uk

2.55-3.10

Elisa Boeri

Post-Doc Researcher | Université Paris 1 Panthéon-Sorbonne | France | Teaching Assistant | Politecnico di Milano | Italy

Rise and Fall of a Draftsman: The Lequeu Legacy at the National Library of France

In July 1825, nine months before his death, Jean-Jacques Lequeu (1757-1826) donated a selection of nearly 800 drawings to the Bibliothèque Royale in Paris. Among the drawings is the *Architecture Civile*, a two-volume graphic work that occupies more than thirty years of his life, becoming a real obsession.

From that moment on, Lequeu's work lies forgotten between the deposits and the so-called "Hell" of the library until the first half of the twentieth century, when the historian Emil Kaufman builds an asymmetrical parallelism between Lequeu and two French eighteenth-century giants, Etienne Louis Boullée and Claude Nicolas Ledoux, juxtaposed under the lucky title of *Three revolutionary architects*. In 1987, the only monograph devoted to this moment contributed to nurturing the enigma of a mysterious character and hypothesizes that the archive was subject in the twentieth century to dubious apocryphal manipulations.

The absence of indications from the author led the twentieth century historians, outside and inside the walls of the archives of the National Library of France, to develop a series of assumptions that immediately relegated the figure of Lequeu to the margins of the Parisian society, interpreting its exceptional qualities as unique graphics work product of a sick mind. Lequeu didn't give us the keys to understand his mysteries, but recent studies reopened "the Lequeu case," interpreting his work as one of the most powerful and communicative expressions of the art of a disappearing world, that of the *Ancien Régime* French society.

Sure about the importance of his legacy as a memory and a warning for future generations, he handed it over to the National Library with a very curious note, which prevented the disclosure of his two most personal works – the *Architecture Civile* and the *Nouvelle Méthode* - for 25 years. This paper aims to analyze and present the fall and the rise of the Lequeu's archival legacy, finally digitized and studied for an exhibition, a catalogue and a monograph came out in 2018.

Elisa Boeri (1987), is a historian of modern and contemporary architecture. She obtained her PhD in History of Art and Architecture in 2016. She is post-doc researcher at the Université Paris 1 Panthéon-Sorbonne and teaching assistant at the Politecnico di Milano. She studies the artistic exchanges and cultural transfers between France and Italy from the eighteenth century, and she is a specialist in Jean Jacques Lequeu architectural work. She published the book *Jean Jacques Lequeu: un atlas des mémoires* (Éd. des Cendres, 2018) and she collaborated on the exhibition *Jean Jacques Lequeu (1757-1826) Builder of Fantasy* (Petit Palais, Paris, 2018-19).

Elisa.Boeri@univ-paris1.fr

3.25-3.40

Break

Session 9 (part b) *The Afterlife of Drawings and Models:*

Collecting and Archiving

Moderator **Bruno Silvestre**

3.40-3.55

Felipe Lanuza

Architect (Chile) | PhD | Postdoctoral Researcher | UCL Urban Laboratory | The Bartlett School of Architecture | London | UK

Archive and Site: The Ghost of Peter Eisenman's Cannaregio Ovest Project (1978) in Venice

"Through decadence Venice preserves herself (...), as the last field of experience where meanings are erased, and the adventure of being occurs in utmost uprootedness." Francesco Dal Co, 1980

Dal Co was introducing the book *10 Immagini per Venezia* (Officina Edizioni), gathering a series of projects developed by renowned architects, to discuss new ways to intervene in the historic city – in particular, the Cannaregio Ovest district in Venice. It included a design by Peter Eisenman along with other nine unrealized projects feeding into the vast imaginary of an un-built Venice.

Eisenman's design explicitly engages with that absent dimension of the city to articulate a critique of both modernist and postmodern architecture. In this way, by regarding Le Corbusier's Venice Hospital project as part of the context and drawing on alchemist Giordano Bruno's misfortune, the project engages with Venice's history and myth through an intellectual and fictional narrative, yet disregarding more tangible aspects of present use and experience.

My investigation confronts project and site from the point of view of their reciprocal absence – not a reconstruction “as if built” of a design that was ultimately not thought to be constructed, but acknowledging it as fundamentally unbuilt, reimagining it as the experience of absence.

I base this work on two interrelated pieces of research, which include, first, a comprehensive study of the original drawings and models of Eisenman's project stored in the Canadian Centre for Architecture (CCA) in Montreal, and second, a detailed analysis and photographic survey of Cannaregio Ovest, on which I trace and explore the absence of the project on-site.

Eisenman's proposal unfolds as a sequential and articulate overlap of horizontal layers of intervention, each one with a specific role and distinctive components. I develop an analysis and critique of his design following this mode of operation, revealing nuances as well as contradictions not mentioned by the architect in the texts with which he disseminated his proposal. For reimagining the project's absence, however, I shift to another form of layering: one that blends photographs (or fragments of photographs), both of the archival material and the site, making use of absence's capacity to evoke multiple, uncertain and distant presences.

Through this (yet another!) misreading of Eisenman's work and discourse, I bring forward the use of archival materials to read critically and creatively interpret this paradigmatic project under the lens of absence. I further explore the contingency of the themes Eisenman addresses through the afterlife of his unrealized project, still aiming to destabilize conventional realities and discourses – most significantly, the ones underpinning the increasing efforts for Venice to remain identical to itself, retaining an image of its past as a frozen present. In reimagining the hauntings of an alternative past in the current materiality of the city, Dal Co's words may be recognizable again.

Dr. Felipe Lanuza is an architect trained at the University of Chile and obtained a Masters in Architecture from the Catholic University of Chile. He holds a PhD in Architectural Design from the Bartlett School of Architecture, UCL. Through his investigations on absence and layering, he explores processes of design and representation to prompt new understandings and alternative interventions in the built environment. He is a Senior Associate at Urban Transcripts and co-founder of DLA Scan / Devilat + Lanuza Architects. Felipe has taught and exhibited internationally and currently develops post-doctoral research at the UCL Urban Laboratory and the Bartlett School of Architecture.

lanuzarq@gmail.com

3.55-4.10

Francesca Favaro

Phd Student | Dipartimento di Architettura | Politecnico di Torino | Italy

Documents as Barycentres: Documentary Constellations in the Architect's Archive

Regarding the issue of the afterlife of drawings and models, this contribution intends to focus on a further question: how to study them? How to approach the (more or less conscious) archive of the architect, the place where traces of his professional practice are preserved?

I am referring in particular to documents —including in this category all the inscriptions produced by the architect in the daily practice of the profession. With regard to architectural practice, in the last fifteen years, many ethnographic studies focused on practicing architecture, taking inspiration from science and technology studies. Their analyses demonstrated architecture as a collective process of negotiation, shared with a variety of nonhumans (materials, models, software, renderings). However, it appears that architectural drawing has remained largely untouched by this so-called “ethnographic turn.” Nevertheless, architectural drawings are in effect “social objects,”⁴⁷ stretched over legions of actors: they are agents with specific performativity in an intricate network, they are the results of complex negotiations.

Moreover, in the impossibility of adopting ethnographic instruments of direct observation, documents, and in particular drawings, can play a pivotal role in understanding the professional practice of an architect operating in the past. In fact, drawings, worksite instructions as well as technical reports, drawn up by the architect, can tell us how his atelier worked, which role he covered on the worksite and how he interacted with other professional figures, bureaucracies, and civic authorities.

⁴⁷ Making reference to *Documentality*, documents can be considered as *social objects*: inscriptions possessing social relevance. MAURIZIO FERRARIS, *Documentalità. Perché è necessario lasciar tracce*, Bari, Laterza, 2009.

For example, by borrowing from science studies some investigative paradigms,⁴⁸ it is possible to find a new way of interrogating the archive of an Ancien Régime architect,⁴⁹ redistributing his agency among the actors involved. Shifting focus from the author (his inventive capacity, his belonging to a certain stylistic model) to the documents he produced can contribute to a deeper understanding of architects' activity during the eighteenth century —a turning point for the development of the liberal profession. The archives of eighteenth-century architects are often rarefied and dispersed, although the documents they contain are strongly interrelated. Such a method of conceptualizing social ties could provide an operative model with which to systematize and reconfigure the archives according to new geographies. In this sense, architectural drawings can be regarded as barycentres: nodes constituting multiple constellations in which the architect is only one of the actors.

Francesca Favaro graduated from the Politecnico of Turin with a Master's thesis focused on a mid-seventeenth century bath apartment in Agliè Castle. In 2016 she attended a specialization course in "Economics and Management of the Arts and the Cultural Heritage" in Milan II Sole 24 Ore Business School. She is currently a Ph.D. student at the Politecnico of Turin. Her research interests mainly concern the architectural practice during the eighteenth century, a turning point for the development of the liberal profession. With the aim of detecting the ordinary activities of an Eighteenth Century architect, she is studying the architect's archive: documents and drawings produced in the daily practice of the profession.

favaro.francesca.ff@gmail.com

4.30-6.00 *The Beginnings of the Afterlife of Drawings and Models*

Plenary Session

Moderator **Mary Vaughan Johnson**

4.30-4.50

Nicholas Olsberg

Charles Robert Cockerell: Is Architectural Drawing an Art or a Science?

4.50-5.40

Niall Hobhouse, William Whitaker, Olivia Horsfell Turner, Alba di Lieto & Nicholas Olsberg

Panel Discussion

5.40-6.00

New Beginnings

Paul Emmons

11 Frascati Symposia

Book Launch: *Ceilings and Dreams: The Architecture of Levity*
Edited by Emmons, Goffi, La Coe (Routledge, 2019)

Lisa Landrum & Sam Ridgway

Frascati Symposium V

⁴⁸ Such as the Actor-Network Theory, a paradigm of social theory for which Bruno Latour is leading spokesman (BRUNO LATOUR, *Reassembling the social. An introduction to Actor-Network Theory*, Oxford, OUP, 2005).

⁴⁹ I'm conducting a study of this kind dealing with the Italian architect Bernardo Antonio Vittone (1704-1770) (and his extensive and dispersed archive), a key figure in Piedmontese Baroque architecture, a prolific architect and writer, an intellectual, deeply influenced by the coeval European culture and a teacher, in his workshop and at the University.