

The Cost of Design

2019 Annual Conference of the Design History Society
Northumbria University, 7th – 9th September

Dr Elizabeth Kramer, Convener
Dr Janine Barker, Co-Convener

Organised with generous support from
Northumbria University and the Design History Society

With special thanks to the Bauhaus-Archiv / Museum für Gestaltung,
Berlin

**DESIGN
HISTORY
SOCIETY**

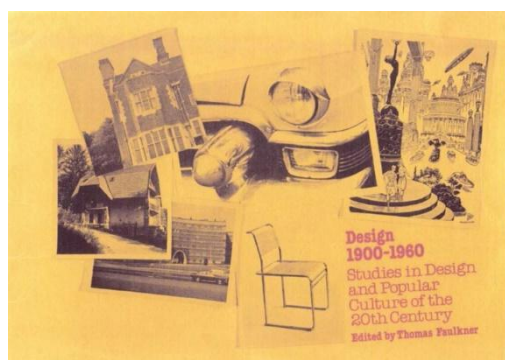


**Northumbria
University**
NEWCASTLE

Introduction

This year's theme 'The Cost of Design' explores the complexities of the historic and contemporary relationship between design and economy. Both 'cost' and 'economy' are to be considered beyond the financial. Cost is envisaged as the exchange of resources, meaning or value. Design is both influenced by, and can shape, economic systems. This year's conference will look at how design sustains, accelerates or challenges dominant systems and examines the resulting social, cultural, economic or environmental consequences that arise.

The theme for this year ties very closely to the location of the conference. The North East of England, particularly the urban centres of Newcastle, Sunderland and Middlesbrough, which have witnessed dramatic changes in terms of our design and creative industries. Coal mining, ship building, and glass production all contributed to the region's prosperity in the late 19th and early 20th century. A shift in politics and economics in the 1970s and 1980s saw these industries decline. A change was needed and in the 1990s investments came which led to the regeneration of certain areas, notably the Newcastle-Gateshead quayside with the BALTIC Centre for Contemporary Art (2002) and the Sage Gateshead (2004); in Middlesbrough with the Middlesbrough Institute of Modern Art (2007); and in Sunderland with the National Glass Centre (1998).



The publication from the first design history conference at Newcastle Polytechnic. Faulkner, T. (1975) Design 1900-1960: Studies in Design and Popular Culture of the 20th Century Newcastle: Newcastle Polytechnic. By permission of The DHS Papers, The Design History Society.

The conference venue at Northumbria University carries further significance. The rise of the polytechnics in the late 1960s and early 1970s was a direct response to the political

and social changes that resulted in a shift in British higher education that sought to support vocational and practice-based studies through the provision of contextual studies. In 1969, Newcastle Polytechnic, which would then become Northumbria University in 1992, was formed. In addition to the formation of communities of practice, academics desiring to develop a critical approach to design history came together. To facilitate this, the first conference, 'Design 1900 – 1960' was convened by the division of the History of Art and Complementary Studies at Newcastle Polytechnic in 1975. The delegates in attendance continued to meet regularly and in 1977, the Design History Society was formed.* This year's conference is therefore a homecoming of sorts, celebrating and reaffirming connections made over the years as well as developing new connections and networks.

We warmly welcome you to this year's Annual DHS Conference, 'The Cost of Design'!

Dr Elizabeth Kramer, Academic Convener

Dr Janine Barker, Academic Co-Convener

*see J. V. Gooding (2012), '*Design History in Britain from the 1970s to 2012: Context, Formation, and Development*' PhD, Northumbria University, Newcastle-upon Tyne.

Acknowledgements

We would like to extend a warm welcome to everyone travelling to the North East of England to attend the 2019 Design History Society Conference: The Cost of Design. It is a great pleasure to host this event in the NE and deliberate issues so relevant to this region's design history. We would like to extend our special thanks to our keynote speakers Professor Aric Chen, Professor Guy Julier, Dr Tereza Kuldova and Professor Alice Twemlow for provocatively approaching this year's theme. And of course, there would be no event at all without the participation of you, the excellent speakers and delegates travelling from over twenty countries to NE England and giving of your time and energy to attend this conference.

We are also delighted to celebrate the centenary of the Bauhaus at this year's conference by acknowledging this significant school and its broad-reaching influence in design through the inclusion of the panel 'The Business of Bauhaus', chaired by Professor Jeremy Ansley, University of Brighton and Dr Esther Cleven, Bauhaus-Archiv / Museum für Gestaltung, Berlin.

Without the generous support and participation of many people, this event would not have been possible. We would like to express our sincere thanks to Northumbria University for hosting this event. We also thank Professor David Gleeson, Associate Pro Vice-Chancellor; Professor Ysanne Holt, Arts Department; and Professors Jo Briggs, Justin Marshall and Gilbert Cockton, School of Design; as well as colleagues in the Arts Department and School of Design at Northumbria University for steering on this topic. We further thank the Head of the Arts Department, Professor Dean Hughes, and Head of the School of Design, Dr Heather Robson, for their support in organising this event. We are further grateful for the generous support of the Trustees of the Design History Society, Editorial Board of the Journal of Design History as well as colleagues from across the Arts Department and School of Design at Northumbria University -and beyond in a few cases- for assisting with peer review and serving as panel chairs. In particular we would like to extend thanks to Dr Gabriele Oropallo and Michaela Young for lending their experience and assistance in organising the conference as well as Dr Harriet McKay and Dr Megha Rajguru in organising the Publication Workshop. A special thanks must also go to Seton Wakenshaw, Senior Lecturer at Northumbria University, for designing the conference logo. Sincere thanks is further expressed to my colleagues at

Northumbria University, Dr Michael Johnson and Dr Catherine Glover, as well as Dr Janine Barker, for organising visits demonstrating how our city relates to the theme of this conference. This event would not have come to fruition without the help of Barry Nicholson and his team at Northumbria University as well as the student volunteers who facilitated the event spaces and conference rooms in managing this complex event. Finally, thank you to our families for patiently enduring the absorption of our time in organising this event and helping with our children. This event would not have been possible without them.

Dr Elizabeth Kramer, Convener and Dr Janine Barker, Co-Convener

Overview

Wednesday, 4 September

10.00-3.30 Publication Workshop

1.00-5.00 The Journal of Design History
Editorial Board Meeting

Thursday, 5 September

9.00 Registration opens

10.00-12.00 Conference Visits

12.00 - 1.00 Lunch

1.00-2.30 Parallel Sessions

2.30-3.00 Coffee/Tea Break

3.00-4.30 Parallel Sessions

4.45-6.15 Keynote

Fixing Liquidity; Making Change
Reasonable – Design, Finance
and History

Professor Guy Julier, Aalto
University, Finland

6.30-8.30 Oxford University Press /
Design History Society Opening
Reception

Friday, 6 September

8.30 Registration opens

9.00-10.30 Parallel Sessions

10.30-11.00 Coffee/Tea Break

11.00-12.30 Parallel Sessions

12.30-1.30 Lunch / PGR and ECR Drop In

1.30-3.00 Parallel Sessions

3.00-3.30 Coffee/Tea Break

3.30-5.00 Keynote

In Conversation: The Costs of Curating Design

Professor Aric Chen, Tongji University, Shanghai

Professor Alice Tremlow, Royal Academy of Art The Hague, Netherlands

5.00 -5.45 DHS Annual General Meeting

7.00-12.00 Design History Society Gala Dinner

Saturday, 7 September

9.00 Registration opens

9.30-11.00 Parallel Sessions

11.00-11.30 Coffee/Tea Break

11.30-1.00 Keynote

Luxury and Corruption: Re-Thinking Design, Crime and Neoliberalism

Dr Tereza Kuldova, Oslo Metropolitan University, Norway

1.00-2.00 Lunch

2.00-2.45 Closing Remarks and the Big Reveal of DHS 2020

Keynotes

Guy Julier is Professor of Design Leadership and Head of Research in the Department of Design at Aalto University, Finland. More specifically, he works with researchers and students to investigate post-capitalist and hybrid design practices and possibilities. In 2019 he was Commissioner of 'Everyday Experiments', the Finnish Pavilion for the XXII Triennale di Milano, an exhibition highlighting institutions and communities who explore new configurations of sustainability and equality. His most recent book, *Economies of Design* (2017), provides an analysis of the multiple roles of design in the contexts of contemporary, neoliberal orthodoxies and beyond. Other books include *The Culture of Design* (3rd revised edition 2014), the *Thames & Hudson Dictionary of Design since 1900* (3rd revised edition 2005) and *New Spanish Design* (1991). Guy Julier is also a co-editor of *Design and Creativity: Policy, Management and Practice* (2009) and *Design Culture: Objects and Approaches* (2019). Before moving to Finland in 2018, he was the Victoria and Albert Museum/University of Brighton Principal Research Fellow in Contemporary Design.

Aric Chen is a design and architecture curator, writer and consultant based in Shanghai, where he is Professor of Practice at the College of Design & Innovation at Tongji University. In addition, Chen currently serves as Curatorial Director for the Design Miami/ and Design Miami/Basel fairs; Curatorial Consultant to the Brooklyn Museum; and Curator-at-Large for M+, the new museum for visual culture under construction in Hong Kong's West Kowloon Cultural District, where from 2012-2018 he was that institution's first Lead Curator for Design and Architecture.

Prior to M+, Chen was the first Creative Director of Beijing Design Week. Over the years, he has organized dozens of projects and exhibitions internationally, in addition to serving on numerous juries, and as a curatorial advisor to the UABB Shenzhen Biennale of Architecture\Urbanism, the Cooper-Hewitt Design Triennale (New York), and the Gwangju Design Biennale. Chen is the author of *Brazil Modern* (Monacelli, 2016), and has been a frequent contributor to *The New York Times*, *Wallpaper**, *Architectural Record*, and other publications.

Alice Twemlow is a research professor at the Royal Academy of Art The Hague (KABK) where she leads the Design and Deep Future Lectorate and an associate professor at Leiden University in the PhDArts programme, where she supervises artistic research PhDs with a design focus. Her research interests include design criticism, design

research, design education, speculative design, design and disposal, and the relationship between design and time.

She was the founding director of the MA in Design Research, Writing & Criticism at the School of Visual Arts in New York, 2008-2015 and then head of the Design Curating & Writing MA at Design Academy Eindhoven until 2018. She lectures widely and has directed and moderated numerous design conferences. She writes about design for publications such as *Design Observer*, *Eye*, *Disegno*, and *frieze* and is the author of *Sifting the Trash: A History of Design Criticism* (MIT Press, 2017). Twemlow has an MA and a Ph.D from the History of Design program run jointly by the Victoria & Albert Museum and the Royal College of Art in London. For more information, please visit: www.alicetwemlow.com.

Tereza Kuldova is a social anthropologist and Senior Researcher at Oslo Metropolitan University. She is the author of, among others, *How Outlaws Win Friends and Influence People* (Palgrave, 2019), *Luxury Indian Fashion: A Social Critique* (Bloomsbury, 2016), editor of *Outlaw Motorcycle Clubs and Street Gangs: Scheming Legality, Resisting Criminalization* (Palgrave, 2018), *Urban Utopias: Excess and Expulsion in Neoliberal South Asia* (Palgrave, 2017), and *Fashion India: Spectacular Capitalism* (Akademika Publishing, 2013). She has written extensively on topics ranging from fashion, design, aesthetics, branding, intellectual property rights, nationalism, philanthropy, India, to outlaw motorcycle clubs, subcultures, and organized crime. She is the founder and editor-in-chief of the *Journal of Extreme Anthropology*. For more information, please visit: www.tereza-kuldova.com.

Parallel Session One

Typographic Transactions

Typography and indigenous languages of America: the case of the glottal stop

Tai Cossich, Doctoral Candidate, Royal College of Art, UK

'*Chipewyan baby name not allowed on N.W.T. birth certificate*', reported CBC News in March 2015, as a woman from the Canadian Northwest Territories was prevented by local authorities from registering her daughter's name in her native language. According to the newspaper, authorities claimed difficulties in writing the glottal stop letter, a letter from the International Phonetic Alphabet that is also present in the Latin-based orthography of the Chipewyan language. The glottal stop letter offers striking examples of difficulties in accommodating typography to the orthography of indigenous languages. This paper will present this phenomenon and discuss how studies in 'Typography and Indigenous Languages' could benefit from comparative examinations of seemingly disparate socio-historical contexts through the observation of discrete points of consonance.

The paper provides examples of typographic inadequacies related to the case of the glottal stop, across languages and across typographic technologies. These typographic inadequacies are analysed as graphic variations that result from 1) the practice of adding extra-alphabetic symbols to new orthographies; 2) patterns of distribution of typographic resources; 3) the pivotal role bilingualism plays in standardising orthographies. To conclude, the paper provides a summary of the discussion and points to possible contributions to ongoing debates about Global Design Histories.

Alphabets, syllabaries, ideograms: negotiating typography as infrastructure in Asia

Dr Vaibhav Singh, University of Reading, UK

The design and production of printed matter, in a number of scripts of the world, was subject to a process of drastic change from the beginning of the twentieth century. This came about partly in the form of a relatively rapid succession of technological innovations – most importantly, the change from hand-setting movable type to the mechanical composition of text through type-casting and type-setting machines. And partly, it was in response to the growth of new economies and polities in Asia presenting a different set of requirements for textual communication in their specific linguistic contexts. This paper is an attempt to examine and re-conceptualise the twentieth century history of Asian scripts through the material encounters that shaped their typography. It aims to draw transnational connections in the development of typographic infrastructures for text-based communication in modern Asia. By reversing the customary formulation of design and technology as outside forces, foisted on unsuspecting societies, the paper will explore how local entrepreneurs, technocrats, and intellectuals across Asia participated not only in negotiating modernity through typographic design but also in determining the costs – material, cultural, and conceptual – to be borne in this process. The paper will focus on the global intersection of linguistic exploration, economic thought, technology, and political ambitions with reference to mechanization in India, China, Japan, and Korea. By touching on an Asia-wide comparative framework the paper aims to reorient enquiry into the materiality of language, typographic design, and technological developments in the region.

Experiments in Publishing: Indian Opinion and the Murty Classical Library of India

Dr Rathna Ramanathan, Royal College of Art, UK

Between 1903 and 1915, whilst he was based in South Africa as a lawyer, M K Gandhi published a newspaper *Indian Opinion*. The newspaper, published in multiple world languages and encompassing different genres from news to philosophical extracts was aimed at a broad international audience. Over the years, Gandhi used the paper to test out theories of how printing and publishing could create new kinds of 'ethical selves' and built a concept of an ideal reader, one who was free from constraints of market and nation. The Murty Classical Library of India aims to present the greatest literary works of India from the past two millennia to the largest readership in the world. The series seeks to reintroduce these works, a part of world literature's treasured heritage, to a new generation. The series provides English translations of classical works alongside the Indic originals in the appropriate regional script in languages such as Bangla, Hindi, Kannada, Marathi, Pali, Panjabi, Persian, Sanskrit, Sindhi, Tamil, Telugu, and Urdu.

This paper posits two case-studies of independent publishing ventures, each with ambitions for transnational publication. It places this within the context of publishing, a market-driven industrialized practice as well as within today's international and intercultural world where news is absorbed by multiple audiences and readers. It provides a view of the economies, printing practices and challenges faced by these ventures, whilst also showcasing the possibilities of what can be achieved when the traditional and transactional relationships between design and economy are challenged.

The Economy of the Home

The price of good taste: social status and cultural capital exchange in the design of a 1960s Sydney interior

Catriona Quinn, Doctoral Candidate, University of New South Wales, Australia

'Our client had no taste of his own....which is why he engaged us.'

The buying and selling of 'tasteful' interiors is a heavily masked component of interior design commissioned by the socially ambitious – Pierre Bourdieu's 'parvenus' anxious their own choices may betray their origins. But in what way is the selection of an interior designer and the style of interior they create, in itself, an expression of taste and 'distinction'? Australian design history, particularly the history of post-war furniture, has concerned itself primarily with a Modernism defined by minimalist, avant-garde designers. This paper argues that, in departing from a historical model that places the progressive architect or designer at the centre of the narrative, there is much to be gained by interrogating the client's role in the production of meaningful designed spaces – their aspirations and belief in the value of their home as a locale for the expression of personality and success.

This paper will examine the exchange of capital – cultural and economic – in the context of one remarkable Sydney 'time capsule' house, the home of electronics millionaire and racing industry identity Keith Harris. The house and its interiors, by Sydney firm Décor Associates, represent a style of luxurious, Hollywood regency modernism all but ignored by Australian design history. Yet its unique custom-made furnishings met the needs of Harris and his wife as an expression of their flamboyance and ambition to join the smart set – later to be dashed by Harris's very public fall from grace. The nature and scale of the Harris house commission supports a view of the complexity of the capital exchange to be found in the client/designer relationship.

British Homes for Irish People in the Irish Free State, 1922-1932

Tom Spalding, Doctoral Candidate, Technical University Dublin, Ireland

The role of Irishmen in the British forces during the First World War has only become widely recognised in the Republic of Ireland in recent years. Many of these men had returned to a radically altered country. After the war (and the subsequent war of Irish independence and Irish civil war), the British Government paid for and supervised the construction of 2,626 veterans' homes in the newly-independent state. This process is an excellent example of 'soft power' being wielded by the recent neo-colonial administration. The UK government intended to mollify and support the veterans, to provide exemplary accommodation (which illustrated the virtues of British rule) and to prevent Irish veterans being seduced to fight for the IRA. These homes were also intended to be an officially-sanctioned and living memorial to the Irish war-dead. In Cork City over 230 units were built – a substantial contribution to the city's post-war housing stock, but far short of the needs of the estimated 12,000 veterans there. The Neo-Georgian design of these homes reflected the priorities and prejudices of British housing authorities. This was clear in terms of the exterior design, interior arrangements and layouts of the various housing developments, and of the placenames adopted for them. In particular, the layouts reveal the underlying class and military identity of the resident population. This paper will analyze the design of these developments for the first time and argue that the homes contributed to the building of an 'imagined community' of Irish-British veterans, neither stoutly republican nor full-heartedly loyalist, but proudly localist. Ironically, their design was rapidly adopted by speculative Irish builders keen to attract private buyers; this will also be discussed.

The expressive, expansive, and expensive Modernism of Paul Laszlo (or, how one architect rejected the "glorification of economy" in mid-century American design)
Dr Monica Penick, Associate Professor, The University of Texas at Austin, USA

In the 1940s and 1950s, when many American modernists were exploring standardized, prefabricated, low-cost solutions to a national housing crisis, architect Paul László was working at the high end of the residential market. László, who left a successful design practice in Stuttgart, Germany for a new start in Los Angeles, made no compromises: with his custom homes, he explored the problem of how to live in a modern way *without* sacrificing personality, livability, quality, or luxury. His approach and aesthetic -- and the resulting price tag -- frequently challenged the "severe, almost ascetic expression" and the more "economical" solutions sought by many of his fellow modernists. This included two designers whom László admired: his one-time Werkbund colleague Mies van der Rohe, and Le Corbusier.

László, unlike many of his contemporaries in the United States, was committed to a version of modern design that simultaneously embraced industrial materials, technological advances, *and* old-world craft traditions. His work was thorough and complete -- a modern *Gesamtkunstwerk* in which he controlled every aspect of design and production, "right down to the last ashtray." But his designs were not cheap: in a market where the average price of a new home was \$25,000, a László house ranged between \$50,000 and \$1 million.

This paper explores two key aspects of László's practice that set him in opposition to dominant postwar trends: his reliance on industrial production *and* craft production (and his network of artisans that guaranteed high-quality work); and, his consistent ability to "sell" his expressive, expansive, and expensive vision of modernism to an eager clientele. Though László was not the only architect who refused to "accept the glorification of economy," his dedication to the problem of luxury points toward a broader understanding of how many designers (and their clients) came to define modern design in midcentury America.

Education and the Economy

Craft and livelihood: developments in formal education in the Federated Malay States, Singapore, and Java, during the boom and depression of the 1900s–1940s

Dr Mitha Budhyarto, LASALLE College of the Arts, Singapore

Dr Vikas Kailankaje, LASALLE College of the Arts, Singapore

As part of a larger survey of the history of design education in Indonesia, Malaysia and Singapore, the present paper examines the roles formal and informal modes of education played in aiding the economic development of three regions with intertwining histories: the Federated Malay States, Singapore and Java during the 1900s to 1940s. This was a period when imperialism was confronted with the 'welfare' and 'development' in the colonies and protectorates. Particular attention is given to expenditure on education, apprenticeship and related issues such as economic depression and imported labour. This context frames an analysis of the development of vocational and vernacular education at the time, beyond a prior emphasis on English and Dutch-medium general education. British and Dutch colonial office reports (such as those by R. Winstedt and J. E. Jasper respectively) will be considered, especially since they were both scholar-administrators that had drawn a connection between native crafts and native education. The changing colonial economy and demography entailed the following shifts: the role of formal education in the commodification of cultural artefacts that were previously positioned as objects of ethnographic interest; shifts in educational policies to overcome a bloat in the clerical class and shortfall in manual skilled labour.

Pedagogy and Practice in Nottingham Lace: Copying to learn and learning to copy
Dr Amanda Briggs-Goode, Professor, Nottingham Trent University, UK
Dr Gail Baxter, Research Fellow, Nottingham Trent University, UK

The original object of creating machine made lace was to copy the styles of hand made laces but in a much faster and cheaper way (Earnshaw, 1986). Copying can thus be said to have been at the heart of Nottingham lace design from its earliest inception. The Nottingham lace industry repeatedly adapted traditional designs and was widely seen as catering for "the masses and not the classes" (Brompton, 1997). The Government-instigated Schools of Design by contrast were attempting to instil 'good taste' and the principles of good design in the industrial arts (Romans, 2004; Bell, 1963). The School of Design promoted the reproduction of a canon of design, but the lace industry sought to employ designers who could produce refreshed versions of common laces, these opposing focuses inevitably created tensions between the two sides (Nottingham Daily Express, 1917).

This paper explores the lace design pedagogy that developed in the Nottingham School of Design during the first half of the twentieth century. It draws on teaching material and student work in the Nottingham Trent University Lace Archive examining three sets of material in particular: portfolios of student artwork; a collection of lace and draughts collated for teaching purposes; and student designed lace samples. These materials are records of a learning process influenced both by a national education system and the local lace industry. While the ability to create original designs was valued by the lace industry the commercial habit of adapting successful designs continued, indeed the problems of copyright infringement have never been eradicated (Fisher, 2018).

Lace design pedagogy encompassed the 'principles' of design, the 'technique' of design and the 'business' of design. In each of these fields, students learnt by copying, so that copying was, to some extent, both the method and the outcome of Nottingham lace design education.

American Industry & Design Schools: Tracing Influence from Enterprise to Education
Gretchen Von Koenig, Curator and Lecturer, Parsons School of Design, USA

Higher education for designers has been understudied, particularly when compared to art and architecture education. Yet, product and industrial designers are more overtly tied to the culture of consumption, systems of capitalism, and global economies—significant topics in the social, cultural and political topics of the last century. Indeed, American industry and enterprise has had a heavy hand in underwriting design schools, where participants in the market economy serve as faculty, program directors, and sit on boards of trustees. While the Bauhaus is often thought of as a leading influence on design education formation and ideals, this paper aims to move outside that paradigm and analyze the relationship between American industry and the beginnings of formal design education in 1930-1950s, looking at Pratt Institute as a catalyst and early influencer in product design education.

Analyzing archival material from Pratt Institute, as well as early professional associations' curricular guides (IDSA, IDEA, IDI & SDI) and correspondence with design educators, this short historiography will examine a particular moment when leading institutions were developing their approach and deployment of design education to better fit industry needs. This paper hopes to reveal the ways that capitalistic thought and concerns were both overtly and covertly adopted into design education—quite the opposite of Bauhaus socialist ideals. It looks at the complex relationship between design schools, design educators, design industry and professional design organizations to attempt to trace the influence that American industry had over education. The role that industry had in forming, developing, and underwriting new and existing programs in design education has had lasting implications on how schools define teaching design, what good design is, and how design is ultimately thought of in the American industrial landscape.

Design Challenges for Sustainability

A Feminist Model of Industrial Design Practice

Dr Isabel Prochner, Syracuse University, USA

Dominant models and conventions in industrial design often emphasize the marketplace, expansion and economic growth. This has been the case throughout much of the history of industrial design where, for instance, the profession has been repeatedly seen and employed as a strategy for economic development. This is not without its consequences - good and bad. On the negative end, our dominant economic system and the design industries within it can perpetuate patterns of inequality, exclusion and exploitation.

This paper will outline an alternate model for industrial design practice rooted in socio-economic sustainability and empowerment. I will draw on feminist economic theory to develop and propose a community-centred model of practice. Broadly speaking, feminist economics examines underlying assumptions in economics and proposes more human-centred, egalitarian and context-specific visions. I will employ the resulting model in my own work. In the coming years, I will establish an industrial design company based on this vision, and explore its feasibility, advantages and limitations. This paper is a first step in this design practice and research project. However, it also promises to contribute to broader discussions on relationships between design and economy and on resistance.

From draining swamps to urban activism: sustainability in the design of Finnish landscapes

Dr Eeva Berglund, Adjunct Professor, Department of Design, Aalto University, Finland

This paper sketches out key developments in Finland's rural and urban economies in order to help frame the current politics of sustainability in a historically informed and approachable way and acknowledges the mutual dependencies between rural and urban economies.

Combining my earlier anthropological research on the making of the Finnish landscape (the 'forest state' and the administrative and everyday cultures associated with it) with my recent work on design activism in the Finnish capital Helsinki, the paper engages with debates around the proliferation of sustainable design projects and related post-growth social movements and broken-world thinking. As a new kind of design-friendly environmental politics gains popularity, intellectually sound comparative research on its material and cultural histories is imperative.

One can plausibly argue that modern Finland was self-consciously designed, the nation and its nature co-constructed. Narratives of Finland as modern yet still based on and respectful of nature had traction because they became embedded in and helped promote material practices, forest management or industrial growth for instance, that benefitted many. From the late nineteenth century and even more after independence (1917), these discourses supported economic growth and political peace, leaving protest and dissent marginalised or suppressed. The rise of information technology as a nationally significant economic sector at the end of the last century, changed the narratives and also upturned how urban and rural life were organised and valued.

Today environmental politics keeps urban and rural separate even as economics joins them ever tighter together, while sustainability talk easily obscures unsustainable choices, in Finland as elsewhere. Putting together the rural story of designing better forests with the urban story of designing better cities, will yield more nuanced analyses of claims to sustainability today.

The role of design for craftsmanship in a growth-critical transformation

Dr Ulrike Haele, Assistant Professor, Institute of Design Research Vienna, Austria

For a starting point, the paper describes the state of contemporary craft practice, with references to global knowledge cultures, new technologies and the associated potential of decentralised production. The knowledge implicit in craftsmanship that can promote the preservation, "care-in-use" and re-use of products is emphasized. This contradicts our fast-moving consumer culture, which aims to reduce the value of work and make goods obsolete as quickly as possible.

The paper tries to identify the potential of design for craftsmanship in relation to a growth-critical transformation. With reference to the concept of "Redirective practices" in Tony Fry's work (2011), it is examined to what extent "Re-Crafting", elementary for a future economy and culture, can be directed at establishing a condition of *Sustainability*, Fry's concept of broad scale social change. On the other hand, Sommer/Welzer's demand for a reductive modernity (2014) is presented. They advocate the legibility of the history and origin of products, a transformative task that design and craftsmanship can fulfil. These demands are complemented by the presentation of the concept of "Cosmopolitan Localism" of the Transition Design Network (2015), within the framework of which solutions to global problems are conceived to correspond to the respective social and ecological contexts. It is precisely in this respect that design and craftsmanship can play an important role in decentralised production.

On the one hand, the contribution formulates possibilities and outlines a programme for a future-oriented craft, on the other hand it is to be understood as a call to practitioners to acknowledge their own political responsibility and to deal with it in order to enable new and more sustainable ways of consumption and production.

Parallel Session Two

Graphic Persuasion

Typography, illustration, and the politics of visualizing immigration to the United States
Dr Dori Griffin, Assistant Professor, University of Florida, USA

Throughout the last century and a half, popular visual media has played a significant role in articulating the shifting politics of international immigration to the United States. Print media such as posters, newspaper cartoons, informational leaflets, and magazine or book covers circulated messages ranging from optimistic welcome to fearful exclusion. Visual communications across this conceptual spectrum deployed the design tools of culturally specific typography and ethnically coded commercial illustration to carry their message. These politically charged visual narratives about immigration circulated image tropes that were then, as they are now, familiar to their audiences. Illustrations frequently depicted protective (or exclusionary) border walls and personified Lady Liberty as a nurturing mother-figure (or beleaguered victim of violence). Language and typography further politicized such visualizations, whether through “chop-suey” lettering deployed to mark nineteenth century Chinese-Americans as undesirably foreign or Century Schoolbook-style typography used to imply that early twentieth century Eastern European adult immigrants required remedial elementary education upon arrival in the United States.

Today’s digital meme culture shares significant formal and conceptual characteristics with these printed predecessors. Far from being (in the words of Marc Prensky) “digitally native,” the contents and aesthetics of today’s memes emerge from visual messaging strategies rooted in the history of graphic design. In our current political context, nationalist agendas inform both the content and the production process of visual communications about immigration. As with all politically motivated design, there are significant social and human costs – and/or potential benefits – associated with such acts of communication design. Using the United States as a case study, this paper will explore the historical contexts for today’s visual rhetoric of immigration. It will suggest that lessons learned through a critical examination of historical precedents might inform our approach to critiquing and challenging twenty-first century meme culture.

Posters as Public Persuasion: mediations of power and ideology in the graphic work of E. McKnight Kauffer between WWI and WWII

Kristina Parsons, Lecturer and Cataloguer, Cooper Hewitt, Smithsonian Design Museum, USA

Inspired by the pioneering experimentation of early 20th century artists, and dedicated to the advancement of the poster as a compelling means of communication, American graphic designer E. McKnight Kauffer metabolized the avant garde to pioneer a new visual language for poster design. By considering Kauffer's prolific poster work between the end of WWI in 1918, and his departure from England in 1940, this paper examines the varied messages communicated to and by British citizens in a time of political, social, and economic reconstruction. As Kauffer wrote in the inaugural issue of the *ALS Bulletin*, in 1919: "Few people realize the importance of the hoardings. It is from them that the masses gather ideas for a great many things that directly influence them." In the period between WWI and WWII, how effectively do Kauffer's posters remain a universally effective tool, equally advocating the needs of British citizens and disseminating governmental beliefs to those it seeks to compel? As a prominent fixture of public life, how do posters mediate the flow of both power and ideology between citizens and the dominant governing bodies that act on society at large? Whose ideologies are promoted, and therefore, who is empowered through the medium of posters? Focusing on Kauffer's work for citizen-led arts organizations such as The Arts League of Service on the one hand, and government agencies like Empire Marketing Board on the other, this paper examines the paradoxical principles espoused by and conveyed to British society after WWI and questions the role of the Kauffer's posters in facilitating the flows of power and ideology between them.

Stamp design and soft power: 'the silent ambassadors of national taste'

Dr Mary Ann Bolger, Technological University Dublin, Ireland

This paper takes the designs for Ireland's second definitive series of stamps as the focus for an examination of graphic design as ideological conduit—a manifestation of 'soft power'. It considers the ways in which the Republic of Ireland—an apparently peripheral nation-state—sought, by visually invoking the past, to reimagine and invert power relations with the former colonial power, Britain.

In 1966, the recently established Stamp Design Advisory Committee invited three Irish and twelve international designers to enter a competition to replace the definitive series that had been in circulation since the establishment of the Irish Free State in 1922. The theme was 'Early Irish Art' and the controversial winner was a West German artist, Heinrich Gerl, two of whose four designs were based on examples of 8th-century English decorative art.

Drawing on several unpublished archival sources, the paper investigates the various discourses around the competition and its aftermath in the context of efforts by an influential minority in the Irish state agencies to construct an export identity for Irish goods and to overcome an association between modernisation and Anglicisation that persisted in post-war Ireland. It argues that the SDAC's choice of winning stamps could be understood as an act of decolonisation and as a celebration of Ireland's intellectual heritage in Europe in the context of application for EEC membership.

Approaches to Design History through Archives and Literature

Inside the Cash Book: Regional History and the Cost of Design

Professor Anne Massey, University of Huddersfield, UK

This paper takes as its subject a simple cash book measuring 32cm by 13cm. The book contains a record of the expenditure and income of the illustrator and artist, Tom Carr (1912-1977) from April 1948 until June 1954. It offers a rare and detailed insight into the working practices of a jobbing illustrator. The minutiae of the cost of drawing materials and packaging are listed, even down to 2/6 (30p) for a ball of string. The cash book lists the cost of every image sold, whether to magazines such as *Riding: The Horse Lover's Magazine* or *Country Life* at prices ranging from one to eight guineas. Carr was also commissioned to illustrate books by patrons such as the Irish writer, Stanislaus Lynch, including *Hoofprints on Parchment* (c1952), while sketches and paintings were sold to local farmers and aristocracy.

Tom Carr was originally destined for a life working down the coal mines. He was born into a working-class family, the youngest of nine children. He left school at the age of 12 and then worked at Westwood Colliery in County Durham. With the outbreak of the Second World War, Carr transferred employment to the other great industry of the north-east of England, ship building, and worked as a drop steam hammer operator, helping to fabricate anchors for Royal Navy warships. This heavy labour took its toll: Carr suffered a slipped disc and could never work in the colliery or shipyard again.

But Carr could draw, and in partnership with his wife Sadie (1911-2002) who administered the cash book, he began to earn approximately £50 per month. The working practices were maintained throughout Carr's lifetime, and he earned a modest income and reputation as an illustrator and artist. And it all started with the cash book.

"The Industrial Design Complex: Upton Sinclair, Lanny Budd, and Military Modernism During the World Wars"

Rachel Hedy Rosengarten Hunnicutt, Cataloguer and MA Candidate, Parsons School of Design and Cooper Hewitt, Smithsonian Design Museum, USA

Best known for his literary crusades against capitalism such as *The Jungle* (1906) and *Oil!* (1927), American author, activist, and progressive politician Upton Sinclair's (1878–1968) literary output most often falls under the purview of literary scholars and social theorists. While his muckraking journalism and fictive exposés are enlightening to these fields, they also offer rich, contemporary accounts of the intersection of industry and design during Sinclair's lifetime. In particular, his eleven-novel Lanny Budd series—written and published between 1940 and 1953—offers tremendous insight into the cultural, political, and industrial pressures that influenced design in the twentieth century. The cycle follows its eponymous protagonist from boyhood to middle age, illustrating the life of a wealthy Euro-American playboy and art connoisseur who plays the socialite but secretly cultivates socialist ideals. The "parlor pink" is the scion of the fictitious Budd Gunmakers and Budd-Erling Aircraft—the former sold arms to warring nations during World War I while the latter provided flying machines to both Axis and Allied forces before and during World War II—and secret agent for Franklin Roosevelt. This paper examines the novels from a design historical perspective, interrogating Sinclair's fictional commentary on the period's very real political, cultural, and material pressures. I propose that Sinclair's Lanny Budd series offers a unique lens through which design historians can view the complex relationship between capitalism, consumption, and the weapons industry, along with their reciprocal impact on design in the middle of the twentieth century. Drawing on sources such as H.C. Engelbrecht and F.C. Hanighen's *Merchants of Death* (1934) and George Nelson's CBS segment *A Problem of Design: How to Kill People* (1960), it offers a reexamination of twentieth-century military modernism to elucidate its complex legacy and profuse impact on design and design history in Europe and America.

'The Caoutchouc of Commerce': India-Rubber and Economic Botany in Nineteenth Century Britain

Helen Butler-Watts, Collections Move Officer, Victoria and Albert Museum, UK

Founded in 1847, the Kew Museum of Economic Botany dedicated its collections to useful plants, with its displays aimed at merchants, manufacturers, scientists and artisans. Among the array of vegetable products was a collection of natural rubber, known as 'India-rubber' or 'caoutchouc'. The array of objects, including raw plant material, animal figurines, surgical articles, moulded portrait plaques, vulcanised mourning jewellery and an inflatable cushion, are linked by their taxonomic name: *Hevea brasiliensis*, the tree from which rubber was tapped to source the material. The museum at Kew and the first International Exhibitions showed rubber as a spectacle. It was presented as a material of wonder and curiosity, with innumerable applications. Throughout the century, rubber revealed its capacity to replace the ornamental and the practical.

Kew aligned itself with industry, turning rubber into an imperial opportunity. India-rubber's agency derives from the constant difficulties it posed to European inventors, chemists and manufacturers, in terms of its solidity, stability, malleability, and later, questions of cultivation in plantations. From the first shipments of rubber to Europe in the eighteenth century, rubber entered into a process of being cured of its problems. From 1876, with the first importation of seeds from Brazil, via Kew Gardens, the process of creating plantations of rubber began. The endeavours of both cultivation and material development can be framed through this concept of improvement. Regarded now as an act of 'bio-piracy', the rubber tree seeds propagated by Kew and sent to Sri Lanka and Malaysia contributed to the failure of the Brazilian rubber industry.

Using the Kew collection as a beginning point, this paper traces its objects to form a history of Victorian transformations of rubber's physical properties and the ways the botanic garden became an economic instrument, influencing rubber's shift from West to East.

New Approaches to Design Teaching

Redirecting design education: cost, hope and agency

Sancha de Búrca, Doctoral Candidate and Lecturer, University of Kent, UK

Graphic design has historically been implicated in upholding the ideologies of consumerism and infinite financial growth on a planet of finite resources. Since the Industrial Revolution's need to turn mass product into money, most graphic design has persuaded people to needlessly consume.

Now we need to redirect the purpose of graphic design to use, for the common good, design's affordances of communication and research. Yet, redirective teaching creates further costs in terms of shattering students' expectations and by triggering feelings of disbelief, guilt or hopelessness. Educators become bringers of bad news and face an ethical dilemma - hurt students in the class, as critical pedagogy reveals the historical costs of design; or hurt humankind by ignoring the urgent need for radical change

By utilising transformative experience and critical hope, design educators might develop a pedagogy that redirects graphic design towards an ethical and socially responsible purpose.

The presentation will focus on examples of interventions that allow students to undergo transformative experience through expansion of perception, motivated action, and feeling experiential value. The interventions originate at the local level, where students work with communities to have a lived experience of design for good agency. Projects include collaborative ideation workshops or designing provocative prototypes as conversation-starters. These provide opportunities to engage in dialogue with others for change-making, service learning and rethinking professional practice as an ethic of care. Using ideology-based critical lenses for exploring design's historical context, serves as both a warning and, sometimes, a hopeful role model for a beyond-the-self ethos and design as activism.

The Emotional Cost of Design History: Rethinking the Teaching of Fashion History

Dr Sarah Cheang, Senior Tutor, Royal College of Art, UK

Dr Shehnaz Suterwalla, Tutor, Royal College of Art, UK

Calls for the decolonising of higher education curricula have never seemed more pressing than in Britain today. Emotions run high in student-led campaigns for the removal of colonial statues, the renaming of university spaces and the revamping of reading lists, and many academics have also long been strong and furious advocates of a teaching agenda that does more than pay lip service to matters of post-colonialism, institutionalised racism, and the marginalisation of non-European descended perspectives.

Teaching a decolonised design history involves more than simply by broadening the canon and making the definition of 'design' more inclusive. This paper reflects on experimental methods and approaches to teaching fashion studies and fashion history as a decolonised practice. It focuses on recent initiatives at London art and design colleges (The Royal College of Art, Central Saint Martins, London College of Fashion, London College of Communication), some of which have been student-led interventions, some tutor-led, and some occurring at a more institutional level (often with an eye to attainment gaps). By analysing examples of decolonising events and experimental teaching methods in fashion history, we explore how the dismantling of Eurocentric bias and critique fashion systems involves the asking of uncomfortable questions and the unpicking of top down structures, in which the institution cannot and should not lead by definition. We further ask what the personal and emotional costs might be of having a decolonised teaching practice. What could a decolonised practice look like? Is it possible to have an activist teaching practice in this area and still meet the expectations of institutions and students alike? And how can students and educators best be supported in these endeavours?

A Story of Fashion Revolution – the initiative that challenges the cost of fashion.

Catherine Glover, Doctoral Candidate and Senior Lecturer, Northumbria University, UK

This paper aims to give insight into how stories can be used to inspire a positive change in habits, attitude and mindset, resulting in micro to macro trans-global engagement between fashion stakeholders. It examines how the strategy of putting storied content in the hands of consumers can incite grass-roots movement and a change in mindset, energizing contemporary fashion dialogues.

This paper draws from a unique educational 'live brief' designed in collaboration with the initiative Fashion Revolution in which 65 degree-level students were tasked to create pro-fashion content. The learning process involved exploring the initiative's position as a pioneer and disruptor within the industry. Fashion Revolution was established in response to the collapse of the Rana Plaza factory in Bangladesh in April 2013 which killed 1,134 people. Its mission is to inspire a global sustainable movement; to encourage brands to care about the cost of fashion, transparency, and accountability within the supply chain; and for consumers to become pro-fashion protestors who actively engage through hashtag campaigns. This study provides insight into how design education can be used to illuminate contemporary understanding and motivate consumers to question the cost of fashion.

Translation and Design

"Affordable Luxury"? Bargaining on the Aesthetics of Everyday in Danish Design

Dr Mads Nygaard Folkmann, Associate Professor, University of Southern Denmark, Denmark

Professor Anders V. Munch, University of Southern Denmark, Denmark

In the last 15 years, several Danish design companies have positioned themselves through re-articulating the tradition of Danish or Scandinavian Modern as New Nordic or New Danish Modern – a double gesture of pointing to tradition while also setting off from it. One of the central actors in this "movement", the company Muuto, paradigmatically positioned itself in relation to a "Scandinavian mindset" of producing "democratic, social (as opposed to individual), affordable luxury", because, as the company stated, "We want everyone to be able to afford our design".

"Affordable luxury" is, though, a paradox. In most instances, luxury would signify what is desired by many, but accessible to few. But the slogan seems to pick up the "offer" from Danish Functionalism, where Danish Design was explained as a real bargain, if you understood its multifunctionality and longevity and learned to consume reasonably: "It does not cost any money to light up a room correctly, but it demands culture" (1928), Poul Henningsen stated to promote his lamps. The functionalists wanted to avoid luxury as non-essential. The irony, however, is that now, their designs are expensive icons. This is a further background for the current bargaining on the "affordable luxury" of New Nordic design.

In this paper, we will analyse and discuss the paradox of "affordable luxury" in relation to the discourse of the aesthetics of the everyday in Danish design and the different articulations of "luxury" it makes open. Taking a starting point in what today seems to be a marketing trick of making the cheap appealing, we will trace positions in Danish design, where, for instance, luxury is articulated as a special sensation of the action that design objects enables (Munch-Petersen, 1990s), as the quality of everyday utensils (Herløw, 1950s) or as the achievement of rich lighting by cultural knowledge and aesthetic training (Henningsen, 1920s).

Articulation of Turkish Vernacular Design in the Context of Global Furniture Industry
Dr Esra Bici Nasır, Lecturer, Izmir University, Turkey

Turkish vernacular furniture had as its characteristic qualities being mobile and lightweight, yielding a multifunctional domestic space practice in a sustainable manner. In the Westernization process in the late 19th century Ottoman society, consuming neo-classical Western furniture became a status symbol for upper classes yielding the abandonment of local furniture. After the establishment of the Turkish Republic in 1923, modern furniture was consumed as a sign of modern identities. Whether the style was neo-classic or modern, this furniture was designed and produced on the basis of emulation of Western trends and counterparts. In the context of the Turkish design profession and furniture industry, the design potential of vernacular furniture like floor tables, built-in closets and *sedir* has hardly been recognized and evaluated. In this study, the withdrawal of vernacular furniture and of the relevant traditional use practices is considered as missing a rich source. The inquiry is about envisioning possible contemporary Turkish design if the vernacular system were taken as a prime source or if contemporary units had evolved from the vernacular. One of the important cases is Turkish Modern Concept Store based in both San Francisco and Istanbul. Custom daybeds and multifunctional benches are important products of this company, which is inspired by the vernacular in terms of texture, form and function. Another case to be discussed is a global one to provide insight: the Mah Jong Sofa produced by the French furniture company, Roche Bobois. Designer of Mah Jong Sofa, Kenzo Takada, took inspiration from ancient kimonos used in the Noh Theatre, re-interpreting their patterns and colours to create fine and sophisticated harmonies. Taking cues from a prominent global case and a local example, the path of Turkish vernacular design to be renovated and modernized will be discussed thoroughly.

A Little Rabbit Making Great Profit

Wei Huang, Doctoral Candidate, Vrije Universiteit Amsterdam, The Netherlands

In 1955, when Dutch artist Dick Bruna was playing with his son and enjoying a seaside holiday, he saw a rabbit on the beach. He drew the shape of the rabbit to tell a story to amuse his son. Since then, the image of a little rabbit grew up. Named Nijntje in 1955 from the Dutch word 'konijntje' (little rabbit), in English it became Miffy in 1963 and has developed into an oeuvre of 124 storybooks for children and distributed in more than 70 countries worldwide. The related products are now worth approximately £150 million annually (Harrod, 2017, *The Telegraphy*). Mercis BV, a small company in Amsterdam, manages the copyright.

Miffy's original picture book is never too abstract and always retains its original essence. Originally designed for children, it gives them "lots of room for their own imagination" (Bruna, 2006, *The Guardian*). Miffy's minimalist shape refers to the avant-garde De Stijl movement in the Netherlands beginning in 1917 which advocated the abstraction of visual compositions and the use of primary colors in art and design. Therefore, Miffy's design has the potential to be an adaptable vessel. Miffy-images easily integrate into the consumer's landscape when they enter other media such as sculpture, animation and movies or are printed on related commercial products. When Miffy enters other countries' markets, it quickly adapts to different cultural contexts, whether this is Japanese Kawaii culture focused on consumption by women or Chinese stationery culture for the expanding market of the Chinese educational industry.

This paper traces Miffy's adaptation to different cultural contexts as a driving force for tremendous economic value. It discusses the vitality of design between cartoon images created by an independent artist and why Miffy related designs have gained high monetary value in Japan and China.

Parallel Session 3

The Environmental Cost of Design

From *La Maison* to *Environnement*: the struggle for design, architecture and ecological quality in Belgium (1945-1970).

Dr Daniela N. Prina, Senior Lecturer, University of Liège, Belgium

Born in the aftermath of WW2, the Belgian architecture and design magazine *La Maison* promoted a vision characterized, on the one hand, by a dynamism linked to the reconstruction efforts in the post-war period, and, on the other hand, by a theoretical and practical research based on the relationship between crafts and industry. *La Maison* emphasised the link between architecture, design, craft and the environment, and analysed them as interdependent fields. This specific cultural orientation as well as the attention to living comfort, urban aesthetic and environmental issues make it a pioneering magazine of its kind.

Created with a precise architectural and social mission by the renowned critic Pierre-Louis Flouquet, *La Maison* addressed, in the years between 1945 and 1970, the necessity to encourage the adoption of sober and rational ways of living as a means to relaunch Belgian architecture and design, thus stimulating the economy and preserving the beauty of the environment. Therefore, *La Maison* helped to inform and educate not only architects, but also a wider readership of non-specialists, art lovers and ordinary people seeking inspiration or advice to organise or to choose their home. Its contributions also mirrored social, political, and economic changes. Nevertheless, the magazine's editorial line stressed, above all, the environmental cost of short-term planning strategies and their impact on architecture, design and landscape. In 1970, after Flouquet's death, *La Maison* changed its name to *Environnement*, reflecting growing concerns about the destiny of the planet, in continuity with the ideals of its founder.

This paper will examine how the contributions in these magazines, penned by Belgian intellectuals, designers and architects, such as Louis Herman De Koninck, Victor Bourgeois, or Joseph Moutschen, disseminated new and more virtuous design practices and sober ways of living, aimed at preserving the national existing heritage as well as the environment.

Design's Ecological Restraints: Hans Palmstierna and Sweden's Environmentalist Awakening

Professor Kjetil Fallan, University of Oslo, Norway

Consumption, and its relation to design on the one hand and the environment on the other, became a particularly contested issue in Sweden throughout the 1960s and 1970s. Having assiduously promoted 'beauty in the home' and 'better things for everyday life' for a century or so, Swedish design professionals were apparently taken somewhat aback by their eventual success and the dawn of what John Kenneth Gailbraith termed 'the affluent society'. No sooner had Sweden's remarkable economic growth materialised in the everyday life of its citizens in the shape of Volvos and villas, than concerns arose over the potential social and environmental ramifications of an economy centred on private consumption and the production that fuels it.

A key protagonist of Sweden's environmentalist awakening was the biochemist Hans Palmstierna. When the Swedish government in 1967 established the world's first Environmental Protection Agency, he was recruited as its research liaison. He was also a chief strategist behind the landmark 1972 United Nations Conference on the Human Environment taking place in Stockholm, where delegates from the International Council of Societies of Industrial Design (ICSID) lobbied inside and design students protested outside. Palmstierna's position as a public intellectual and environmentalist was established in earnest with the publication of *Plundring, svält, förgiftning* (Plundering, Hunger, Poisoning) in 1967, a call to arms that sold 60,000 copies and received massive media attention. In this book, and in subsequent publications, he singled out the capitalist world order and industrial production as the main cause of environmental destruction and urged for an ethos of reason and restraint.

As a charismatic and radical public intellectual, Palmstierna's environmental activism found fertile ground among designers and design students. This paper will explore how the biochemist-environmentalist's ideas for a design culture revolving around concepts such as global fair-trade, recycling-based manufacture, reuse, design for disassembly, extended product durability, etc. resonated deeply with design professionals in search of socially and ecologically sustainable approaches.

The World in the Age of Its Digital Reproduction: Environmental Modelling, c. 1972
Dr Gabriele Oropallo, Senior Lecturer, London Metropolitan University, UK

The paper will examine the portrayal of the deterioration of the ecosystem as represented through early world models such as World3, developed by a group of MIT researchers and funded by the Club of Rome, or Daisyworld, developed to demonstrate the Gaia hypothesis.

Data-driven calls for action on the environmental crisis over this period revolve around the urge to consume less, or more responsibly, and avoid mass production. From this point of view, they are consistent with earlier diatribes. The paper will interpret their data-based mode of narration as an example of distant reading because of the focus on abstraction of complex processes and masses of information. It will contrast it with a mode of narration that relies on visual evidence to denounce ecocide and loss of biodiversity. The paper will argue for appropriation of methods from digital history to highlight the politically and socially constructed mindsets driving the world-making of the models from underneath.

Early world models return a picture of the future that is famously grim as much as unrealized. They are therefore precious in historiography. History writing routinely reckons with different chaotic systems. Some, like the weather, are not susceptible to change because of human predictions. Others, instead, are indeed affected by predictions which dramatically modify the original scenario when they manage to change individual behaviours or policy making. Assumptions and bias are always embedded in the ways crude facts are gathered and then narrated into habitable stories. How long do these narrations remain functional before they require to be patched with new data? The paper will conclude with an invitation for further work on the implications of relying on datasets in interpreting the world, and the constructs into which data is designed, such as truth, fiction, or provenance.

Exhibiting Global and Local

The North-East Can Make It: Post-War Design Exhibitions at The Laing Art Gallery as A Strategy Against the Crisis of Local Industries

Laia Anguix-Vilches, Doctoral Candidate, Northumbria University, UK

In 1945, CB Stevenson, first curator of the Laing Art Gallery (Newcastle), predicted a crisis in the local financial structure in connection with the changes or displacements undergone by many of the city's traditional industries during the Second World War. He felt that the Laing could provide creative solutions to the crisis by 'drawing attention to the importance of good design and craftsmanship in our manufactures' and by showing 'the widespread application of art to things of everyday life'. From that moment on, and until the curator's death in 1957, the Laing held over 20 design-related exhibitions aimed to illustrate the connection between art and industry and to share 'what the North could make', following the path opened by the exhibition *Britain Can Make it*, held at the V&A in 1945 and organized by the Council of Industrial Design.

The paper will describe the different approaches to design (in the form of crafts, graphic arts and industrial design) tested in those exhibitions, as well as the attempt to establish a connection with Scandinavian design, in order to regain international relevance and to strengthen the diplomatic relationship with those rising neighbouring countries. It will also analyse the challenges faced by the traditional North-Eastern manufactures in a rapidly changing environment, discussing the power of design to resist the financial drift and the reach of the Laing's initiative in the context of the progressive loss of relevance of Newcastle and a displacement of the country's productive force towards the South.

Design or Decline: The Political and Visual Economies of Olympics Design
Seungyeon Gabrielle Jung, Doctoral Candidate, Brown University, USA

The 1988 Summer Olympics held in Seoul, South Korea was the largest design project that the nation has ever seen. From the construction of stadiums to the design of the first fully manualized graphic identity system, the Olympic design for South Korea was a watershed moment in South Korean design history. Although it was a huge triumph for South Korean design, the project also had serious downsides: it exoticized Korean culture and concealed the vibrant home-grown visual styles with its modernist façade.

The Olympic Games are believed to offer invaluable opportunities to the hosting countries' domestic economies. Many developing countries find the reward appealing, despite the known side-effects such as violent segregation and gentrification. South Korea was one of those countries that were enticed by the opportunity and one of the very few that succeeded in hosting the games. When the country bid to host in 1981, however, it was in no shape to hold a global sporting event. South Korea's gross domestic product was significantly lower than the nations that previously hosted the games, but more importantly, the South Korean people were still living under a military dictatorship. It was precisely the military regime who desperately needed to attract the Olympic Games: to distract its people from the growing aspiration for democracy.

This paper analyzes the official designs of the 1988 Summer Olympic Games, arguing its graphic identity system can be read as a symptom of the volatile politico-economic circumstances of 1980s South Korea. Comparing this system with the images produced by untrained artists and designers, that had been *erased or masked by the sleek modernist Olympic design with an Orientalist tinge, which sought to satisfy the global audience*, this paper looks at competing desires for economic prosperity and political progress as well as the rival visions for a better country—in short, the utopian visions of different designs.

On shoes and beer: The cost of national pavilions at interwar world's fairs
Dr Marta Filipová, Research Fellow, Masaryk University, Czech Republic

The space of a world's fair in its heyday contained a medley of national, colonial and commercial presentations. Pavilions or booths from General Motors to Heinz symbolised clear commercial aims of companies that treated the fairs as a great opportunity to advertise their products. At the same time, national and colonial pavilions often included large sections dedicated to individual companies which often contributed to the cost of the pavilions. In these cases, the division between commerce and promotion of a state was not so clear cut.

This paper focuses on the role of manufacturers at interwar world's fairs and their involvement in shaping a specific image of a nation or a state. It focuses particularly on two firms with their origins in the Czech speaking part of Austria Hungary: the Baťa shoe company and the Pilsner Urquell brewery who continued to thrive in Czechoslovakia after 1918 as well as worldwide. The latter became an indispensable part of restaurants in the Czechoslovak pavilions, selling its beer and image. Even though originally produced by a Bavarian brewer, the beer became closely linked with Czech identity. Founded on the basis of the Fordian philosophy of manufacture and care for employees, Baťa grew into a global empire of factories and whole towns in the interwar period. Due to intimate links with the government of Czechoslovakia, the company also found its way to world's fairs as part of the Czechoslovak pavilions. I therefore argue that presence and financial involvement of these companies was one of the reasons why Czechoslovakia could be so active in participation at interwar world's fairs, promoting its own identities and the companies it was associated with. At the same time, I point out that such relationships raise more general questions about the intimate links between state and business at world's fairs.

Design Solutions to Changing Economies

Design, Continuums, and Development in a Periphery's periphery: An account from the Ziro Valley

Saurabh Tewari, Assistant Professor & Doctoral Candidate, SPA Bhopal & IIT Kanpur, India

Like most of the geographical peripheries, India's North-East border zones too, has witnessed disjointed pace, scales and forms of modernity. The post-colonial (post-independence in India) and further, the contemporary Neo-liberal focus from the centre has brought in inevitable transformations in its ideological, material and spatial life.

From the region, the Apa Tani Cultural Landscape of Ziro Valley in Arunachal Pradesh (bordering China) features itself in the Tentative List of World Heritage Sites, bolstering the claims of the richness of indigenous knowledge systems at various scales. A tribal region where barter systems were integral to its existence till recent times and its traces forms its everyday life and belief systems, the continuums including its agriculture, land use practices, natural resources management and conservation, festivals, material culture, objects and crafts, have been noteworthy.

The post-colonial history of design in India stresses the agenda of development in its politics as conception and operation. In the Post-Independent era (post-1947), the Design has been a conscious tool of development in various scales including town-planning, architecture, and design. Post-1989, the Neo-liberal policies of the centre facilitated a rapid dispersion of globalisation in the various design cultures of the geography and different systems including agriculture, healthcare and services. In contemporary South Asia, a periphery in itself, often the state of the global design defines the development narrative.

In the Ziro Valley, the exposure to externalities in everyday transactions have contributed to the construction of unique practices vis-à-vis cultural continuums of the indigenous communities. Through a design-ethnography approach, the paper examines the cost of design (as development) in three realms of design-culture as: ecological, cultural, economic

The paper will unearth case studies teasing the larger political economies and global/local exchanges.

Experiments in Post-Growth Expertise: Design and Technology Advising in Contemporary Japan

Dr Sarah Teasley, Reader, Royal College of Art, UK

This paper explores design and innovation strategies promoted, adopted and modified for local use by designers, manufacturers and policymakers in post-growth scenarios, taking design promotion activities in northern Japan as a case study.

In July 2015, the Yamagata Prefectural Technical Research Institute, a century-old public technical research facility in northern Japan, announced the launch of the Institute's new 'Making Innovation Lab' (Monozukuri Sozo Labo). The new Lab's remit conformed closely to the Institute's own long-standing remit: to create a robust, resilient industrial sector, particularly amongst SMEs, within the challenging economic and demographic environment of largely rural north-eastern Japan. At the same time, the visual and verbal aesthetic of the lab's communication materials indicated a clear attempt to reposition the Institute's services for an audience of young art and design university graduates more attuned to contemporary visual communication design, design-led innovation and the design of services and experiences than to manufacturing or mechanical engineering.

By many economic and demographic measures, Yamagata forms part of a post-growth region within a country heralded by advocates of post-growth economies as a model environment. This paper takes the Making Innovation Lab as a starting-point for exploring how designers, manufacturers, policymakers and educators have attempted to reframe existing design and industry support mechanisms - once integral to Japan's success at economic development through manufacturing - as still relevant in Japan's post-1990s economy. Whether makespaces and social design or engagement with new, inter-regional East Asian markets, institute initiatives offer an effective insight into how design and technical expertise - once framed as fundamental for economic growth - might reshape themselves for post-growth scenarios.

Living Through Making: Between Resistance and Adaptability in Contemporary Artisanal Production

Daniela Salgado Cofré, Doctoral Candidate, l'Université Libre de Bruxelles, Belgium

There is a growing tension between innovation and tradition in contemporary societies, especially in those in-between low industrialized production and a fast-growing consumption. In Chile, the political context and the free market economy have had great incidence on the territorial evolution of the rural areas, their progress and productivity, generating a transformation in the use of the resources and activities. Consequently, there is a suspected idea of crisis affecting traditional artisanal clusters in rural environments. Nevertheless, the frictions shaped by an interconnected global consciousness have been used by artisans and designers to re-shape the technical and social aspects surrounding rural artisanal spaces of production.

This contribution studies the case of Pomaire -Chile, where all these factors have influenced the dynamics of the main economic and cultural activity: traditional pottery production. This village –with more than 230 families related to artisanal practice– has a rich patrimony in the manufacture of objects deeply associated with the rural world, symbols of creolization and carriers of national identity. These objects, however, have also been exponentially transformed by new values that seem to respond to global trends, consumption and urban economies, due to the capitalist modification of their environment. Nevertheless, these transformations are not absolute and while new productive practices are incorporated and generalized in the village, some traditional structures remain the same.

Therefore, this proposition will compare the main discourses expressed by different actors –as designers– involved in the policies for artisanal production during the last 50 years, and the *praxis* discourses of artisans, shaped in their material production. Through this comparison, it is possible to trace controversies between meanings, values, frictions and transformations within traditional craftsmanship, allowing designers to understand how processes in the artisanal world are resilient, iterating continuously in order to adapt and resist.

Spatial Transformations

Reconstruction of an Ancient Chinese Temple: The Perspective from an Abbot

Professor Xiong Yi, Nanjing University of the Arts, China

Dr Zhao Quanquan, Nanjing University of the Arts, China

In 2014, the Buddhist Association of China authorized a project aimed at reconstructing the Jian Chu Temple in Nanjing. Only one original hall remained, yet the temple's importance lies both in its 1800-year history, which made it the first temple in southern China, and also its relation to significant historical events and sacred objects including Buddha's relics. There has been little design historical research in English on Chinese design, less on Chinese temples, and none on the many issues involved in their historical reconstruction.

This ongoing project is mainly overseen by the abbot of the temple, Master Dachu. In a reconstruction project like this, the abbot receives information like a hub every day, from materials to be used on a statue, the layout of the canteen, to interacting with local government and patrons. With his own understanding of this project, he has to make decisions accordingly, such as how to balance historical and contemporary elements and how to source accurate historical plans.

The role of the abbot provides a perspective for our research to observe how activities (from design to manufacture, ritual to finance) and ideas (from Buddhist tradition to professional designer's aesthetics, from religious policy made by national government to the secular culture of believers) of different beneficiaries of the temple cooperate, conflict, negotiate and mediate.

A case study of New Year Blessing ritual of 2019 held at the temple is included in this research. This event demonstrates how this reconstructed temple with its architecture, statues and furnishings provided a location for secular visitors, believers and monks to realise their respect and craving for Buddhist wisdom; and how design processes create and rewrite material culture in which religion, design and humanity all played their roles to reconstruct the temple.

Nomadic Murals: where craft meets architecture

Lisa Mason, Assistant Curator, National Museums Scotland, UK

Le Corbusier described tapestries as 'nomadic murals' and this time honoured medium has come to occupy a curious position in the history of modern architecture. Studio tapestry weaving was finding its way in the post-war period, both financially and conceptually; moving towards a more direct engagement with modern art and responding to the boom in public and domestic architecture.

This paper will explore how the patronage of religious and civic institutions, museums, and the private sector contributed to the renaissance of tapestry weaving in the post-war period, by focusing on the work of Archie Brennan (b. 1931) and the Dovecot Studios, Edinburgh (established 1912).

Brennan was instrumental in the development of Dovecot as an international centre for tapestry and ensuring that tapestry weaving became a collaborative art form in its own right. He took up the position of Artistic Director at Dovecot in 1963, at this time he simultaneously established the tapestry department at Edinburgh College of Art. Brennan was a catalyst for change at the Dovecot, ushering in the first era of art school trained tapestry weavers and fostering ambitious collaborations with artists such as Harold Cohen, Eduardo Paolozzi and Tom Phillips.

Drawing upon the Dovecot company archive and unpublished interviews with Brennan, this paper will argue that these economic, geographical and societal factors coalesced to give rise to some of the most ambitious tapestry projects of the twentieth century.

Economy and Artisanry: Unmasking the First Modern Church in St. Louis
Genevieve Cortinovic, Andrew W. Mellon Foundation Assistant Curator, Saint Louis Art Museum, USA

"Much of its simplicity is due to economy," concluded the *St. Louis Post-Dispatch* in its photographic essay on the newly consecrated St. Mark's Episcopal Church designed by Charles Nagel and Frederic Dunn in 1938. The newspaper's assessment, furnished by the architects themselves, justified the building's blunt modern design as an ethical response to the financial constraints of a congregation. In fact, the architectural sobriety of this groundbreaking church gave space to the city's foremost contemporary artists. A slender, whitewashed brick box topped with a copper steeple, St. Mark's boasted custom stained glass windows with scenes of social critique by Emil Frei & Associates, a local studio with national and international ties, and sculpture by Sheila Burlingame, a star student of Carl Milles. With exquisitely realized, bespoke fittings, the church took little advantage of any savings gained from prefabricated elements or new materials associated with modernism, relying on local artists and artisans to realize its radical design. Indeed, contemporary critics linked the severe simplicity with the perceived purity of early Christian architecture rather than international functionalism. This paper will explore St. Mark's craft-based solution to budgetary constraints and prevailing conservative tastes in order to understand its significance as a model for the great resuscitation of ecclesiastical art and craft in post-war America.

Parallel Session Four

Beyond Money: The Meta Economics Of Fashion One

Street Style: London's street markets and the informal economies of fashion

Professor Victoria Kelley, University for the Creative Arts, UK

Until recently the dominant narratives of retail history have depicted the market as a declining retail form, with little ongoing impetus in modernity. In London, however, prodigious urban growth coupled with tangled local government jurisdictions led the street markets to expand. They met rapidly-growing demand, and proliferated in number and size from origins in the mid-nineteenth century. These were not London's established, authorised markets, but *impromptu*, kerbstone markets that grew on the streets without any formal organisation or legal sanction. They became the chief greengrocer, fruiterer and fishmonger of the London working classes, and increasingly they were its haberdasher, tailor and jeweller too.

The literature on fashion production and consumption, while led by accounts of the *avant garde* and the upscale, fully acknowledges the spread of mass-market fashion and its high street retailers. The role of the street markets that were co-located with chain stores and cheap tailors in many London urban and suburban high streets has rarely been examined in historical analysis, although it is documented extensively in contemporary accounts. In Petticoat Lane and other street markets, street sellers (including many Jewish immigrants) took their first steps to entrepreneurial success. Analysing what was for sale in these markets, where it came from and who bought it allows an examination of the fringes of an *expanded* fashion economy of production and consumption. This paper will argue that the best category for understanding such activity is *informality*, the a-legal economic strategies of people otherwise marginalised. The cheapest products of sweated labour were sold back to the communities that manufactured them, issues of price and quality were keenly scrutinised, and cut-price luxuries were circulated to consumers wanting 'something showy at a small cost'. Paying attention to the street markets across the 1850 to 1939 period reveals the humblest entrepreneurs and the least advantaged of consumers, in a distinctive market space that had ramifications for cultural as well as economic informality.

Negotiating Fashionability: Second-hand Dealing, Seconds Trading, Jumble Sales and Street Markets in 1930s London.

Dr Cheryl Roberts, Lecturer, University of Brighton, UK

Second-hand outlets, seconds trading, jumble sales and street markets, disobedient and unruly spaces of consumption, have long occupied the literary and visual panorama of everyday life. Walkowitz describes them as 'messy, unhygienic [...] they have been historically defended as the shopping centre[s] for the poor and culturally prized as liminal, carnivalesque places where journalists and writers can find good copy about the pulsating social organism of "Living London".'

London, in the 1930s, was brimming with these kinetic, physically interactive, non-class stratified retail spaces. Purchasing garments through the market, wardrobe dealer, second-hand dealer or jumble sale suggests that the used clothing trade went some way toward providing access to otherwise unattainable garments for those with a limited budget. Yet the buying of second-hand and low quality clothing required negotiation, not only with a specific trader but also with fashion itself. Although the casual observer might assume that women who patronized these transitory spaces of consumption were driven by practicality rather than style, there is no clear indication that women viewed their procurement of used dress as a process lacking in taste or mode. In fact, the opposite could be noted, as it required a discerning eye to select quality garments from a seemingly worn out bundle of cloth or cheap, badly made apparel.

Llewellyn Smith writes that there were 10,492 street market stalls in London in 1930-1931, selling a range of wares including fruit, flowers, fish and livestock. Central to this study are Caledonian Market for the Friday 'peddlers' market or 'rag fair', 'where 1300 stall holders, selling an extraordinary variety of second-hand wares, compete for a sale from the sea of bargain hunters; and Berwick Street, a hub of traders (mostly Jewish) of stockings and ready-made dresses in the heart of London's West End,' set in the foreign quarter of Soho behind the glamorous, modern shops of Regent Street and Oxford Street. From the budget-driven housewife to the fashion conscious young, working-class woman to the tourist compelled to breathe in the rich, if slightly decrepit, nostalgic air, this paper will discuss how these dealers created a world of cross-class communication as women purchased 'smart' clothing at low prices.

Time to Work: Temporal Formations in the fashion industry
Dr Agnès Rocamora, Reader, London College of Fashion, UK

In recent years scholars have turned their attention to the idea of acceleration in a context in which capitalism is seen as promoting the values of speed (Elliott and Urry 2010). In the field of creative labour in particular, studies have evidenced that workers have experienced an intensification of the pace of working life, with a speeding up of rhythms and deadlines (Huwes 2010). Digitisation in particular, and the proliferation of digital Information Communication Technologies (ICTs) have been correlated to both a new wave of acceleration (Rosa 2010) and the redefinition of work. However, researchers have also shown that a sense of control over one's time use is central to well-being (eg Goodin et al's 2008; Wajcman 2015). Given the above it is surprising that no attention has been given to the significance of ICTs in one's negotiation of temporal regimes in the worksphere, and in particular to their role in the implementation or impediment of well-being. This, in turns, is symptomatic of the dearth of studies concerning the everyday experience of time in relation to ICTs, of the ways they may both enable and constrain everyday practices (Wjacman 2015). This presentation seeks to address this gap in studies of contemporary forms of labour. To do so it draws on ongoing interviews and observations conducted with small UK based designers, and starts addressing the following questions: how is time negotiated to ensure that one keeps moving smoothly from one project to the next? What is the role of ICTs in this? Which also begs the questions: How do fashion professionals manage creativity and innovation under various temporal regimes and time constraints? How sustainable is this?

Exhibitions and Persuasion

Reorienting Identities at the Imperial Fairground: British Malaya and North Borneo
Dr Jesse O'Neill, Lecturer, Glasgow School of Art, UK

Grand exhibitions of commerce and manufacture were key events for the British Empire's economy. The British Empire Exhibition of 1924–1925, for example, was expressly intended to reinvigorate British and colonial markets after the First World War by encouraging inter-colonial trade. This exhibition shaped appearances of wealth, industry and development throughout the empire with its regionally styled pavilion architecture, model villages, craft and industry displays, and ephemera. However, this event, and others like it, also drew prominent attention to the relationships between the peoples within the empire, shaping imperial subjecthood and proto-nationalism, and revealing conflicting ideas of identity construction. This paper examines the representations of British Malaya and North Borneo at the British Empire Exhibition, comparing them to those of the Malaya-Borneo Exhibition, a lesser-known event held in Singapore in 1922. It discusses how British administrators portrayed the material and cultural values of the region in relation to their wider economic and developmental programmes.

The British Empire Exhibition's Malaya and Sarawak pavilions collected a number of separate colonies, states and companies together as two distinct entities, beginning a process of unifying the region and defining the identity of its peoples. In placing this exhibition alongside the localised Malaya-Borneo Exhibition, we see how these territories adapted their economic and cultural identities between different regional and global scales. These events show the shaping of a Malay identity alongside the effects of British modernisation, and how raw materials, regional crafts, and inter-colonial relations were re-cast for an international stage. The paper contributes to our understanding of how early twentieth century exhibitions sought to transform regional economies and identities, and how value was ascribed to the material culture of British Southeast Asia.

Design's diplomatic turn: Contemporary design festivals as a tool of and for soft power
Enya Moore, Doctoral Candidate, University of Technology Sydney, Australia

In recent years the contemporary design festival has transitioned from bounded sites to new forms of transient spaces and experiences. National 'showcases', and industrial trade fairs transformed into knowledge arenas embedded in networks both concrete and virtual. While its predecessors took place within confined environments such as purpose-built events centres or 'expo' sites, contemporary design festivals (take for example Milan Design Week or London Design Festival) sprawl across the cities in which they take place. The rise in popularity of design festivals worldwide has resulted in a vast transnational network of places, actors and organisations, whose role rests in 'activating' the city for new audiences.

Design festivals gained prominence in well-established cities in global networks such as Hong Kong and Sydney. Alongside rapid urbanisation they are increasingly spreading to cities outside of that network. Meanwhile, their dominant discourse has taken an increasingly diplomatic, politicised turn. Statements that focus on design-led 'ambassadors', 'collaboration' and 'friendships' have become commonplace and partnerships between different cities, towns and organisations are the norm. This tendency underscores more than design education, commercial endeavours and business ventures. It speaks to complex imbrications of international relations, diplomacy and soft power.

This paper looks afresh at the design festival with a focus on the Asia Pacific region. Here the growing role of design within urban, economic and political trajectories should be considered within the geo-politics of a rapidly transforming region. I seek a more nuanced understanding of the exchanges occurring between social actors that goes beyond the 'duality of state and non-state' (Exernova 2017). This paper examines emergent transnational networks of the contemporary design festival. How does the design festival relate to wider social, economic and political shifts and the global/regional/local exchanges occurring in a dynamic and volatile geo-political environment?

Regulating Movement: The ICOM Customs Label for Circulating Exhibitions
Nushelle de Silva, Doctoral Candidate, Massachusetts Institute of Technology, USA

In 1946, UNESCO and ICOM partnered to foster peace through cultural projects; circulating exhibitions were soon deemed a compelling means for strengthening international relations. This partnership engendered protocols for moving objects that exceeded the purview of a single institution or state, concretized over several decades. Until then, exhibitions were beset with problems caused by divergent national regulations. Import protocols obstructed movement of new art forms for which tariff schedules made no provision. Exhibition bonds, which waived duty for temporary imports, were not a viable option for smaller museums. These hidden costs crucially shaped where, when, and what art could travel.

Current scholarship on exhibitions illuminates the social contract by interrogating the displays on view and the luminaries who conceived them. This paper argues that museums exist in systems that exceed an exhibitionary complex (as Tony Bennett terms the relationship between spectacle and surveillance) by examining the ramifications of one UNESCO/ICOM-enabled protocol: the design of a customs label for traveling exhibitions in the late 1950s. Following the Florence agreement, a UNESCO-sponsored understanding by which states agreed not to impose duties on certain cultural goods, it assured major multilateral exhibitions judged to be of significant cultural, aesthetic, and educational value safe, speedy passage through customs, and democratized the exhibition circuit. It also drastically reduced costs related to customs duties, insurance and object conservation.

This paper posits that power manifests in shaping infrastructures, not particular activities, which cut across national borders. It argues that the label serves as a metonym for the design of UNESCO-sponsored standardization of exhibition practices, and that studying the international circulation of these practices reveals as much about imagined communities, international politics, and museum history as scholarship on the event of the exhibition itself.

Impact of Economic Systems

Did design cause climate change? An ecological approach to the British Industrial Revolution, 1750-1850

Dr Spike Sweeting, lecturer, Royal College of Art, UK

Geologists and other earth scientists have been fairly strident in arguing that the anthropocene was a result of industrialisation, first in Britain then elsewhere in the world. As was entirely clear to nineteenth century observers, the costs of the modern manufacturing regime were pollution, greenhouse gas emissions and fast-paced environmental degradation. However, quite where design fits in to this increasingly important narrative is a moot point. To be sure, industrialisation called into being a whole phalanx of "art-labourers" (porcelain decorators, dye-stamp carvers, steel-plate engravers, textile designers etc.) but these operatives responded to major shifts in the mode of production that slashed prices for materials rather than widening markets through their creative work. Moreover, the story of consumer demand told by real wages suggests that most families' access to secondary sector goods was limited during the classic period of industrial take-off. Taking these factors into account, this paper urges historians of design to suspend their preoccupation with commodities domesticated by identity crafting consumers. Indeed, the most ecologically important design activity of the so-called steam age activity took place in the realm of engineering, process innovation and transport infrastructure. The substitution of wood for metal and, more generally, the proliferation of products that utilised materials with a high degree of embodied energy, such as multiple fired ceramics, were also important. In much the same way that Marx lamented the problem that commodification obscured labour, the cultural value of these types of goods did not necessarily lie in the fact they were the result of modern energy regimes; style and ecology were divorced to some extent. This silence prompts the paper to conclude by reflecting on some alternative sources and methodologies design historians might utilise whilst engaging in this debate.

Designing Bureaucracy: Self-Managed Economy, Cybernetics and Design in Post-War Yugoslavia

Dr Rujana Rebernjak, Senior Lecturer, Arts University Bournemouth, UK

In the context of Cold War polarities and their battle for power, SFR Yugoslavia sought to set itself apart from both the East and the West by proposing its third way - a unique path to socialism based on workers' self-management. Introduced in 1951, soon after the war and Tito's split with Stalin, self-management was an economic, political and social system that sought to position the country's citizens at the centre of decision-making power. This was to be achieved by introducing workers' councils within the industry and local councils tied to housing communes. In this way, the Yugoslav ideologues imagined, the state would ultimately wither away.

However, there was a significant gap between the theory and practice of self-management. The often-abstract political ideals that shaped the government's vision of self-management, remained distant from the everyday experience of Yugoslav citizens. The numerous rules and regulations that shaped the processes of workers' self-management formed a complex bureaucratic system whose inner workings, principles and practices remained unintelligible to most workers. To solve this problem, Yugoslav technocrats turned to design.

Understood as a fundamental process regulating the Yugoslav industry, self-management provides a fruitful case study for exploring the way economic systems can be designed. This paper will explore the way Yugoslav designers and architects designed the bureaucratic structures of self-management that underpinned the country's economy. In particular, the paper will look at the design of cybernetic protocols and machines, as well as the discourse that surrounded it. In socialist Yugoslavia, cybernetics was embraced as an integral part of self-management, interpreted as a supposedly neutral system for managing the economy and distributing the decision-making power. Addressing the design of tangible and intangible architectures of self-management, this paper will explore the complex entanglements between the economy, bureaucracy and design.

Designing Socialist Economies: The Cuban Libreta for Industrial Products
Dr Erica Morawski, Assistant Professor, Pratt Institute, USA

Within what alternative economies to the capitalist system can designed goods operate in the socialist state? What values do these goods promote? How can design manifest socialist theory? These were some of the big questions that the Cuban government grappled with under the leadership of Fidel Castro after the 1959 Cuban Revolution. The regime's 1967 establishment of the *Ministerio de Industria Ligera* (Ministry of Light Industry) and founding of a school of industrial design in 1963 are testament to the importance placed on industrial design. Also significant was the 1961 establishment of the *Ministerio de Comercio Interior's* (Ministry of Internal Trade), which was responsible for the creation and implementation of the *libreta* (ration card) system for industrial products.

This paper proposes the libreta as a designed system for realizing a particular market and economy, positioning it squarely at the intersection of the state's design of economies of distribution and the Cuban citizenry's negotiation of an ever-changing system of socialist production and consumption. This research elucidates how, as a system, it determined what, when, how and who could acquire industrial goods. This research also analyzes the libreta as a material object that mediated and embodied the designed goods that could be bought with its coupons. This paper contends that the libreta reinforced state discourse that condemned capitalist consumption by providing an alternative system meant to foster appropriate collective and individual relationships with designed objects and through designed objects.

Moreover, this research goes beyond the libreta system's ideals by utilizing historical examples that show how global trade, geopolitics, and black markets undermined the libreta's work in the 1960s-1980s. In highlighting these aspects of history, this research reveals how the libreta shaped the average Cuban's experience of designed goods, as well as how the libreta system provided opportunities for agency and subversion.

Identity, Design and Economy

When Less Was More – Self Expression in a Time of Ration

Janne Helene Arnesen, Collections Registrar, National Museum of Art, Architecture and Design, Norway

Fashion is deeply intertwined with economic systems, be it financial or cultural, and can be a powerful tool for expressing political and social views. But what happens when materials and availability is limited? During WWII, fashion was rationed, but within this framework materials were used with great liberty, and remodelling and upcycling were done with great creativity. Fashion walked a fine line between social and personal considerations.

This paper explores the conditions, constraints and outcomes of fashion in occupied Norway during WWII. Contrary to the story often told, fashion continued to evolve. Often the very limitations functioned as a vehicle for new ideas and ideals as well as a renewed creativity: the lack of money, the lack of materials and even the lack of occasions to flaunt new clothes opened new pathways to fashion in which ingenuity was the foremost currency. In the context of war, the notion of fashion - so often deemed as superficial and a luxury - may seem secondary, even irrelevant. Yet, for some felt more necessary than ever. *"We used everything to look like something"*, a journalist wrote.

The paper complements existing research of the politically initiated "Make Do and Mend" in the UK, where making the most out of little became both a virtue and a necessity, and the government told you how. Norway too was on a ration, and *"our status symbol was the individual's ability to get the most out of little in the best way possible"*, as the aforementioned journalist wrote. Using wartime Norway as a lens, this paper explores how getting by on a minimum became a hallmark, and at the same time the renewed will to express the self through clothes functioned as a counterweight to repression during German occupation, giving rise to shifting economies of fashion.

Designing an Inclusive Business for Indigenous Crafts

Dr Fang-Wu Tung, Associate Professor, National Taiwan University of Science and Technology, Taiwan

This practice-led research presents a case study, KAMARO'AN, which was achieved through a collaboration project involving a design team from a university and craftspeople from Makuta'ay, a rural aboriginal area in Taiwan. The outcomes of the project paved the way to an economically viable business, KAMARO'AM, which has created local jobs and supports ongoing craft revitalization by including the local artisans and residents into the firm's value chain. Design interventions have been considered as one of the strategies to revitalize local crafts and stimulate economic development. However, in some cases, we see a lack of continuity of the design interventions and the outcomes might not be suitable in the long term. Since launched in 2015, KAMARO'AM keeps growing and continuously develops new products based on the indigenous crafts. The project showcases how design intervention can contribute to place-based craft revival and work towards a sustainable development. We outline the activities conducted in the project to establish an inclusive business and discuss the entrepreneurial opportunities in the design and craft sectors.

The patchwork archive: exploring *chogakbo* as institutionalised object
Christin Yu, Doctoral Candidate, Royal College of Art/Victoria & Albert Museum, UK

The lore of the Korean wrapping cloth's patchwork iteration, *chogakbo* reiterates the handicrafts as representative voices of unknown women. Said to be working-class women's handicraft, the constructions are described as the artistic endeavours of women's creative labour stemming from the neo-Confucian reforms of the Chosôn dynasty. In South Korean imaginary, *chogakbo* symbolizes and reinforces an identity of 'Koreanness'. Their origin not only traces back to a united Korean peninsula, prior to the Japanese colonial occupation (1910-1945) and the contemporary Republic of Korea (1948-present), but their materiality is said to demonstrate constructive superiority and frugal tenacity. This presentation explores the place of *chogakbo* in the South Korean historical narrative through the collecting and exhibition practices of the object archive. By examining the transition from a ubiquitous domestic textile to an art object, this work questions the politics of aesthetic categorization and the role of the institution in identity construction.

With memories and histories affected by the trauma of recent wars, geopolitical fracture and successions of military regimes, the Korean peninsula has seen the construction of neo-nationalist narratives in the north and south alike. South Korean government-sponsored cultural institutions have edited narratives of traditional craft and arts to reinforce linear histories, creating univocal subjectivities.

By looking at *chogakbo* archives both nationally and transnationally and by collecting stories through contemporary curators and makers, this work deploys feminist and postcolonial strategies to exorcise the embodied, reiterative narrative of this Korean patchwork craft. It aims to trouble mythologies of authenticity by contributing polyphonic voices within the craft narrative of the national identity.

Critical Approaches to Design Production

The Art and Business of Integration at Container Corporation of America

Robert Gordon-Fogelson, Doctoral Candidate, University of Southern California, USA

In June 1951, Herbert Bayer argued before an audience of designers, educators, and executives, "that art and business must converge and co-operate in the new visual experience towards total integration." While collaborations between artists and businessmen were not new at the middle of the twentieth century, Bayer envisioned a relationship more fully intertwined than previously achieved in such areas as advertising, commercial art, and industrial design. The corporate design program of the future, he claimed, would combine all these practices in the service of creating a cohesive corporate identity. The Chicago packaging company Container Corporation of America (CCA), which employed Bayer as a consultant designer, had already become one of the clearest examples of total visual integration. Under the aegis of president Walter Paepcke and the supervision of art director Egbert Jacobson, CCA's art department, established in 1935, sought to coordinate all aspects of the corporate environment, from trademarks and trucks to advertising and offices.

This paper reveals the underlying mechanisms of CCA's design program by recuperating the conceptual importance of "integration" to mid-century design and business practice. Existing scholarship characterizes Paepcke as a uniquely enlightened businessman and CCA's advertising as a definitive example of artistic patronage. Yet the concept of corporate art patronage implies an uneven power dynamic that fails to encapsulate the growing mid-century interdependence of design and business. In this paper, I examine Paepcke and Jacobson's collaborations between 1935 and 1942 to reveal how processes of corporate growth and graphic communication shared a common aim to reintegrate the fragmented dimensions of modern experience. This paper therefore reevaluates existing ideas about the scope of the design process, the intersecting imperatives of corporate and creative enterprise, and the efficacy of integration as an industrial and visual ideal.

Guns and Gloves: Hand and Machine Manufacture, the Price of Design and the Cost of Design.

Professor Grace Lees-Maffei, The University of Hertfordshire, UK

Industrialisation makes mass-produced goods available to many by reducing prices, but at what cost? Two categories of goods that work with and on the body, and specifically the hand, provide some answers: guns and gloves.

Following Mumford and McLuhan we can understand guns as extensions of the hand, supernatural tools which enable people to collapse time and space to achieve fatal dominance over unarmed combatants. Gun manufacture has developed from bespoke differentiation via interchangeable parts to mechanised precision uniformity, but bespoke making continues among weaponry enthusiasts and historical reenactors and also via 3D printers. Defence Distributed's Liberator gun (2013), designed to bypass gun regulation and make guns at accessible prices, provides desktop weapon manufacture with a new capacity for differentiation.

Gloves fit, protect and mould to the body, offering supernatural abilities to withstand cold, heat, sharps and liquids, and enhancing propriety or eroticism. The first factories of Dents glove company (f. 1777) used cutting and sewing techniques similar to today's. Although most consumers wear mass-produced gloves, the hand is so complex in its construction and movement that these depend as much for their fit on the pliability of knitted fabrics and leather, as they do on sizing systems. Wearers with exceptionally large, small, or immobile hands, with fewer or more digits than is standard, or with arthritis, are not well served by mass manufacturers, nor are those who want to express difference through unusual aesthetic qualities.

Notwithstanding the development of sizing systems to provide consumers with goods which fit their bodies, and the science of ergonomics, intent upon smoothing the interface of bodies and machines, as the price of design has fallen due to mechanised mass production, so has its capacity to cater for difference. This is an increasing untenable cost of design.

Adriano Olivetti's Vision to Merge Design and Economy: Design Consultants vis-à-vis Reproducibility as a 'Concrete Utopia'

Dr Marianna Charitonidou, Postdoctoral Fellow Chair for the History and Theory of Urban Design Institute for the History and Theory of Architecture (gta) ETH Zürich, Switzerland

As it was shown in the exhibition "Olivetti, design in industry", held in 1952 at the Museum of Modern Art in New York, Adriano Olivetti was aware of the importance of design for the success of his company. He hired designers such as Ettore Sottsass Jr., Giò Ponti, Achille Castiglioni, Vico Magistretti, Marco Zanuso, Joe Colombo, and *Mario Bellini among others*. This paper examines the impact that these designers had on the success of Olivetti's company. Special attention is paid to ETP 55, designed by *Mario Bellini*, a case in which design aimed to counter excessive price competition. Ettore Sottsass's role in Olivetti's company will also be scrutinized. Sottsass served as a design consultant in Olivetti's company from 1958 to 1980 and designed a notable series of office machines and electronic equipment. My paper examines the role of design for the success of the most famous of Olivetti's typewriters Valentine typewriter (1969), designed by Sottsass and Briton Perry King, and an example of what Maurizio Lazzarato defined as an 'ideological product'.

My presentation will shed light on the relationship between cost of design, design quality and commercial success in the case of Sistema 45 (1973), also designed by Sottsass, a collection of incorporated machines and support systems, including an early minicomputer. Its design was based on a broad research he conducted on the history of office spaces, and on statistical and ergonomic information with the aim to reduce visual impact and eschew luxury in what would be a deliberately 'democratic' and modular system, keeping the costs down. Sottsass designed a booklet entitled *Uffici* in order to bring together the outcome of the research he conducted for this project.

Olivetti's vision to reinvent the relationship between design and economy was encapsulated in the construction of "Learning and Experimental Centre", built in the early 1950s. The paper also presents in which sense the transformation of Ivrea into a major hub of Italian manufacturing, which attracted engineers, designers and factory workers from across Italy, constitutes a case where Olivetti's 'concrete utopia' (Ferrarotti 2013) took a spatial form. The collaboration of Olivetti with the above-mentioned designers constitute paradigmatic instances of 'concrete utopias' in which the advances in technology and design merge with the vision of a reinvented way to perceive reproducibility.

Parallel Session Five

The Business of the Bauhaus: Bauhaus, Education and Business

The entrepreneurial power of design schools as drivers for business models for industry yesterday and tomorrow – case studies: profitable partnerships in architecture and textiles

Professor Marina-Elena Wachs, University of Applied Sciences, Hochschule Niederrhein, Krefeld, Germany

If we look at Bauhaus as a business excellence model, we have to look at the power of business' men like Walter Gropius and Mies van der Rohe, and their influence in industrial design and architecture in practice AND in design education in history. Focussing Bauhaus presence and education system for creative industries, these personalities used their income and their market awareness to organise the design school. Their buildings demonstrated that Bauhaus teachers were occupied with constructing architecture for eternity – matching to the spirit of modernity, but always with support by rich entrepreneurs and as an intellectual playground. Teachers at Bauhaus were used to create market suitable products, but very often profit was based on "partnerships" with women at Bauhaus. They gave great impulse for "new" design and architecture: beneficial partnerships, based on mixed teams, but not in time, to announce women as official project-partners. Beside this, beneficial economic practise based projects mirrored back the drive of interdisciplinary combined courses of Bauhaus for a changing market. Following design education strategies, today we use methods like design thinking in interdisciplinary AND hierarchy less AND cross cultural creative playground in succession of Bauhaus education heritage to come to advanced business models in design /-education.

Nets Stretched into the Unknown

Mara Trübenbach, Independent Scholar and Planning Officer, Leipzig, Germany

My theoretical Master's thesis 'Nets stretched into the unknown. Bauhaus women in British Exile.' written in 2018, examines a group of female Bauhäusler, who visited the Bauhaus as a student, teacher and/or wife of a Bauhäusler and independently made their way into exile in Great Britain. Based on Bauhaus roots in Weimar, it deals with the question of what similarities and relevant differences they shared in life, how the ideas of the Bauhaus influenced them, and what significance they had for Great Britain. The thesis analyzes women in exile in the UK, raises awareness of certain interpersonal discrepancies and brings the eternal covenant of the Bauhaus community closer.

Through the research in my Master's thesis I have noticed among other things the ambitious teaching activities of Bauhaus women at British educational institutions. Bauhaus women have enormously influenced subsequent generations of artists. The Bauhaus teachings were years ahead of the British education system. For example the teaching of Margerete Leischner, the immigrated Bauhaus weaver, was a model based on the roots of Weimar, which revolutionized the Royal College of Arts and thus the British art schools: '[...] a clear contribution to the college's philosophy.' It was less about copying an era, but rather the idea of the Bauhaus. In 1968 she wrote to Gropius: 'This country has become much more interested in the Bauhaus in particular the young. I just hope they will not start imitating what they have seen but have got the message.'

I would like to present the identity of the Bauhaus women's artistic work in their exile through their instrumental heritage of Bauhaus teaching, in particular, to what extent the women's Bauhaus thought became part of the British education and continues to be taught today. The role of education in design is essential for strengthening, shaping and achieving a gender-unspecific future.

Analyzing Bauhaus in Business and Labor History for Art and Design Students

Profesor Kyunghee Pyun, Fashion Institute of Technology, State University of New York, USA

Professor Daniel Levinson Wilk, Fashion Institute of Technology, State University of New York, USA

At the Fashion Institute of Technology, faculty from art and design, business, liberal arts are collaborating to find ways in which to engage their students with various aspects of business and labor history. A century ago, Bauhaus was an experimental and innovative group of design instructors and students. The school became a modern art movement characterized by its unique approach to architecture and design. Although not much is known about business operations of Bauhaus, the school's philosophy emphasized solidarity among industrial workers.

Using *Bauhaus: Crucible of Modernism* and "The Bauhaus and the Business School: Exploring Analogies, Resisting Imitation" in *Management Learning* (2007), Levinson Wilk and Pyun discuss how to present visions of shared labor and profits to art and design students with historical contexts and unique socialist philosophy surrounding the Bauhaus in the early twentieth century. *Emigré Cultures in Design and Architecture* (2017) by Clarke and Shapira and "New Techniques in Industrial Design Education" (2005) by Kolko are introduced in view of documenting the transformative political fortunes of the twentieth century's most influential art school and design organization. As is known, Kandinsky and other artists disapproved Gropius's plans to market the products of the school's workshops while students and faculty members fought over the profits from these sales.

Beyond Money: The Meta Economics of Fashion Two

Equitable Distribution: Acquisition of Clothing in the Second World War

Sarah Magill, Doctoral Candidate, University of Brighton, UK

The British government introduced a plethora of Statutory Rules & Orders during the Second World War to divert labour and materials to war production and ensure remaining resources were used effectively for the home market. Despite these measures the cost of clothing continued to rise, instigating the introduction of clothes rationing: a coupon system based on quantity of clothing rather than monetary value. The Utility scheme and austerity regulations followed, working collectively with rationing to promote efficient manufacture of essential items at affordable prices. As all civilians received an equal number of coupons, there is a common misconception that there was equality in clothing consumption during the War, based on a government-initiated 'fair shares' ideology. In addition, it has often been suggested that the Utility scheme and austerity regulations democratised dress; that women of all classes had access to and wore similar clothing.

Using Mass Observation records, government documents, trade journals, magazines, newspapers and extant garments, this paper aims to dispel the myth that British women were in receipt of fair shares of clothing, in terms of quantity and quality, as a result of wartime schemes. Women of sufficient economic means had access to alternative methods of acquiring clothes without coupons, such as the black market or employing a tailor to turn a suit; working-class women could rely on the second-hand market or home-dressmaking to mend and repurpose garments. Furthermore, the Utility scheme was designed to meet the needs of different socio-economic classes by providing a range of cloths. Examination of extant garments reveals differences in the quality of cloth, but also cut and manufacturing methods used. Findings suggest, therefore, that clothing consumption patterns were not levelled during the war years, nor was dress democratised.

Least Wanted: Unsaleable Dress

Dr Annabella Pollen, Principal Lecturer, University of Brighton, UK

TV 'tidying guru' Marie Kondo currently advises her viewers to go through their wardrobes and dispose of items that do not 'spark joy'. In such a process of 'secondhandedness', discarded items move through a series of 'doors' (Hetherington, 2004) to find new owners and – ideally - to spark joy elsewhere. This process of devaluing and revaluing can be a complex global process, where goods circulate through a wide range of sites and meanings, as researchers from Thompson (1979) and Gregson and Crewe (2003) to Palmer and Clark (2005) have shown. But what becomes of garments that spark joy in no-one? What of those abject articles at the end of the line that can't be sold? What are the cultural characteristics of items of dress that cannot be given away?

There has been a recent flurry of interest among researchers seeking to understand the worn, dirty and distressed in design (see, for example, *Fashion Unraveled: Memory, Wear and Imperfection in Dress*, FIT, 2018). The pursuit of this paper is to look beyond the storied romance of secondhand garments' patina effects and social biographies to examine the cultural values of clothes that have reached the end of their worn lives. To do this, the paper follows the microcosmic cycle of textile turnover in the space of a busy British house clearance company, whose high-speed *modus operandi* moves garments, in less than a week, out of wardrobes and into the domain of dealers and consumers, through the secondhand system and its declining scales of value, until garments are given away for free. What remains unwanted at the end of this process is culturally marked by many rejecting hands and constitutes the lowest ebb of utility and desirability, reduced to rubbish and rags.

Wearing history: exploring vintage fashion consumption since 1965
Dr Liz Tregenza, Lecturer, University of Portsmouth, UK

Writing in 1996 journalist Marion Hume indicated the increasing interest in vintage fashion. She suggested that 'once upon a time, they were called hand-me-downs and nobody wanted them. But now that 'vintage' has become fashion's favourite adjective, spotting great old clothes- collecting them, wearing them, designing collections inspired by them, has become smart.' This paper widely considers the current popularity of vintage fashion, reflecting on how and why vintage clothing has reached further mass popular appeal in the twenty-year period since Hume wrote this article.

The research behind this paper includes interviews with a number of women who collect and wear vintage clothing. It considers their multifaceted reasons for purchasing and wearing such garments; is it connected to a desire for individuality? A monetary decision perhaps? Or, is the choice to wear vintage born out of a yearning to connect with the past? My personal experiences as a vintage clothing dealer and devoted wearer of such pieces are also explored within this paper. The time period for this research has been specifically chosen, the mid-1960s representing the first decade in which wearing 'grannie's' clothes became popular with some fashion-forward individuals.

This paper also reflects upon the 'value' of vintage clothing, considering not only the monetary value of such pieces but also their status as collectible objects. It questions whether the physical act of shopping for such garments, the thrill of the chase in searching for highly desired 'holy grail' items, is as appealing as wearing the garments themselves. Connected to this, the paper considers why some seemingly 'everyday' pieces, such as 1950s floral cotton skirts, command high prices on the vintage market. Overall this paper looks to question the longevity of 'vintage' as a fashion trend and how the consumption of vintage fashion fits within wider debates around sustainability.

Copyright and Appropriation

Appropriating Images: Creating a shared visual language in graphic design history
Professor Amanda Horton, University of Central Oklahoma, USA

Copying, plagiarism and ripping-off content are serious accusations for a graphic designer. However, there is a history of and a precedent for reusing and recycling imagery within the field. Art Chantry (2015) acknowledges that without an established visual language and the reuse of images, the postmodern era of punk and grunge graphic design would not exist. Where is the line between appropriating someone else's imagery and paying homage? When does an image become part of the vernacular and, therefore, acceptable for reuse as part of the larger sphere of building a visual language? According to Keedy (1994) this should never happen, and he claims that "the vernacular in design has pretty much played itself out." But has it? Reuse and appropriation are seemingly as pervasive as ever, resulting in an ebb and flow that will continue, perhaps forever, throughout history. If graphic designers rely on a shared visual language for effective visual communication, must there not necessarily be some reuse and appropriation of images? All design either builds on the past or rejects it; either way the past is important in developing a visual language. Current designers like Aaron Draplin and Charles Spencer Anderson have relied to some extent on the past to influence and inform their designs. Do their designs, as successful as they have been, run the risk of "romanticizing the past," a concern expressed by Ellen Lupton (1994)? This paper will look at the history of appropriation, plagiarism, and homage in design in an attempt to understand the value of or conditions in which these practices are acceptable in the practice of graphic design. It will explore the eclecticism of designers such as M&Co., Push Pin Studio, and others to examine the line of effective reuse, homage, and appropriation in design in establishing a visual language.

How to Steal and Get Away With It: Graffiti, Graphic Design, and Real Property
Brian McSherry, Legal scholar, University of Buffalo, USA

Cases in both the United States and the United Kingdom have failed to answer the question as to the legal protection afforded to street artists. Due to this unanswered matter of law, graphic designers, auction houses, and property owners have been economically proliferating from their appropriation and physical theft of street art/graffiti. This paper looks towards the historical trends of 'illegal' or 'immoral' works of art that are legally parallel to street art and possible legal actions that could garner protection for street artists. Further, this paper examines the current economy of appropriation, arbitration, the cost of litigation, and moral rights imbued to artists for answers as to the current status of copyright regulations for artists, corporations, and freelance designers.

Something Borrowed/Something Blue: Rethinking Tableware Tradition in the Age of Artistic Copyright

Peder Valle, Collections Registrar, National Museum of Art, Architecture and Design, Norway

For designers and artists alike, copyright is generally a good thing. However, it also conceals powerful economies of legitimacy, in which the threat of plagiarism looms large. Within the ethos of modern copyright, the cost of design move beyond the mere division of material/ immaterial, suggesting moral absolutes and risk of economical or professional failure. Once a plea for protection; the enforcement of copyright has become serious business.

In this paper I recount the story of the Norwegian tableware design 'MaxiStrå', whose visual likeness to Royal Copenhagen's 'Mega Mussel' brought Norwegian company Porsgrund into trouble – and a lawsuit. Both designs feature expanded motifs from the iconic blue-and-white 'Strawflower' pattern, which is the signature product of both companies. In 2000 Danish designer Karen Kjældgård-Larsen created 'Mega Mussel' as a new 'take' on Royal Copenhagen's old classic, and in 2004 Porsgrund followed suit. Notably, Porsgrund's designers argue that 'MaxiStrå' is closely based on their own pattern, and not simply a copy of Kjældgård-Larsen's design. Remembering that both designs have a common point of reference, it is worth noting that the 'Strawflower' pattern was originally an 18th century German invention imitating Chinese porcelain. While the pattern itself predates copyright, the case is further complicated by the fact that Royal Copenhagen has succeeded in getting certain elements of the pattern recognised as EU Trademarks, as recently as 2012.

What makes this case so complex and compelling is not just its implications for copyright law; rather, it exposes the limits of our modern understanding of copyright and challenges established views on design practice and its economies. Embodying the idea of the meaningful quotation, 'MaxiStrå' and 'Mega Mussel' raise important questions about the value of design heritage as well as the relevance of existing copyright regimes to postmodern design practices in general – and to appropriations in particular.

Alternative Economies and Design

The Designing the Change Archive as heritage of alternative economic practices

Katie Hill, Lecturer and Research Assistant, University of Wolverhampton, UK

In the documentary film 'Divorce Before Marriage' about alternative rock band ILIKETRAINS, from Leeds UK, the main narrative is the realisation that when the band loses their recording contract because the record label folds, they can continue to make albums and tour, just not in the economic form that they had expected. Toward the end of the film there is a revelation that many of the bands that they admire are also 'DIY' bands, operating in mixed economies. Coming from a city with a strong DIY music community it's surprising that this group of young musicians could get so far into their careers not knowing that many fellow musicians were working in this way, and I suggest that this is due to the dominance of stories of mainstream commercial success in the media and recorded heritage of creative practice. There are parallels in how we celebrate and record the heritage of design practice such that young designers may also think that the only way to be a designer is to find a salaried position in a consultancy and to practice within a traditional commercial model. Over the last 20 years I have been developing social design practice in Leeds, and recently have been putting together an archive of over 70 items that illustrate the context within which this practice has developed. I have analysed this archive as it relates to the development of my own practice but there is another story to tell about the economies within which the community of work represented operates, for example timebanking, public funding, academic research, sharing economies, social enterprise and voluntary work. At a time when we are seeking alternatives to failing mainstream capitalist economies, this paper presents the heritage of alternative economies within which we can practice design.

Designing the Disco Economy

Dr Catharine Rossi, Associate Professor, Kingston School of Art, UK

Nightclubs have long been sites of intense design activity. They are breeding grounds of experimentation and subversion, innovation and networking for designers, artists, performers and clubbers alike. In the 20th and 21st centuries nocturnal leisure spaces have been influential sites of freedom and self-fashioning that have served to build communities and identities, and drive creative and nighttime economies, all over the world.

In recent years this nocturnal creativity has been threatened. To take the UK as a case study, between 2005 and 2016 the country lost nearly half of its nightclubs. Since 2007 London, which represents 40 per cent of the UK's night-time economy and just under half of its creative economy, has lost a third of its clubs. Despite the global reputation of many venues past and present, they have little heritage status, and there is minimal understanding of the value of this nocturnal design realm. This paper proposes that when clubs close it does not just have an economic cost, but social, cultural and political costs too.

The aim of this paper is to examine the contribution of club creativity past and present, revealing the multi-faceted value of often marginalized communities, including LBGTQI and ethnic minorities. It examines the club's role as a design incubator and site of multidisciplinary exchange: from the role of designing club interiors in the careers of designers such as Ben Kelly and Ian Schrager; to the impact of designing outfits and identities by clubbers such as Stephen Jones, Leigh Bowery and Charles Jeffrey; to the dancefloor's fueling of subcultures, music and social trends, and urban transformation. The paper is underpinned by questions of methodology, as it explores the possibilities and challenges of an economic lens in exploring design's nocturnal past, and the contribution design history could make to its future.

Fetters and the cultural origins of some bondage objects in 1970s Britain
Dr Tom Cubbin, University of Gothenburg, Sweden

1976 saw the founding of the first UK business devoted to male erotic bondage. *Fetters* originated as a mail order business that supplied handcuffs and straitjackets by mail order to collectors, escapologists, and fetishists. However, its product range and popularity soon spread across Europe and North America to become one of the best known suppliers of bondage gear. In this paper, I examine how the business was reliant upon pre-existing infrastructures for hobbyists, enthusiasts and collectors – as well as traditions of erotic contact and bonding between heterosexual men in the British armed forces. By drawing inspiration from Houdini's implicit eroticism and appeals to masculine strength and ingenuity, *Fetters'* founder Jim Stewart built a company that provided equipment for bondage that drew upon cultures of erotic contact between men in both heterosexual and gay cultural settings. In reflecting on this history, I highlight the importance of design and commerce within gay life for facilitating the integration of spontaneous erotic activities into the more formalized sexual practices of the leather and BDSM scenes.

Collaboration and Conflict in Design

'Local furniture industry is not interested in baby-sitters': The resolution to modernize Baltic design in 1955

Dr Triin Jerlej, Postdoctoral Researcher, Vilnius University, Lithuania

This presentation focuses on the transition from Stalinism to Modernism in the Soviet Union. Often, the modernization of Soviet design has been seen as a centralized process, led by the Communist Party headquarters in Moscow. This research has uncovered a resolution jointly drafted by Estonian, Latvian and Lithuanian Unions of the Artists and presented at the Baltic Applied Arts Exhibition in June 1955, which demanded from the Soviet Council of Ministers changes in the systems of Baltic design. The presentation analyzes this resolution in its cultural and historical context, compares its aims to the objects shown at the exhibition, and traces its legacy and importance. It suggests that the emergence of Soviet modernism was shaped not only by Moscow as the center, but also by 'peripheries'.

The resolution demonstrates a new approach to design, which would allow a mass production of better quality consumer goods. All three states drafted individual resolutions highlighting local problems, in addition to the joint resolution. The most important demand was that local factories should be forced to hire professional artists, whom they often saw as annoying 'baby-sitters', disrupting the speed of socialist planned economy. Additionally it was demanded that planning decisions would be made at a local level instead of Moscow. The conference presentations by Estonian, Latvian and Lithuanian specialists, intended to pave the way to resolution, demonstrate the ability to use suitable examples in order to justify the desired outcome to the Communist Party. Thus, instead of praising the capitalist system, modernism is excused with references to the highly popular Chinese applied arts exhibition. The resolution did not receive attention in the media, but had a crucial role in the development of Baltic modern design.

The designer as producer: tensions between design and industries in late Soviet Russia.
Dr Yulia Karpova, Central European University, Budapest, Hungary

A stream of the 1920s Russian avant-garde known as 'productivist art' stood for repudiating formal artistic experiments and integrating creative work into industrial production. The 'productivists' viewed an artist not just as a producer of useful objects, but as the organizer of industrial production. These ideas were abandoned in Stalin's time in favour of the vision of art as a tool to celebrate the power, but they resurfaced again in the 1960s campaign to create modern socialist consumer culture responsive to international trends. After the establishment of the state system of design services in the 1960s, design specialists became preoccupied with reinforcing the position of a designer at a factory that would have continuous influence on production guidelines. These efforts, however, repeatedly clashed with the stubbornness of factory managers whose main goal was to meet production plans. Rather than the organizer of production, a designer was often pushed to the role of a humble assistant to engineers, technical workers and factory managers.

For solving the conflict between designers and factory administrations, in the early 1970s Soviet design theorists proposed the notion of 'production culture' – a seamless workflow organisation that prioritises the continuous update of the assortment. Such production culture required the willingness of designers and industry managers to communicate on the most essential needs of the population and the requirements of dynamically changing daily life. My paper addresses this late Soviet effort to bring 'art into production' in the form of socialist industrial design. It focuses on the production of glassware through exploring the archival and published documents of the Leningrad Factory of Artistic Glass.

Experts of design (technology)

Denise Ruisinger, Doctoral Candidate, ETH Zurich & Lucerne University of Applied Arts, Switzerland

For most of the nineteenth century the canton of Zurich was - along with Lyons in France and Krefeld in Germany - home to a booming silk industry. Silks produced on the shores of Lake Zurich were bought all over Europe and the US. Other than expected, the Zurich silk industry didn't cater to Haute Couture, but sold their textiles en masse to wholesalers and the newly evolving department stores. With the democratization of fashion and the introduction of mechanical mass production towards the end of the century, the design and production processes changed fundamentally. It wasn't only that the machines pushed production to previously inconceivable speed. An intricate assemblage of punched cards, needles, draw hooks, lifting knives and pegs supplanted weavers' manual skills and tacit knowledge.

Yet, the new technology didn't simply degrade the weaver's trade to piece-work. As I will argue, it concurrently gave rise to a new kind of employee. With the power looms came mechanics and technicians, who maintained and repaired the looms and were responsible for the installation and smooth running of the ever more complex design machines, e.g. the dobby, jacquard and shuttle-box. However, the machines and their experts didn't suffice to fulfil the demands of fashion, as the industrialists were soon to learn. A different body of knowledge than theirs was needed. Experts of design, who were able to meet the requirements of both fashion and textile production, were sought. The paper explores how the broad silk producers tackled this expensive challenge as an industry and each on his own, and at what cost, simultaneously tracing the evolution of the experts of design (technology). By looking at the cost of design in terms of profession and expertise, the paper addresses a rarely considered ramification of the transition to mechanical mass production.

Parallel Session Six

The Business of the Bauhaus: Bauhaus Objects and Mediation

The Bauhaus and the Business of Window Display

Kerry Meakin, Doctoral Candidate, Dublin School of Creative Arts, Dublin Institute of Technology, Ireland

Using primary research material from the Bauhaus Archiv this paper seeks to shed light on the impact of the Bauhaus on the commercial practice of window display. It investigates the connections between the Bauhaus and the Schule Reimann in Berlin. After the closure of the Bauhaus in 1933, the Schule Reimann employed some of the Bauhaus tutors; Joost Schmidt taught under Hugo Haring before he was declared a communist, Walter Peterhans and Georg Muche were also hired. Schmidt's student Heinz Loew was later appointed Head of the Display Department when the Reimann School opened in London in 1937.

A training school for applied arts offering window display as a discipline emerged in 1910, the Höhere Fachschule für Dekorationskunst. With the alignment of the Fachschule with the Schule Reimann in Berlin, the education provided had a profound effect on the development of the international fundamentals of window display.

From the mid-1920s the Reimann and its chief display tutor, Georg Fischer took the principles of modernism used by Bauhaus tutors and applied them to the display techniques previously developed. Fischer was an admirer of the work of Bauhaus teachers, Laszlo Moholy-Nagy and Oskar Schlemmer, and the influence of their work is seen in Fischer's teaching.

Marcel Breuer, the Wassily Chair and the “frozen” Bauhaus Modernism after 1945
Dr Donatella Cacciola, University of Bonn, Germany

Marcel Breuer was the first designer – and one of the few – from the Bauhaus who was actively involved in the reedition of his furniture designs. When Dino Gavina in 1962 started with him the re-edition of his first tubular steel chair, calling it “Wassily”, this was almost 40 years old.

Immediately after moving to the U.S., Breuer proposed his designs to several furniture companies in different materials – he also tried them in plastics and bamboo. He further convinced Hans G. Knoll to produce a tubular steel chair – but Knoll canceled it from sales catalogues after only one year of production. In 1960 Wohnbedarf in Zurich started an edition of six pieces of the tubular steel armchair– and only sold three pieces. Two years later, the first Wassily chair, with no substantial modification, was shown for the first time at the Gavina showroom in Milan and started a “career” as a “timeless” furniture design.

This paper investigates a paradox: in order to be well perceived and commercially succeed, Bauhaus objects had to look “old as then”– and their designers were not requested to ideate up-to-date furniture pieces.

Shifting Geographies: Herbert Bayer's World Geo-Graphic Atlas and the Mapping of the Postwar Globe

Courtney Schum, Doctoral Candidate, University of Bristol, UK

Adapted from my 2018 University of Bristol master's dissertation of the same name, this paper explores the intersection of Bauhaus principles, communication design, transnationalism, and postwar global affairs present in Herbert Bayer's *World Geo-Graphic Atlas*. The book was produced exclusively for clients of the Chicago-based Container Corporation of America in 1953 as part of the company's unique patronage of artists and designers. Driven by the typographic prowess Bayer honed as a Bauhaus instructor, it is exemplary of modernist informational graphics. However, the book is most notable for its encapsulation of conflicting geopolitical attitudes after the Second World War. The mid-century brought a simultaneous transfer of global influence and Bauhaus talent to America, which unfolds in the atlas' visual elements, structure, and text. Bayer's cogent infographics facilitate understanding the work's recurring themes of air communication, comparative economic development, industrial resources, and mounting Soviet pressure. The paper uses the *World Geo-Graphic Atlas* as a case study to explore applications of Bauhaus philosophy and design in the context of postwar capitalist America, and therefore dovetails with the aim of this conference.

Community and Wellbeing

The True Cost: remaking value, designing a sensibility for sustainable clothing
Professor Fiona Hackney, University of Wolverhampton, UK

This paper takes the True Cost (2015), a documentary exposing the social and environmental costs of the fast-fashion industry, as a starting point to reconsider value in clothing and how this might embed pro-environmental behaviour change. Extant research reveals the difficulty of reversing fast-fashion. Even those aware of fashion's externalities can get caught in a value-behaviour gap since quality fast-fashion items are more readily available in the market place and out-compete eco-fashion (D'Souza 2015). The paper argues that part of the answer lies not only in our intellectual but also in our affectual relationship with fashion, its deep connections with individual identities that are themselves rooted in socio-cultural attachments (Kaiser 2012). It draws on findings from the Arts and Humanities Research Council-funded project, Designing a Sensibility for Sustainable Clothing (S4S), which uses wardrobe audits, repurposing workshops, clothing diaries, questionnaires and films to explore how we might remake our relationship with clothing by building a 'sensibility' for sustainable fashion. While the True Cost and films like it are vital for consciousness raising and their shock value is an important incentive for change, the scale of the problem can seem overwhelming. Working closely with around forty people who participated in up to forty workshops over a period of 10 months, we found that it was the pleasure taken in small, everyday activities such as reconstructing a piece of knitwear, repurposing an item, or embellishing a tear, that helped provide and more importantly sustain behaviour change. Pleasure rather than fear was the principal driving factor; the pleasures of creative agency, learning skills, sharing knowledge, belonging to a wider like-minded community, connecting the micro with the macro/the local with the global, and forging new identities around a cluster of deeply held ethics and values about our relationship of care to each other and the planet.

Making makes me feel better: Designing for wellbeing, happiness and social values.

Jill Brewster, Doctoral Candidate, Northumbria University, UK

Dr. Colin Wilson, Senior Lecturer, Northumbria University, UK

This paper presents a design led inquiry, which aims to understand the benefits on wellbeing for people living with dementia through participatory handcraft making workshops. The study is set in a historically immersive 1940's cottage at Beamish Museum, the Living Museum of the North. This pilot project builds upon existing collaborative research that the Beamish Health and Wellbeing team have engaged in and sits within the context of a growing practice of engaging people with dementia in cultural activity at non-conventional venues as a valuable alternative to clinical interventions.

This is a qualitative craft-centred research project involving a dementia friendly team which draws on museum artefacts to inform the design and creation of new handcrafted products with an emphasis on the social and historical ideals that a product or craft practice holds for a community. The project uses workshop activities to gain an understanding of the experiences of a small group of people and seeks to unpick the rich detail of the participatory activities in terms of mental and physical wellbeing. A thematic analysis was used to identify patterns and meanings that emerged from the qualitative data. This resulted in the initial identification of key themes and seeks to understand the benefits and value of the project for participants and staff within the museum.

Initial findings suggest that creating artefacts with the hands challenges participants to be imaginative and can enrich the lives of people living with dementia. The close connection with materials is comforting, often participants comment that concentrating on a creative activity 'in the moment' can be absorbing, a temporary distraction from other difficulties. We observed a commitment to the project and increased levels of confidence in participants where they valued learning new skills and felt privileged to work and have access to the historic collections within the museum.

Designs on happiness: the inherent worth of artificial flowers.

Dr Kirsten Hardie, Associate Professor National Teaching Fellow, Arts University Bournemouth, UK

This paper considers the value of artificial flowers and their relationship with happiness. It considers how artificial flowers - their manufacture and their various forms and functions - relate to perceptions of joy and value across time and across different countries and cultures. It questions the inherent worth of artificial flowers, their commercial, social and cultural value, and considers why they can be dismissed as merely cheap and cheerful objects and, conversely, why they can be considered to be invaluable designs of significant importance.

The paper considers how artificial flowers have bloomed and have been, and continue to be, used across a variety of contexts. Importantly the paper explores why across history artificial flowers have enjoyed both significant popularity and also ridicule. Through consideration of key theoretical perspectives regarding taste and popular culture (Baudrillard, 2005; Bourdieu, 2010; Bayley, 1991) particular historical and contemporary flower designs are scrutinised. How personal and popular taste feature in the evaluation of artificial flowers' worth is considered. Artificial flowers are discussed in relation to the concept of kitsch and notions of ugly, fakery and unnecessary decorative and the playful and sentimental. (Dorfles, 1975; Bayley, 2012; Kjellman-Chapin, 2013; Margolin, 2002). The discussion considers how artificial flowers' designs can represent and create happiness.

The paper examines the design of artificial flowers and discusses their manufacturing processes in consideration of their commercial value and enduring appeal. It questions why their manufacture continues to flourish and how their cost can determine how they are valued, viewed and used.

The discussion presents an original and important consideration of artificial flowers as valuable historical and contemporary designs that deserve balanced documentation and inspection. The paper's findings, in part, are drawn from the author's empirical research and her extensive artificial flower collection.

Exploring New Technology

Does authenticity matter? Exploring the discourse between hand drawn and CGI image making in communicating the idealised interior.

Douglas Gittens, Senior Lecturer, Nottingham Trent University, UK

Anja Bendix, Senior Lecturer, Nottingham Trent University, UK

The idealised perfection of the interior digital image has generated a new discourse between the stakeholders associated with interior architecture and design. Whilst tensions continue between commercial viability and creative vision that characterise the client/designer relationship, a third party has been thrown into the mix with digital CGI visualisation. The visualiser must balance their own professional integrity, commercial viability and artistic licence in imaging the 'perfect' interior.

However, it is the end user who ultimately inhabits the idealised digital image of the interior. Does the idealised CGI image signify a correct representation of a new interior? Or does it overreach the authenticity of the actual interior? If so, the user may have to live with unfulfilled expectations (Lawson, 1997).

Australian CGI company 'Blank Canvas' highlighted the irony of wanting photorealistic images stating that 'Developers and architects are trying to sell the idealistic dream, but the *reality* of the project might resonate even more with their target market' (Bourn, 2018). Even so, to what extent is this exclusively an issue of the digital image? Was the traditional hand drawn perspective an authentic conveyer of the virtual interior, or did it simply enable the same *fait accompli*? (Frasconi, 2011).

Perspective drawing was formalised via the Camera Obscura and the tracing of a projected image. Emergent from this system of representation, the traditional hand-drawn interior perspective generates a simulation of an interior (Panofsky, 1937). By comparison, digital imagery emulates a photograph, a representation of what *already exists*, not what *might yet exist*. The digital image is a simulation of a simulation of a simulation of an interior design. If the interior perspective has always been a simulation, to what extent does authenticity matter anyway? (Baudrillard, 1997).

This paper will explore the evolution of the perspectival representation of the interior, interrogating notions of authenticity associated with hand drawn and CGI imaging.

Cyborg, How Queer Are You? Speculating on Paternalism towards Democratic Posthuman-Centered Design

Sena Çerçi, Doctoral Candidate, Northumbria University, UK

As the mediators of human-world relationships (Verbeek, 2011), autonomous decision-making AI technologies steer our behavior, altering what it means to be human, as well as our society. The use of queering as an analogy/method (Light, 2011) to tackle the problem of paternalism caused by such technologies reveals the true cost of design in parallel to Heidegger's notion of technology as "a way of revealing" (1977). Although heavily debated within the academic discourse, the predominantly solutionist approaches to paternalism within the field of HCI (e.g., the discussions around quantifying morality and outsourcing it to technology, or opening up of black-boxed algorithms to allow for a certain degree of user intervention in decision-making) fail to capture the covert paternalism, the true cost of technological design. As an inherently moral activity (Verbeek, 2006), technological design limits human freedom in subtler ways through uncoupling freedom from the responsibility it comes with (Gertz, 2017). This not only results in "moral laziness" (Verbeek, 2008), but also accounts for technocracy (Harris, 2017). Within the current scheme of "surveillance capitalism" (Zuboff, 2015), the conventional approaches and methods of RtD fail to capture and communicate the essence of this wicked problem (Rittel & Webber, 1973), where the co-evolution of problem and solution pair requires different approaches (Dorst & Cross, 2001; Kolodner & Willis, 1996, Maher, 1994). The reciprocal impacts of human-computer interaction also denote to the need for evolving into posthuman-centered design (Faste, 2016). This paper discusses how the use of queering as an analogy/method within speculative design approach can help destabilize the current anthropocentric humanistic thinking towards posthuman-centered design, as well as convey the problem to the public in order to initiate a more democratic, collaborative and explicit moralisation of technology.

Commodity Chains

Redefining design expertise: how boots 'made in Canada' reveal changing design relationships in global commodity chains

Dr Elise Hodson, Post-Doctoral Researcher, Aalto University, Finland

The global, spatial distribution of design work is changing. The core-periphery model, in which design is located in one part of the world and manufacturing in another, is being reconfigured in global networks of design. By dissecting one commodity and exploring the many actors tied to various iterations of its design, this paper shows how an everyday object – a pair of steel-toed safety boots – represents this shifting landscape. The case study boots are proudly 'made in Canada.' They are manufactured in the last shoe factory in Ontario but their design and production would be impossible without global commodity chains stretching across North and South America, Europe and Asia. The boots highlight in particular the transnational exchange taking place between Italy and Mexico, illustrating how post-industrial and industrial centres are redefining design expertise in often invisible ways, challenging old hierarchies of 'design-led' and 'manufacturing' nations as well as notions of value attached to countries of origin. Building on long traditions of leather goods, and offering different cultural and economic advantages, Italy and Mexico bring together producers from around the world in locations ranging from 'shoe cities' to trade shows, academic institutions and factory floors. Old and new technologies, trends, and practices converge in these microcosms of global design, generating new design knowledge. Back in Toronto, the shoe designer's work reflects the global fragmentation of production. For the designer, global supply chains offer opportunities and constraints, like the challenges of fitting together pre-existing components that are designed elsewhere. These components are sourced not only for their low price but also because their points of origin offer expertise and resources that Canada does not. The Canadian designer draws from his training in Italy and time in Mexico to create footwear that is at once 'global' in its appropriation of styles, forms, and manufacturing techniques, and 'vernacular' in that it represents unique local conditions of production, the result of a consolidated and diminished Canadian footwear manufacturing sector and further evidence of global shifts in design capacity.

Prestige and Profit: Linton Tweeds, Paris Couture, North American and Japanese Ready-to-Wear

Fiona Anderson, Independent Scholar and Doctoral Candidate, University of Edinburgh, UK

This paper will explore the complex relationships between prestige and profit within the international post-war fashion industry, by examining the export trade and client relationships of Linton Tweeds. From the inter-war period up until today, this firm, based in Carlisle in the north-west of England, has been the main supplier of tweeds to Chanel. The paper will primarily be informed by original research, including an interview with Leslie Walker of Linton Tweeds, and research in their company archive. It will show how the design and business relationships of that mill with Paris-based couture houses, played a significant role in encouraging their export sales to upmarket North American ready-to-wear designers and manufacturers. This research builds on Alexandra Palmer's work on the international licensing of Paris couture designs, by showing how these commercial practices interconnected with UK-based woollen manufacturing. In the early post-war period, Paris reasserted its role as the leading global centre for women's fashion, which meant that it also had a key influence on trends in fashion textiles. The fashion prestige associated with selling textiles to a leading couture house was therefore highly significant. Financial profits from that trade were limited, however, because couturiers usually only bought short lengths of fabric that were sufficient to make one outfit. The paper will explore how Linton Tweeds balanced the design and production costs of dealing with the high risk Paris couture trade, by using the associated fashion status to attract large orders from North American ready-to-wear businesses. It will also examine how this business strategy extended to Japan in the later post-war era. This research reveals the important design and commercial exchanges between a manufacturer from a city on the periphery of the global fashion industry, and firms from leading fashion centres such as Paris and New York.

'We manipulate these machines – we do': design in the knit sector in Shetland and Ireland

Dr Siún Carden, Research Fellow, University of the Highlands and Islands, UK

How do people who design for knit machines in contexts strongly associated with hand knitting conceptualise, acquire and communicate their skills? To answer this question, this paper draws on a 2018-19 study, funded by the Carnegie Trust, called 'Micro-manufacturing and place-based maker cultures: textile production and skill transmission in Shetland and the west of Ireland'.

The 'maker cultures' (Carr and Gibson 2016) around Shetland's 'fair isle' and Ireland's 'Aran' knitting encompass the full spectrum of modes of production, from amateur handcraft to mass manufacture, and an equally complex range of design processes. Mechanisation is sometimes assumed to represent a loss of 'skill', especially in contexts where hand skills have recently become less widespread. Yet, machine textile SMEs in Shetland and Ireland report long term difficulties attracting and retaining appropriately 'skilled' staff, partly due to a commonly reported gap between design as learned on academic textile courses and design as it happens within these businesses. Situated between the poles of home-based handcraft and large scale mass market apparel manufacture, small textile producers in places like Shetland and Ireland design to express degrees of distinction from both. Automation leaves decreasing room for design to happen through iterative and idiosyncratic interaction between an individual and industrial machinery. However, much of the value of design for small knit producers in places with distinct design histories and repertoires rests on their ability to show that 'we manipulate these machines'.

Biographies of the Speakers

Fiona Anderson works as a freelance lecturer and curator. She has held lecturing posts at institutions including Edinburgh College of Art, the University of Glasgow and Central Saint Martins. Fiona was formerly Senior Curator of Fashion and Textiles at National Museums Scotland. Her PhD was submitted to the University of Edinburgh in early 2019. Recent publications include *Tweed* for Bloomsbury Academic.

Laia Anguix is a PhD candidate in Art History at Northumbria University. Her thesis aims to a better understanding of the origins of the permanent collections of the Laing Art Gallery (Newcastle). She holds a BA in Art History, a BA in Fine Arts, and a MA in Cultural Management.

Janne Helene Arnesen is a Collections Registrar at the National Museum of Art, Architecture and Design in Norway. Her main field is dress history, with a focus on Norway. She has given lectures and published within the field of fashion, and also talked about dress history on Norway's National Broadcasting Radio NRK.

Eva Berglund does research on society and the environment, e.g. grassroots urbanism, social movements, notions of expertise, whilst occasionally participating in and persistently trying to better understand activism. She has a doctorate in social anthropology from the University of Cambridge, and an MSc in planning from University College, London.

Esra Bici Nasır is a Turkish design academic based in Istanbul and Izmir whose main interest is the intersection field between design history and material culture studies and anthropology of consumption. Her doctoral dissertation, entitled as "An investigation of transformation of living room furniture: The idea of living room, furniture acquirement dynamics and use practices," was conducted at Istanbul Technical University. She has been a faculty member in the Visual Communication Design Department in Medipol University. After her move to Izmir, she became lecturer at Izmir University of Economic, Fine Arts and Design Faculty, giving lectures in both the Interior Architecture and the Industrial Design Departments. She is also a member of the 4T Design History Committee of Turkey and a member of the Design History Society.

Mary Ann Bolger lectures in Design History and Visual Culture at TU Dublin. She received her doctorate, on mid-twentieth century Irish graphic design and typography, from the RCA, London. She is co-founder of the research group Typography Ireland and is Ireland's country delegate at the Association Internationale Typographique (ATypI).

Jill Brewster is currently a PhD Student in the School of Design, Northumbria University, exploring the role of participatory crafting in a social context with groups of people living with dementia. Jill's previous work as a creative practitioner spans over 20 years of designing and making within the Creative Industries.

Amanda Briggs-Goode is Head of Department for Fashion, Textiles and Knitwear Design at Nottingham Trent University. She provides subject leadership and management and heads up the Lace Heritage Research Group. She has published widely on lace, heritage and textile design and has recently been awarded HLF funding to gather oral histories from those working in textiles from across the East Midlands region.

Mitha Budhyarto is a Lecturer of Cultural and Contextual Studies in the School of Spatial and Product Design at the LASALLE College of the Arts, Singapore. Her research interests include Indonesian design history and contemporary art and cultures.

Helen Butler-Watts holds a BA in Fine Art and an MA in History of Design from the V&A/RCA. Previously an assistant curator in the V&A's Theatre & Performance department, Helen is currently working across the museum's collections to prepare for their move to V&A East.

Donatella Cacciola is research associate at the SK Stiftung Kultur, Cologne, and teaches Design History and Theory of Design at the University of Bonn. Since 2003 she has produced publications for a. o. Vitra Design Museum, "Domus", Restauero, Weltkunst and since 2004, convened at several international conferences. She was born in Rome and has been living in Germany since 1997. She studied in Parma (Preservation of Cultural Goods), in Bonn (History of Art) and in Delft, where she gained her PhD at the Faculty of Architecture in 2008 with a dissertation about reissued furniture designs and their mediations. Her research topics include: re-editions; Marcel Breuer; design archives; the meaning of Modernism after 1945; and mediation of design history through magazines and books. A former member of the DHS, she is a member of GfDG and DGPh (Deutsche Gesellschaft für Photographie).

Siún Carden is a Research Fellow in the UHI Centre for Rural Creativity. Her research interests include textiles, maker cultures and the creative economy. Her background is in anthropology. Her relevant publications can be found at www.skill-knit-manufacture.co.uk.

Sena Çerçi is a PhD student in Industrial Design at Northumbria University, UK. Having completed a BSc in Industrial Design at Istanbul Technical University (Turkey), and MSc in Interaction Design at Malmö University (Sweden), she recently joined "Understanding Fatigue in Healthcare" research led by Prof. John Vines and Dr. Lynne Coventry at Northumbria University (UK). Her research interests are around and in-between the notions of cyborg, embodiment, power, and epistemology.

Marianna Charitonidou is an architectural engineer and a historian and theorist of architecture. She was awarded a Doctoral Degree all'unanimità from the National Technical University of Athens in 2018 for her PhD dissertation "The Relationship between Interpretation and Elaboration of Architectural Form: Investigating the Mutations of Architecture's Scope". She was a Visiting Research Scholar at Columbia University's GSAPP (invited by Bernard Tschumi, 2016-2017) and the École française de Rome (2017-2018) and a Research Fellow at the Canadian Centre for Architecture (CCA) (2018).

Sarah Cheang is Senior Tutor in the History of Design at the Royal College of Art, London. Her research centres on transnational fashion, ethnicity, material culture and the body from the nineteenth century to the present day, on which she has published widely.

Genevieve Cortinovis has curated several exhibitions including *Printing the Pastoral: Visions of the Countryside in the 18th Century*, *Cross-Pollination: Flowers on 18th century Porcelain and Textiles*, *Blow-Up: Graphic Abstraction in 1960s Design* and *St. Louis Modern*, for which she co-authored its award-winning catalogue. She has a MA from the Bard Graduate Center.

Tai Cossich is a graphic designer. Her research interests are situated in the intersections between typography and sociolinguistics, with emphasis in indigenous languages of America. She is currently a PhD candidate at the Royal College of Art, London, where she investigates the various forms the glottal stop takes in typography.

Tom Cubbin is a design historian whose current research, entitled 'Crafting Desire: An International Design History of Gay Fetish Making,' (Riksbankens Jubileumsfond 2019-2021) uses design historical methods to explore what the gay fetish world can tell us about broader changes in the socio-economic status of gay men in Europe and North America since the 1960s.

Sancha de Búrca is the Programme leader, HND graphic design (University of Kent undergraduates studying at West Kent College, Tonbridge) and a PhD student developing a *Design for Good Pedagogy* by researching students' perceptions of their transformative experiences in socially responsible design.

Nushelle de Silva is a PhD candidate in architectural history at MIT. Her research focuses on the politics of display, and her dissertation examines the influence of the UNESCO-ICOM partnership established after WWII on collaborative museum practice. Her research has been supported by the MIT Department of Architecture, Paul Mellon Centre, and Society for Architectural Historians, among others, and she recently received a grant from the American Institute for Sri Lankan Studies to develop a short module on design history in Sri Lanka for use in undergraduate coursework.

Kjetil Fallan is Professor of Design History at the University of Oslo and a founding member of the Oslo School of Environmental Humanities. His most recent books are *The Culture of Nature in the History of Design* (Routledge 2019) and *Designing Modern Norway: A History of Design Discourse* (Routledge 2017).

Marta Filipová is interested in identity construction in the visual arts of modern Central Europe and in the politics of displays at international exhibitions. She is the editor of *Cultures of International Exhibitions 1840-1940. Great Exhibitions in the Margins* (Ashgate) and author of the forthcoming *Modernity, History and Politics in Czech Art* (Routledge).

Mads Nygaard Folkmann is an Associate Professor of design theory, design culture and design history at the University of Southern Denmark. His publications include *The Aesthetics of Imagination in Design* (2013), *Designkultur. Teoretiske perspektiver på design* (2016) and articles in *Design and Culture*, *Design Issues* and *The Design Journal*. He is co-editor of *Design Culture. Objects and Approaches* (2019).

Douglas Gitten's (MA DipArch FHEA) research explores the continuing significance of the sketchbook and hand drawing as a creative tool in the digital age. Douglas is a published researcher and lecturer at Nottingham Trent University where he teaches on the BA Interior Architecture and Design programme. He has taught design for over twenty years.

Catherine Glover is a senior lecturer on the BA Fashion Communication programme at Northumbria University and is also a PhD student. Her teaching specialisms are fashion PR, journalism, publishing and branding and her PhD research focuses on transnational storytelling in the field of fashion promotion.

Robert Gordon-Fogelson is a PhD candidate in Art History at the University of Southern California and he holds an MA in Design History from the Bard Graduate Center. His dissertation, "Total Integration: Design, Business, and Society in the United States, 1935–1975," examines the centrality of the concept of "integration" to mid-century design.

Dori Griffin is an Assistant Professor at the University of Florida, USA. Her research explores the visual rhetoric of popular print media during the twentieth century, interrogating the social, political, and professional contexts in which graphic designers and commercial illustrators practiced.

Fiona Hackney, Professor Fashion Theory, University of Wolverhampton, is a design historian working on dress and fashion culture, print media, crafting and social design. Recent publications include the *Edinburgh Companion to British Women's Print Culture between the Wars* (2018) and *The Power of Quiet: Re-Making Amateur and Professional Textiles Agencies* (2016).

Ulrike Haele holds a master in Communication Science and Political Sciences and a degree in Industrial Design from the University of Applied Arts in Vienna. She has curated numerous exhibitions, published articles and headed research projects, focusing on socially and ecologically motivated design and consumer cultures.

Kirsten Hardie, Associate Professor, is a National Teaching Fellow. Kirsten's research includes flock; artificial flowers; packaging; and Object-Based Learning. She is Co-President, International Federation National Teaching Fellows; GLAD committee member and Associate Editor, *Higher Education Pedagogies* journal. She undertakes various roles across HE internationally including External Examinerships; peer review and consultancy work

Rachel Hedy Rosengarten Hunnicutt is a Master's candidate in the History of Design and Curatorial Studies at Parsons School of Design. She is the *Journal of Design History's* book reviews coordinator, a Graduate Student Teacher and Research Assistant, and Cataloguer of Cooper Hewitt, Smithsonian Design Museum's Donald Deskey collection. Her research interests include twentieth-century, corporate, and package design.

Katie Hill is working on AHRC funded 'S4S Designing a Sensibility for Sustainable Clothing' at the University of Wolverhampton, having previously worked on AHRC and NESTA funded projects developing design research methods and social design practice, alongside working on a documentation of the heritage of DIY design and music practices in Leeds, UK.

Elise Hodson is a Post-doctoral Researcher in Design Economies at Aalto University. She holds a PhD in Communication and Culture from York University (Toronto), where she studied distributed authorship in the globalization of product design. She is formerly Chair of the School of Design at George Brown College and Director of Exhibitions at the Design Exchange.

Amanda Horton teaches design technology, design studio and history of design classes. Amanda has developed multiple courses on graphic design history, including an award-winning online course and is director of the Design History minor at UCO. She is a member of AIGA and a board member of Integrative Teaching International.

Wei Huang is a first year Ph.D. candidate in the Art and Culture Department at Vrije Universiteit Amsterdam. Her research focuses on design across media and cultures. She tries to explain the phenomena that are active in the cultural industry and to give insight into the reasons behind them.

Triin Jerlei is currently a postdoctoral researcher at Vilnius University, researching Baltic design under Soviet occupation. She received her PhD from the University of Brighton in 2016. Her research interests include internationalization within late socialist industrial design, 20th century factory glass and material practices of designers in socialist regimes.

Seungyeon Gabrielle Jung is a PhD candidate in the Department of Modern Culture and Media at Brown University. Her dissertation 'Towards a Utopia Without Revolution: Developmentalism, Globalization, and Design' studies political aspects of design's utopianisms with the examples of South Korean and Silicon Valley design and media.

Vikas Kailankaje is a Lecturer in the School of Design Communication at the LASALLE College of the Arts, Singapore. He is currently researching the history of design education in Singapore.

Yulia Karpova is a historian of Soviet design and decorative art. She is the author of *Comradely objects: Design and material culture in Soviet Russia, 1960s-80s* (Manchester University Press, forthcoming 2020). Currently she is an assistant archivist at Open Society Archives at Central European University, Budapest.

Victoria Kelley is Professor of the History of Design and Material Culture History at the University for the Creative Arts. Her most recent research is a monograph published by Manchester University Press, *Cheap Street: London's street markets and the cultures of informality, 1850-1939* (2019).

Grace Lees-Maffe is Professor of Design History and Programme Director for DHeritage at the University of Hertfordshire. She is author/(co-)editor of *The Design History Reader*, *Writing Design: Words and Objects*, *Made in Italy*, *Iconic Designs*, *Design at Home*, and *Designing Worlds*. Grace is currently writing *The Hand Book* (MIT 2021).

Sarah Magill teaches historical costume construction and dress history. She recently published *Making Vintage 1940s Clothes for Women* (Crowood, 2017) and an article in *The Journal of Dress History* as the 2017 winner of The Association of Dress Historians' Award. She commences a PhD at the University of Brighton in October.

Lisa Mason is Assistant Curator within the Art & Design department at National Museums Scotland. Lisa studied textile design at the University of Dundee and History of Art at the University of Edinburgh. Lisa has worked at Dundee University Museum Services, the Talbot Rice Gallery and the National Galleries of Scotland.

Anne Massey studied for a BA (Hons) History of Modern Art and Design and PhD at Northumbria University. Her books include *The Independent Group: Modernism and Mass Culture in Britain, 1945-59*, *Designing Liners: Interior Design Afloat*, *Interior Design Since 1900* and *Chair*. She recently co-edited *Pop Art and Design* and *Design, History and Time* and edited *The Companion to Contemporary Design*.

Brian McSherry is a Graphic Designer, Educator, and Legal Scholar investigating artistic mediums and the law for the betterment of artists' financial and moral rights. He has received a Juris Doctor from SUNY Buffalo School of Law, a Masters of Fine Arts, a Bachelors of Fine Arts in Graphic Design from University at Buffalo, and is a Fulbright recipient in graphic design.

Kerry Meakin is the Programme Chair of the BA Visual Merchandising and Display at the Dublin School of Creative Arts at DIT. She is also a PhD student at the Modern Interiors Research Centre at Kingston University, London. The working title of her PhD is *The Professionalisation of Department Store Window Display: Design and Practice in the UK and Ireland (1909-1959)*.

Enya Moore is a PhD candidate at the University of Technology, Sydney (UTS). Her current research focuses on transnational design festivals in the Asia Pacific Region. Her academic writing has been published in *Plot(s)* journal and *Australasian Journal of Popular Culture*. In 2019 Moore was awarded the Design History Society Student Travel Award. She also won best presentation at the UTS Design Building and Architecture Faculty HDR Conference. Moore teaches in design history at UTS.

Erica Morawski is Assistant Professor of Design History at Pratt Institute. She received her doctorate from the University of Illinois-Chicago. Her work considers how design mediates relationships between state and populace through approaches that give agency to underrepresented voices and expand the canon. Her work currently focuses on the Caribbean.

Anders V. Munch is a Professor of Design Culture at the University of Southern Denmark. He has published *Der stillose Stil. Adolf Loos* (Fink Verlag 2005), *Fra Bayreuth til Bauhaus* (Aarhus Universitetsforlag 2012), *Design as Gesamtkunstwerk. The art of transgression* (Rhodos 2012) and is co-editor of *Design Culture. Objects and Approaches* (Bloomsbury 2019).

Jesse O'Neill is Lecturer at the Glasgow School of Art, where he coordinates Design History and Theory at the school's Singapore campus. He received his Ph.D. for research into printing cultures of colonial Australia and his current work concentrates on developments of design and lifestyle in colonial Southeast Asia.

Gabriele Oropallo is Senior Lecturer in Critical and Contextual Studies and Course Leader of the MA by Project at The Cass School of Art, Architecture and Design, London Metropolitan University. He teaches Academic Practice at the University of the Arts London. He regularly contributes to the design magazine *Form*. His recent publications include chapters in books such as *Craft Economies* (Bloomsbury, 2018) and *Design Culture* (Bloomsbury, 2019).

Kristina Parsons completed her Masters in Design History and Curatorial Studies at Parsons The New School for Design, where she now teaches. She is currently cataloguing the work of E. McKnight Kauffer at the Cooper Hewitt, Smithsonian Design Museum. Previously, she contributed to the MoMA exhibition, 'Items: Is Fashion Modern' as Project Curatorial Assistant.

Monica Penick is an Associate Professor in the Department of Design at the University of Texas at Austin, where she teaches courses in design history and American modernism. Her recent book, *Tastemaker: Elizabeth Gordon, House Beautiful, and the Postwar American Home* was published by Yale University Press in 2017.

Annebella Pollen is a Principal Lecturer and Academic Programme Leader, in the History of Art and Design, University of Brighton. Her books include *Mass Photography: Collective Histories of Everyday Life*, *The Kindred of the Kibbo Kift: Intellectual Barbarians*, *Dress History* (with Charlotte Nicklas) and *Photography Reframed* (with Ben Burbridge). She is currently completing a visual art history of the British Council and working on the relationship between dress and dissent.

Daniela N. Prina is Senior Lecturer in the History of Architecture and Research Coordinator at the Faculty of Architecture of Liège University (Belgium). Her numerous contributions are published in high ranked scientific journals and in books such as *Made in Italy. Rethinking a Century of Italian Design* (Bloomsbury 2013) and *Expanding Nationalisms at World's Fairs* (Routledge 2017).

Isabel Prochner's research and practice focuses on socially and community oriented industrial design. This includes an emphasis on critical and feminist work, as well as regional practice and professional communities. She has presented her work at many international conferences and is online editor for the Design Research Society.

Kyunghee Pyun is an Assistant Professor at the Fashion Institute of Technology, State University of New York. Her scholarship focuses on history of collecting, reception of Asian art, diaspora of Asian artists, and Asian American visual culture. She was a Leon Levy fellow in the Center for the History of Collecting at the Frick Collection and works on a book project entitled *Discerning Languages for the Exotic: Collecting Asian Art*. Her new book, *Fashion, Identity, Power in Modern Asia* focuses on modernized dress in the early 20th-century Asia and was just published by Palgrave Macmillan in 2018. As an independent curator, she has collaborated with Asian American artists in New York since 2013. Her recent projects were the *Violated Bodies: New Languages for Justice and Humanity* held at The Anya and Andrew Shiva Gallery, John Jay College of Criminal Justice and the *Postmodernism and Aesthetics: Collide or Steer* at the Korean Cultural Center, New York in 2018. She teaches Korean art, Japanese Art, History of East Asian Costume, and Asian American Art & Design. She has received the National Endowment for the Humanities for "Teaching Business and Labor History to Art and Design Students" in 2018-2021. Professor Pyun holds her B.A. in archaeology and art history from Seoul National University and M.A. & Ph.D. in history of art from New York University.

Zhao Quanquan is an Assistant Professor and the Director of the Design History Research Program of Design Research and Global Communication Centre, Design College, Nanjing University of the Arts. Published work includes Anne McClanan & Jeffrey Johnson, *Negating the Image* (first translator 2009) and has been active on funded projects including Chinese Elements in Modern Western Design (second director) and The Research of Design Policy and National Design Promoting Institutions in China and Foreign Countries (second director).

Catriona Quinn is a PhD candidate at the University of New South Wales, Sydney, and a former curator with Sydney Living Museums, where she spent fifteen years developing collections, exhibitions and publications on Australian domestic design. A contributing author to *The Other Moderns. Sydney's forgotten European design legacy* (NewSouth 2017), Catriona lectures for the Sherman Centre, the ACT Heritage Festival and Canberra Modern.

Rathna Ramanathan is a Reader in Intercultural Communication and Dean of the School of Communication, Royal College of Art, London. Her research focuses on intercultural graphic design, and experimental publishing practices. She leads the research and typographic design for the Murty Classical Library of India, at Harvard University.

Rujana Rebernjak is a Senior Lecturer in Contextual and Theoretical Studies at the Arts University Bournemouth. She has previously taught at the RCA, London College of Communication and University for the Creative Arts. She gained her PhD from the RCA/V&A History of Design programme, with a thesis on design and self-management in SFR Yugoslavia.

Cheryl Roberts is a design historian whose main interests are dress and textiles in the 20th and 21st centuries, in particular the consumption of the materials of fashion and everyday objects of culture. Cheryl's research is interdisciplinary and focuses on processes of creativity and pushing academic boundaries.

Agnès Rocamora is a Reader in Social and Cultural Studies at the London College of Fashion, University of the Arts London. She is the author of *Fashioning the City: Paris, Fashion and the Media*. Her writing on the field of fashion and on the fashion media has appeared in various journals, including *Fashion Theory, Journalism Practice, Sociology, Sociétés*, and the *Journal of Consumer Culture*. She is a co-editor of *Thinking Through Fashion: A Guide to Key Theorists*, of *The Handbook of Fashion Studies*, and of *Fashion Media: Past and Present*, and has contributed to various books including *Fashion's World Cities, Fashion as Photograph, Critical Luxury Studies*, and *The End of Fashion*. She is also a co-founder and co-editor of the *International Journal of Fashion Studies* and is on the editorial board of *Cultural Sociology, dObras* and *Fashion Studies*. Agnès is currently working on a book entitled *The Cultural Economy of Influence: Fashion in the Age of Social Media* (with Marco Pedroni, Routledge).

Catharine Rossi is a design historian based at Kingston School of Art. Her research interests range from post-war Italian design, to craft and nightclubs. Recent projects include the co-curation of *Night Fever: Designing Club Culture 1960 to Today*, a touring exhibition which opened at Vitra Design Museum in 2018.

Denise Ruisinger studied at the Universities of Augsburg and Birmingham and graduated with a thesis on the image of the New Woman in 1920s advertising. She is currently working on her PhD dissertation, which focuses on the changing relationships of design, fashion, economy and technology in the Swiss silk industry between 1880 and 1914.

Daniela Salgado Cofré is a Chilean Industrial Designer and PhD candidate at ULB in Belgium. She was awarded the Becas-Chile grant by CONICYT (2017). She remains Assistant Professor at the PUCV-Chile, where she obtained her professional degree. She has conducted several pedagogical experiences of design at the *Travesías* and *Cuidad Abierta*. She has participated and conducted diverse interventions related to the link between design, art and architecture in the *Valparaíso School*, for example, at *documenta 14* and at the *Bauhaus Fundamental*.

Courtney Rebecca Schum is a Doctoral Candidate at the University of Bristol. Prior to this she obtained an MA from the University of Bristol and a BA from DePaul University, Chicago, in Costume Design. Research interests include Bauhaus, Danish Modern, geography and transport, fashion, interiors, textiles, international tourism, postwar British reconstruction, public housing architecture, and transnationalism in art and design.

Vaibhav Singh is currently a British Academy Postdoctoral Fellow at the University of Reading. His research interests revolve broadly around the history of printing, publishing, design, and technology, with an emphasis on multilingual South Asian contexts. Recent projects have focused on labour, technological change, and transnational professional and commercial networks.

Tom Spalding is a PhD scholar at the Technical University, Dublin. He is researching the design of buildings in Cork city, Ireland, built between 1920 and 1970. He is the author of books on Cork, including: *The Cork International Exhibitions, 1902 & 1903* and *A Guide to Cork's Twentieth Century Architecture*.

Spike Sweeting teaches on the V&A/RCA History of Design MA. His research focuses on economic life in the long eighteenth century with a special interest in the port of London.

Sarah Teasley is a social historian who works at the interface of history and design research. She takes an artefact-led approach to the social history of modern and contemporary Japan, with a particular focus on design, manufacturing and communities. Publications include *Global Design History* (2011) and 'Design and Society in Modern Japan' (2017).

Saurabh Tewari, architect and communication designer, is an Assistant Professor of Design at SPA Bhopal and a Doctoral Candidate at IIT Kanpur researching on Design History of India. He was the recipient of DHS Strategic Grant 2017. He has presented at DHS San Francisco 2015 and Oslo 2017, and at ICDHS Taipei 2016 and Barcelona 2018.

Liz Tregenza recently completed her PhD (AHRC funded) on Frederick Starke and London wholesale couture at the University of Brighton. She is lecturer in Visual Cultures at the University of Portsmouth and additionally teaches at the University of Brighton and Middlesex University. She also runs an online vintage business 'Advantage in Vintage'.

Mara Trübenbach studied architecture at the Peter Behrens School of Arts in Dusseldorf, Technical University Vienna and at the Bauhaus-University Weimar, where she was awarded a MSc Arch in 2018. During her studies she has worked in several architectural practices across Europe including Ortner & Ortner Baukunst and Coop Himmelblau. After her MSc thesis, 'Nets stretched into the unknown. Bauhaus women in British exile' she worked as a research assistant at the Bauhaus- University Weimar for the Department of Architectural Theory lead by Prof. Dr. Ines Weizman, where she acted as assistant in organising the XIV. International Bauhaus-Colloquium which takes place in Weimar in April. Mara is currently team leader of Leipzig's 'greenery master-plan' on the behalf of the Landscape and Urban Planning Office Station C23 in Leipzig

Fang-Wu Tung is an Associate Professor in the Department of Design at the National Taiwan University of Science and Technology. She maintains continuing research collaborations with experts from various professions in an attempt to explore the possibilities of design innovation while at the same time gaining perspectives for research and praxis in design. As an academic, Dr. Tung has published articles in various academic journals and conference proceedings

Peder Valle is a Collections Registrar at the National Museum of Art, Architecture and Design in Oslo, Norway. His scholarly interests include the mediation of modern consumer goods within frameworks of national/social identity, as well as the historical influence and impact of design museums. He lectures on design history at the Norwegian National Academy of the Arts.

Gretchen von Koenig holds her MA in History of Design & Curatorial Studies from Parsons, The New School and Cooper Hewitt, Smithsonian Design Museum. She is a Grant Specialist & Curator for the Van Wagen (Apple Tree) House, Assistant Director for ArtFair 14c and also teaches design history & research seminars at Parsons, New Jersey Institute of Technology & Kean University.

Marina-Elena Wachs is a master tailor, tailor directress, industrial-designer and Professor of Design Theory. In 2007 Marina Wachs graduated at Braunschweig University of Art with the thesis "Material Mind – New Materials in Design, Art and Architecture". Since 2010 she held a Professorship in Theory of Design at Hochschule Niederrhein - University of Applied Sciences, Faculty Textile and Clothing Technology. Marina has experiences as a consultant for design companies and architects, and cooperates with museums, schools and foundations. Her present research focuses on interdisciplinary, hierarchy-less and cross-cultural design engineering in Europe. Her intended aim is on corporate social responsibility in material and cultural behaviour about a design shift.

Colin Wilson is a Senior Lecturer in the School of Design at Northumbria University. His key publications include *Tools for Everyday Life* (2012) and *The Tradesman's Wedge* (2011).

Xiong Yi is the Assistant Director of Design College, Nanjing University of the Arts. His research areas include design management and design policy and he has published *QiYiCangLi: The Research of China Design Institution* and been active on funded projects including The Research of China Design thinking and practicing (director of subtopic) and The Research of Design Policy and National Design Promoting Institutions in China and Foreign Countries (director).

Christin Yu is a PhD researcher in the History of Design programme at the RCA/V&A in London, UK. Her work explores identity, nationalism, mythologies and cultural imaginaries through the lens of Korean patchwork culture. Her practice as a textile designer for Alexander McQueen (2012-2017) and Peter Pilotto (2011-2014) have informed her view of textile histories through making.