

## Student parallel sessions

To be presented on Saturday 30 April, 13.00 pm – 16.00 pm

Presentations are listed in order of how they will be delivered on the day for each theme.

### Negotiating Artefacts and Future Craft

Chairperson: Professor Duncan Higgins, School of Art & Design, NTU

#### 1. Future Crafts

Authors: Anaisha Shrujal Patel, Nottingham Trent University, UK

##### Abstract

Many Indian crafts are facing extinction. Examples include stone sculpting in Odisha, cotton and silk weaving in Maharashtra, and Madhubani in Uttar Pradesh. This paper focuses on Madhubani, an intricate form of art and craft practiced by artisans in Bihar, in the state of Uttar Pradesh, used to mark special occasions, festivals and life events. The paper describes the external drivers threatening this craft, and the ways in which it has evolved to incorporate new tools and materials. It takes a practice-based approach, in which the author reflects on a three-month period of training with one of the last families of artisans in Madhubani, and the product and furniture designs she developed as a result. Convivial conversations with the family are recounted, and practitioners' concerns are described around the decline and lack of options for the survival of the craft. The paper finishes with recommendations for a collaborative creative action research approach to evolving the specific craft of Madhubani, in such a way that its true heritage is preserved.

#### 2. Culture-based Design Innovation - A semiotic analysis of Patchwork in Northwest China

Authors: Bai Xue and Ming Xi Tang, The Hong Kong Polytechnic University, China

##### Abstract

Designers can gain inspiration from a range of sources, including folk art. However, traditional Chinese folk art, which is considered an important element of the country's cultural heritage, has particular meanings. Understanding these meanings is crucial to designers' ability to use them properly to create value for new innovations and preserve cultural heritage.

In this paper, an example of patchwork from northwest China is analysed. The contributions of this analysis are twofold. First, it explores a traditional Chinese folk art with origins in remote mountain villages that is little known in the wider design world. Second, it will help designers to explore the meanings of cultural heritage as a source of design inspiration. The origins of Yanchuan patchwork are traced through field research in Shaanxi, a province in the northwest of China, and the meanings and underlying values of the patchwork examples collected are analysed following a semiotic approach. Observations of how folk artists created these examples and a review of how patchwork can be used in modern designs suggest a framework for use in culture-based design innovation and research.

### 3. Tangible ideation: Developing material study approaches and tool kits with children to enhance design education for children

Author: Bang Jeon Lee, Aalto University, Finland

#### Abstract

In the past few years, the concept and practice of collaborative approaches have stretched from adults to younger age groups. Therefore, it has been increasingly acknowledged that children also should be encouraged to participate in and their contributions valued. A tactile learning approach, which is one of the most effective learning methods of maximizing children's learning ability, has been applied to children's education for many decades. However, there are few studies that emphasise material study for children and youth. Therefore, this study proposed a teaching and learning approach with children's participation, which evolved through a designerly and architectural educational project. The main objects of this study were to collaborate with children to develop material study toolkits for children and youth; and to propose a multidisciplinary teaching and learning approach to the primary school curriculum. It demonstrated with the 5th grade of pupils in Töölö Primary School, Helsinki, Finland, in 2013. An analysis of the process and results of the study revealed that material study toolkits were of great benefit to children in recognising material, enjoying a tactile experience, and developing ideas. In addition, there was evidence of children's participation being connected to a satisfactory academic achievement..

### 4. The Mark of the Maker

Authors: Philip Robbins, Aaron Oussoren and Keith Doyle, Emily Carr University, Canada

#### Abstract

Material Matters, a research center within the Intersections Digital Studios of Emily Carr University, is exploring the interstitial conditions arising from new digital means of production and the incipient recalibration of material knowledge. What are the methodologies of making that emerge from the gaps and fissures in this territory situated between emergent digital tools, legacy process and contemporary making? Within craft, the inexorable juxtaposition of the analogue and digital can enable new means of production via a considered re-imagining/re-implementation of craft and digital contexts. This hybridized model evolves in response to the digital flux within established landscapes; it employs a mix of localized, tacit and explicit knowledge to create new physical and mental spaces for makers.

1. Through studio making and academic research this paper explores how craft makers, with extensive material-specific knowledge, may transform elements of tacit understanding through digital means, extending their creative practice. This research examines the place of skill, sensibility, and the inherent "connectedness" of legacy making traditions through the lens of digitally mediated production technologies as a means to explore more considered, reflective, and sustainably engaged practices.

## 5. The role of branded artefacts in celebrating events

Author: Yvonne Trew, Nottingham Trent University, UK

### Abstract

The Courtaulds Pretty Polly Hosiery Archive present an opportunity to preserve artefacts in the company archive and to gather oral histories from employees of the East Midlands region's knitting and hosiery manufacturers. The aim is to present and develop an understanding of the role of branded artefacts in celebrating

anniversary events. The final output from this particular project will be the development and implementation of a communication strategy for the Pretty Polly Brand Centenary celebrations in 2017. Incorporating the theme of future histories students will curate an installation that includes text, image and sound to transmit, circulate ideas and present the project concept for the CUMULUS conference. As some areas of the fashion industry appear to be seriously questioning what the future has in store, how we as educators deal with future spaces in terms of research, may need to consider the Place in which we reside. But perhaps consider the spaces in between that have become bypassed by the relentless drive to consume.

The findings of a cross-disciplinary collaborative project undertaken by postgraduate students that will benefit the company but also facilitate a body of research that has lasting impact in the fashion industry and fashion education sector.

## Innovation and Sustainability

Chairperson: Professor Venu Dhupa, Director, VSDB Consultancy

### 1. Cycling, identity & place

Author: Si Beales, Nottingham Trent University, UK

### Abstract

As cycling journeys have decreased in the last 60 years and subsequently 'car culture' has increased there is a growing public negativity towards cycling, often reinforced by media (both mainstream and social). In some Western countries cyclists have come to be regarded as outsiders or strangers. Yet in other countries, cycling is seen as the norm and cyclists are as integrated into the transport eco-system, just as other roads users are. This paper will consider how place affects perceptions of cycling and identity. Whether geographical, societal, cultural, economic or 'fashionable' place has a fundamental part to play in determining cycling identity, usage and attitudes for cyclists and others.

This paper will also consider how positive associations with cycling, such as freedom, rebellion and independence, might be utilised to engender a more positive attitude towards cyclists from non-cyclists. And whether innovation - particularly in wearable technology, improved visibility and personalisation - can be utilised to enable cyclists to demonstrate the positive aspects of cycling to other road users. This paper is presented as part of the author's continuing research into cycling, identity, fashion and innovation.

## 2. Future spaces: Food Design applied to inclusion and local identity

Authors: Rita De Castro Engler, Letícia Hilário Guimarães and Ana Carolina Godinho de Lacerda, UEMG, Brazil

### Abstract

In times when ancient customs and memories are lost and left at the mercy of moment, much of the identity of a culture has been lost. Thinking new scenarios highlighting the culture of a community and further promoting income generation is an important and valued way to sustainable development. A valuable tool for achieving this result is the creative production that combines new solutions for recovery and propagation of concepts and ideas. Therefore, this article discusses issues surrounding the belonging of a community through creative production, manages the recovery of cultural identity, in order to promote social inclusion through income generation and encourage local tourism.

As a case study, points to a project developed in Matozinhos, town in the metropolitan region of Belo Horizonte / MG. The project "Sabores das Geraes" brought by the Food Design recovery and rescue of cultural identity through food, processes and raw materials. The work has partnership with the UEMG, local government and tourism agencies. Workshops on creative processes were developed, importance and rescue of local memory and new dishes were developed based in the region characteristics. A very worthwhile experience with important results, contributing to the community, the local tourism and the university.

## 3. Knitwear design new visions: smart-k project. How the traditional craft methodologies are evolving into new scenarios thanks to technological innovation.

Authors: Giovanni Maria Conti, Politecnico di Milano, Italy, Martina Motta, Politecnico di Milano, Italy, Federica Gallarati, Dolce & Gabbana, Italy, Arturo Dell'Acqua Bellavitis, Politecnico di Milano, Italy

### Abstract

The following paper aims to show some of the results of the SMART - K research whose purpose was to create a software for 3D modelling to be applied within the production chain of the industrial sector of Italian knitwear.

Today, the market offers software for knitwear designers that can represent the product concept in 2D and still remain purely descriptive, without providing any kind of information useful for the end producer in terms, for example, of yarn quality or size and placement of working to be used for a given item of clothing.

While technology must improve production efficiency, in Italy, the knitwear sector in particular needs this intervention as it is characterized by a long, complex and highly fragmented production chain. SMART-K, or new System for the creation of design innovation processes and for the integration of the production chain, by Means of the Application and Research of new Tools for virtual prototyping and rendering in immersive environment in the Knitwear sector, tries to offer companies in the sector a series of new digital tools in order to improve the various design phases of clothing items. The

following are some of the operational phases (those not covered by an industrial patent) of the software the objective of which, within the companies of the specific sector, is to increase the efficiency of the stylistic, creative and production skills of all operators involved thus optimizing costs and production times.

#### 4. Smartphone enabled design: utilising unique markers for reimagining Ming vases

Authors: Paul D. Found and Ming-Huang Lin, National Chiao Tung University, Taiwan

##### Abstract

The conceptual relationship explored is the comparison between this place “here” (A), and this place “there” (B). Each place has specific characteristics that differentiate it from everywhere else. Perhaps most significantly of all, is geographical position; this place (here) and this (an)other place (here) are, by definition, in different locations.

Inspired by research into mobile music, which allows for the creative process to take place anywhere, at any time, this paper explores the use of smartphones as a tool for 3D sketching ideas for ceramic vessels. For “In This Place”, the intention is to employ an innovative approach to design, utilising smartphone devices to gather and process location specific data to create a series of unique, singular forms. The resulting digital models can then be 3D printed. As well as exploring a new design process, this allows for a kind of collaboration, as users in different locations contribute to designing the complete series of vessels.

Specifically, the aim is to reimagine a pseudo Ming dynasty-era vase form, whereby the vessel has a central, vertical division. One half is redesigned by each user “here”, and becomes an unique redesign of the vessel, subtly different to all others designed in their own “here”.

#### 5. Future Factory. New Design skills in the era of post-craft.

Authors: Viktor Malakuczi and Loredana Di Lucchio, Sapienza University of Rome, Italy

##### Abstract

Today the online marketplace encourages an increasingly ‘Long Tail’ economy, as Chris Anderson (2006) calls the growing share of niche products opposed to mass manufactured goods.

Design has embraced this evolution, in particular due to the crisis of large-scale production in favour of low-volume production, acting locally while thinking globally.

Therefore, the Long Tail phenomenon causes the designer efforts to shift as well, towards creating uniqueness and experimenting various goals and approaches.

We assist to different Design approaches to this phenomenon: a) on one hand there is the tendency to substitute the Design Skill with new ones (i.e. Makers); b) on the other, a faithful revival of traditional craft techniques and archetypes seems to reply to an environmental-cultural attitude which wants to bring Design back to a pre-industrial condition.

The paper reports an experimental project carried out at our Laboratory in order to investigate this phenomenon and imagine a possible evolution of the Design Skill.

According to our interpretation, creating authentically crafted unique artefacts in a digitally literate age requires the use of state-of-art tools both on the physical level (digital fabrication) and, even more importantly, on the intellectual level: from computationally tailor-made objects to algorithmically generated ornaments.

## Future space

Chairperson: Ana Souto, School of Architecture, Design and the Built Environment, NTU

### 1. The urban public space and design as tools to promote social interaction

Authors: Mia Modak Guevara, Universidad Nacional Autonoma de Mexico (UNAM), Mexico

#### Abstract

We live in a rapidly changing world, where the way we live, work and interact in the cities and with each other is constantly transforming.

Through need-finding, and understanding of the community requirements that depends of the context, designers and managers could decide pertinent strategies and develop future scenarios for creating new stories. Is not just about designing spaces, is about creating stories, designing services and experiences that happen in the space and reinforce social interactions and relationships.

Is in the public space where relations and encounters happen spontaneously.

The scope of work suggests a new approach to identify, design and develop more efficient places, in terms of cost and social benefits, through a systemic perspective, focused in the emotional process of interaction in order to find the meeting point between the system components.

This research raises open possibilities for designing spaces through understanding and studying interactions from a human centred perspective and promoting social innovation.

By understanding the community needs and involving it in the design process, this model proposes new ways to construct citizenship that could generate more interaction, social innovation and quality of life.

### 2. Empowerment started with a mug of herbal tea - Oi!, A case of art integration in communities in Hong Kong.

Author: Pik Yu Chan, Tsinghua Academy of Art and Design, China

#### Abstract

“Oi!” is a surprisingly successful experiment and historic building re-activate project. Oi! is an art space located in a grade II historic building in North Point, a region on Hong Kong Island. The transformation of this colonial building from a former clubhouse of the Royal Hong Kong Yacht Club, to an art space which is a platform and contact point for different communities, demonstrated how the respect of tradition, culture and the involvement of art communities can create a strong bonding of different parties and communities. Through sharing, collaboration and empowerment, Oi! has successfully attracted different art communities to curate exhibitions and events in this art space, and also successfully attracted different publics to participate in different levels. These efforts have changed the public’s concept and value towards art.

### 3. Rephotographing Place Together: Japan and the Challenger expedition

Author: Gary McLeod, London College of Communication, University of the Arts London, UK

#### Abstract

Locating the vantage point in historical photographs and making contemporary images of the same views, “rephotography” is a range of photographic practices that asks viewers to consider their relationship to time and change (Klett et al 2006). Inviting viewers to participate in an act of rephotography, the method also provides a platform for the discovery of alternative viewpoints and understandings. This paper draws upon a practice-led inquiry into photographs of Japan made during the Challenger expedition, a 19th century voyage to further knowledge of the world’s oceans. Having made rephotographs of the locations in 2006, the experience initiated a methodological shift in the author’s practice away from straight photography and toward gathering and compositing photographic fragments. Viewed within an accumulation of misrepresented knowledge (Latour 1988), both the original photographs and those rephotographs were considered to have omitted local voices from production. Therefore, returning to the same locations in 2015, contemporary residents were invited to rephotograph and collectively document the locations, and make collages in response to the experience. This paper discusses their collages within the context of rendering local voices explicit and proposes that rephotographing with participants activates a place in the past through creative engagement with the present.

### 4. Impact of Future Space from a Masters’ Student Experience

Authors: Lydia Awad and Thomas Garvey, Carleton University School of Industrial Design, Canada

#### Abstract

A transdisciplinary approach that combines architecture and industrial design into a new hybrid profession can help solve problems of tomorrow’s changing world. Living in urban city centre allows residents to be inclusive within society and in close proximity to their daily needs and activities. Urban cities are dense and culturally conceptualized to be crowded. For a creative production in expansion for future space in an urban city, an innovative approach must be applied, transforming a cube into a living space for individuals and cohabiting residents. A design transformation has been explored to situate the cubes on top of existing buildings, creating an expansion within the city. Integrating different disciplines; design and technology, three main technical features were explored; folding, sliding and rotating. Roof articulations generate a direct relationship between the indoor and outdoor environments. This direct link enhances the future space visually and decreases crowdedness. Adapting such a user centred design approach improves the quality of life and inclusiveness within society. Ensuring that the future space produced meets the users’ needs. This design approach creates an opportunity for future design research and education, ensuring a lasting impact is formed.