

## Academic and professional parallel sessions

To be presented on Friday 29 April from 9.00 am – 16.00 pm

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

### Negotiating Artefacts

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

#### 1. Bloody Sunday's Bloody Flag

Author: Catherine Harper, University of Portsmouth, UK

##### Abstract

On 30 January 1972, British soldiers shot dead 13 unarmed civilians (another dying of wounds weeks later) during a Civil Rights Association march in Derry.

17-years old Jackie Duddy was the first fatality, shot in the back while fleeing. Father Edward Daly was running beside him, and used his handkerchief as a 'truce flag' to allow removal of the corpse as shooting continued.

In that place, in "unjustified and unjustifiable" circumstances [David Cameron, 2010], a humble hankie became an historical, locational, cultural and political artefact, preserved in the iconic, much reproduced, photographic image, and protected in Duddy's family home and subsequently in the Free Derry Museum's archives of Bloody Sunday.

That artefact embodies both personal tragedy and political transformation in the social imagination of Northern Ireland, a flag of humanity providing an alternative to those traditional flags marking sectarian affiliation or heraldic triumphalism.

When we accept that Ireland herself is a stained and bloodied cloth, marked irreversibly by history, conflict, denial and abuse, stained by repression and denial of all her people's rights and needs, bloodied by the haemorrhage of her people, then – with empathy, humility and heart – we just might make peace with our past.

#### 2. Wonder Design and the Exploration of Senses and Imagination

Authors: Rian Rezende, Sabrina Araújo and Denise Portinari, PUC-Rio - Pontifical Catholic University of Rio de Janeiro

##### Abstract

This article explores the relationship between design, imagination, senses, places and objects. It was based on Richard Holmes' theoretical concepts, particularly on the period designated "Age of Wonder", Robert Silverman and Thomas Hankins theories on "Instruments and the Imagination" about the parallel of imagination and the real world, the ideas of Juhani Pallasmaa on senses and architecture, and the Design Fiction theories of Stuart Candy. A conceptual survey of the correlation between imagination and the senses makes us wonder how objects/spaces present themselves to men and how men perceive them. Which senses rules this communication? We examine the relevance

of senses and imagination on the creation of artifacts and surroundings, in order to build a more intimate relationship between them. To explore this connection we developed the "Wonder Cards" card game focused on the development of ideas, objects and surroundings that stimulate senses and imagination. We are testing the game on Pontifical Catholic University of Rio de Janeiro and workshops to analyze and understand the use of these elements in design projects where emotion and wonder is the key factor.

### 3. Yes, And (+), Maybe: CloTHING(s) as Conversation

Authors: Helene Day Fraser, Keith Doyle, Nicolene Mckenzie, Mia Daniels and Natalie Tillen, Emily Carr University of Art + Design, Canada

#### Abstract

CloTHING(s) as Conversation is an interdisciplinary research initiative that seeks to disrupt contemporary expectations of clothing. Our work questions longstanding tendencies to characterize garments as forums for creating statements linked to who we wish to be, what we do, who we are, and where we feel we belong. We are exploring clothing as mechanisms that encompass notions of meaningful interchange and dialogue.

One of the key artefacts in our work is a plus(+) form template that we use to create clothing. The plus(+) has been manipulated into hundreds of garment forms. It is an idea artefact. It helps us to negotiate and construct active critical conversations concerning Design for Sustainability, Fashion, Distributed Manufacture and Wearable technology.

The plus(+) has been consistently reconfigured by draping and folding and by using fastener objects (found and made). It has been placed in the built and natural environment and observed along the West coast of North America, the Canadian Prairies, Paris France, Venice Italy. It has been made, worn and observed by numerous participants over extended periods of time. Embodied experiences, documentation of actions, conversations, and other residual designed artefacts are all acting to expand perspectives and generate new models pertaining to how clothing is designed, produced and used.

### 4. Presenting 'Lost But Not Forgotten' at the Crypt Gallery St. Pancras: Negotiating and Constructing Active Critical Conversation Concerning Contested Human Remains in Museums

Author: Jane Wildgoose, The Wildgoose Memorial Library, UK

#### Abstract

*Lost But Not Forgotten* is a commemorative wreath made from donated human hair using Victorian techniques for creating mourning artefacts. It memorializes the lives of people whose skulls were taken from the colonies for museums during the late nineteenth century - a historical moment described by Stephen Jay Gould as 'the heyday of craniology', which remains a significant factor in claims made by Indigenous peoples for return of ancestral remains from museum collections in the UK today. *Lost But Not Forgotten* was made as the focal point in the culminating exhibition of a practice-based doctoral research project conducted in the School of Art and Design History at Kingston University. This paper, which is presented in three parts, describes: the background, and rationale for the project; research and development of the *Lost But Not Forgotten* wreath as an artefact designed to facilitate active critical conversation concerning contested human remains in

museums; and the role played by the Crypt Gallery St. Pancras in the process of presenting this artefact and associated historical evidence to the public.

### 5. Cultural Identity and the Municipal Gallery: The Re-Imagining of Bradford's Collection as a Transcultural Representation of Identity at Cartwright Hall 1904-2014

Author: Jemma Browne, Nottingham Trent University, UK

#### Abstract

Museums have historically played an important role in the formation of cultural identities; they evolved in their current form in the late nineteenth century concurrent with the emergence of the bourgeois public sphere (Bennett, 1995).

As cities have been spatially transformed through time by the layering of new and existing expressions of cultural identity, galleries and museums have struggled to retain their meaning as representational spaces. The municipal gallery at Cartwright Hall in Bradford presents a timely case study demonstrating how it ensured that its collection evolved to reflect the changing communities in the city and how, by re-imagining the idea of heritage, it has created a transcultural representation of identity.

## Innovation

Chairperson: Professor Anthony Kent, School of Art & Design, NTU

### 1. Work on the Move

Authors: Richard Firth, Edinburgh Napier University, UK; Michael Taks and Peter Van De Graaf, School of Engineering & Design, Windesheim, Zwolle, Netherlands; Trent Jennings and Ruth Cochrane, Edinburgh Napier University, UK

#### Abstract

'Work on the move' is a design, process-driven methodology, which uses multiple locations within an outdoors setting and movement between locations, all of which function as learning places, confined to a specified time period.

Between 2012 and 2015, a team of international Higher Education product design educators (all members of Carousel, a co-operation of Erasmus members in Zwolle, Edinburgh, Nantes, Rome, Kortrijk and Oslo), industry professionals and product design students developed and tested four case studies. Each case study was conducted in a different international location and was constructed with a different focus, to help define and refine a definitive working methodology.

'Work on the move' explores the influence of 'place' upon design, in terms of the impact it has on productivity and creative problem-solving, when working away from the traditional studio/office-based environment. It also explores the significance of shared place, when working directly with a client in situ, and experiencing the place-based influences upon their businesses. While identifying location as part of the design process, the study also seeks to understand the effects of time restriction and working in transit upon creativity and productivity, within the context of specific projects.

## 2. As a future working place : co-working places

Authors: Füsün Curaoğlu and Duysal Tütüncü, Anadolu Üniversitesi, Turkey

### Abstract

Twenty-first century is an important breaking point for the planning of human history and the future. Social and scientific innovations' taking place in everyday life profoundly affect our community, social, cultural and economic relations and is also changing existing systems. From individual relations to relations between institutions many systems are exposed to structural changes. This exchange converts systems from horizontal to vertical configurations. Therewithal from this exchange, all the means of production and activities along with their places, all everyday life relationships are profoundly affected. This system defined as "social flattening" by Friedman, lead us questioning new spatial relations in short and medium term future. Especially the new production equipment forced working patterns, locations and spatial relationships to transformation and change. Due to evolution of individual working styles to a more collective form of work, Co-working places has begun to take place in our daily lives as new spaces of work and production. In this study, results of an international study conducted in Germany, Turkey, Austria at co working places where interpersonal and intercultural futuristic production forms together with social relations and creative productions will be shared. This research mainly focuses on co-working places and relations of users through these places.

## 3. Suburban Safari: Co-designing a Cultural Network for Sutton

Author: Nicola Ryan, University of the Arts, London, UK

### Abstract

It is predicted that London's population will increase by approximately 1.5 million in 15 years. As property prices rise and more relaxed planning laws make the British capital city accessible only to developers, wealthy home owners and tourists, it is the less densely populated periphery or suburbs that will provide the location for these new Londoners. The rich potential of Outer London as a site on which to build affordable housing runs in parallel with a prevailing view of suburbia as dormitory commuter habitation lacking in cultural and entrepreneurial vibrancy.

This paper considers the challenges of the suburban place in generating creativity, ideas and design and its value as site of learning. A co-design project between London College of Communication MA Design Management and Cultures students and the local charity Arts Network Sutton (ANS) serves as a case study through which to analyse key challenges, issues and possible solutions. The Double Diamond research process developed by the Design Council is used by students to work in collaboration with relevant stakeholders. The aim is to re-envision the charity as a vibrant cultural network and promote the suburbs as the next creative frontier.

## 4. End-user development: e-textiles and the wearable IoT

Author: Sarah Kettle, Nottingham Trent University, UK

### Abstract

The textile industry is at the centre of innovation in enabling technologies for technical and electronic textiles. However, many specialist and family run companies are investing in speculative research, and producing high visibility creative projects, without knowing how to define or create consumer demand for 'smart' textile products. This paper proposes that such approaches to design research and development are frustrating because the definition of 'multidisciplinary' remains too narrow. A simplified framework of three approaches is used to demonstrate that in such cases, innovation

methodologies are not being matched to the new complex design space of connected textile products, including wearables. A case study is discussed, in which an end-user centred innovation approach for textiles as part of the Internet of Things is developed. The structure of the multidisciplinary team, processes of participatory entanglement, and complexities of the digital health design space are described. The importance of relational making, and questions of data collection and analysis are raised, before the paper concludes with a proposition for new product-service design models based on opportunity rather than need.

### 5. **Savoir Faire and Innovation: Place-based design heritage in undergraduate education**

Authors: Carol Overby, Parsons Paris, France; Elisabetta Cianfanelli, DIDA University of Florence, Italy and Gabriele Goretti, DIDA- University of Florence, Italy

#### Abstract

At two European universities, undergraduate design students gain a complex understanding of design processes as a reflection of place as they study the ways that companies' operations and identity reflect the community's culture, people and heritage. Through collaboration, students experience centuries-old arts, skills, and design processes, while the companies' traditional Savoir faire (it. Saper fare: "knowing how to do things") benefits from students' innovations in manufacturing and marketing; this sustains the design businesses and their design heritage.

In Florence, students in a Product Design course collaborate in Joint Labs with advanced craftsmanship manufacturers in Tuscany production districts, experiencing and promoting connections between historical artisanal practices and innovative processes. Similarly, design students in Paris work with culturally significant "heritage" companies to bring them innovative marketing and branding insights.

International markets are becoming more attuned to the context of products' origin (Morace 2003), giving the "vocation" of a place greater significance and highlighting the place-specific processes that imbue the object's design. Collaborations with design students enable culturally significant companies to innovate in improving and promoting their place-based aspects, and sustaining their heritage.

### 6. **Social Innovation Design on Local Cultural Heritage of Ya'an Grit Utensils Welfare, Brand Business Model Innovation and Design Practice**

Authors: Jun Zhang, Yuan Cao and Tie Ji, Hunan University, China

#### Abstract

With 'MG V Tao' post-disaster reconstruction social Innovation as an example, this paper explores the 'MG V Tao' black grit brand industry situation, existing problems, development trend and proposes solutions through design thinking, with identifying local problems as the primary task and cultural heritage as the core, carry out innovative design and brand design strategy of commercial operations based on Online to Offline local distinctive resources. And combined with project practice, it discusses the business model innovation of non-profit brands based on emotional design. Then business model is built based on target users and market research and product iteration is achieved through the

cooperation between design workshops of several schools and local enterprises, thereby establishing a new business model to promote the sustainable local economic development.

## 7. Towards a Common Space for Research in Fashion

Authors: Marco Mossinkoff, Utrecht University of the Arts, Netherlands and Anthony Kent, Nottingham Trent University, UK

### Abstract

This paper aims to identify the characteristics of a future fashion space for research. Not so much future as an imminent space where conversations between various scholars and disciplines focusing on fashion can not only understand each other, but also come to new research ideas and projects. The binary distinctions between creative and non-creative have found their way into academic thinking: left and right brain, visual and textile reporting, quantitative and qualitative; these tend to stereotype research approaches. However, the future spaces of fashion must demolish this worldview to account for the convergence of, among others, the digital and physical environments, or eastern and western perspectives. Within the converged space, access, process and content form the essential elements. The content will increasingly be drawn from existing and new disciplines and sub-disciplines. The processes will be driven by methodologies and particularly the critical development of methodologies from other disciplines. It is in this last realm that we aim at contributing.

To follow up on Lipovetsky's democratising power of fashion, in the future fashion space there are no borders. Instead we propose a framework for methodological pluralism which foregrounds triangulation and hermeneutics.

## 8. In-situ 3D Printed Souvenirs and their effect on Visitors' Engagement with Built Heritage

Authors: Samantha Forster and Constantia Anastasiadou, Edinburgh Napier University, UK

### Abstract

In this study, visitors' perception and engagement with built heritage surroundings was investigated in relation to their interaction with 3d printed souvenirs which reflected architectural features of the site. A 3D printer was set up in Stirling Castle, Stirling, UK in collaboration with Historic Scotland. The visitors' were given the opportunity to interact with the 3D printing process in action and personalise their item. Short structured interviews and researcher observations recorded the visitors' impressions of the process and souvenirs. The participants expressed how their interaction with the souvenir artefacts enhanced their view of their surroundings. This paper concludes by exploring how participative making technologies and innovative souvenir objects, within heritage environments, can be used to enhance the authenticity of the visitors' experience of place.

## Future craft

Chairperson: Professor Tom Fisher, School of Art & Design, NTU

### 1. Digitally making as an opportunity for skilling and empowerment

Authors: Giuseppe Salvia, Carmen Bruno and Marita Canina, Politecnico di Milano, Italy

### Abstract

The current trend of digitally enabled self-production (i.e. digital DIY) is emblematic of the



contemporary attitude to making and crafting. Although digital DIY has been seen as an opportunity for social and technological innovation, a major debate is taking place in research literature about its potential skilling or deskilling effect on practitioners.

For instance, on the one hand, focusing on the digital representation undermines the ability to experience materials qualities and manufacturability. The ultimate effect is the development of a creative process, which is led by a virtual idea disconnected from the material world. On the other hand, the machine itself is a manifestation of knowledge, skills and labour involved in its design, manufacture and maintenance.

The objective of this paper is to further unpack this debate and presenting our reflections from an ongoing research project on the potential of digital DIY as a skilling process through making collaboratively. We introduce a research model representing the dynamics enacting over three interdependent levels (i.e. social innovation, social practice and creative process) in which three factors of technology (e.g. digital fabrication), motivation (e.g. commitment) and collaboration (e.g. with peers) are envisaged as crucial for learning and skilling.

## 2. Maker Movement -creating knowledge through basic intention.

Authors: Tomi Dufva, Aalto-University, the School of Arts, Design and Architecture, Finland

### Abstract:

This article focuses on the knowledge making process in the maker movement following Finnish craft professor Kojonkoski-Rännäli's account of making by hand. Basing her theory on Martin Heidegger's philosophical analysis, Kojonkoski-Rännäli sees making by hand as an essential way of existing in the world. Making by hand is a bodily experience where knowledge is acquired by doing, by grasping and making, but it also requires knowledge of the material, process, etc. When immediate grasping-being in the world happens together with comprehension acquired through practice and intellectual knowledge, Kojonkoski-Rännäli calls the act of making a basic intention. This basic intention is crucial in making as it creates profound knowledge of the subject and also involvement and responsibility of the created object. Kojonkoski-Rännäli separates basic intention from instrumental intention, where the process of doing does not generate deep knowledge nor responsibility. Kojonkoski-Rännäli describes industrial processes, including also digital fabrication, through instrumental intention.

In this paper, I describe Kojonkoski-Rännäli's philosophy of doing by hand and then examine if and how maker movement brings basic intention into digital fabrication and why this is important.

## 3. Codesigning and Sustainable practices in fashion teaching

Author: Desamparados Pardo Cuenca and Patrik Baldan Escola d' Art i Superior de Disseny of Valencia, Spain

### Abstract

The issue of sustainability is presented today as one of the main challenges facing modern society.

Educators and fashion designers have the opportunity to adopt a paradigm of humanized thinking, that gets away from the classical structures of fast fashion and which can guide them towards a new concept of ethical and sustainable fashion.

From this approach it is possible to work on criteria of design, manufacture and consumption; but also to reactivate the longevity of the garments, enhancing the user experience and the unfashionable

character of the product. Our research is based on the concept of slow fashion and application of co-design methods, to encourage the development of sustainable practices in fashion design education, and which involve the process of design and product development, designers, researchers, craftspeople and several different social groups.

The qualitative methodological approach was tackled from the practice of participatory design, where workshops, hacking tactics, employing clothing decoding techniques, and design strategies were based on optimization criteria by the garments.

The sample included 30 participants divided into 5 groups, whose members adopted different roles and actions within the groups.

Several data collection instruments that measured levels of awareness and sustainable positive impacts on the workshops participants were also used.

#### 4. There is far too little handicraft going on at the University

Author: Lena Hakanson, Linnaeus University, Sweden

##### Abstract

Design educations have transformed and changed significantly in the last decades. While, visual expression and craft based workshops used to occupy a big part of the students' time, nowadays many subject matters compete about time in the curriculum. There is little time for reflection, playfulness or free experimentation. For students this development can be stressful and demanding. I do not believe this is optimal for someone trying to be creative.

From my experience, handicraft (or Swedish 'pysse') is often ridiculed in the 'serious' design discourse. However, it is my hypothesis that this very activity can play a vital role in fostering strong designers. Handicraft can bridge the gap between the effective, purposeful work for fast result and the more practical, analogue and thoughtful part craft can play by letting student's try practical work in a playful 'handicrafty' way.

This paper presents findings from my ongoing research exploring the possibility and potential of handicraft in a design context. The research is conducted through creative workshops and seminars with bachelor and masters students in the Department of design, Linnaeus University, Sweden.

#### 5. Connecting with local resource flows: flax fibre composites

Author: Faith Kane, Loughborough Univeristy, UK

##### Abstract

The agricultural basis of many fibres means that textile and fibre-based materials and products are intimately connected, ecologically and culturally, with specific places; products that employ natural fibres often have a distinctiveness associated with their provenance. A concern in this area is the negative impact that the overuse of certain fibres, such as cotton, can have on the places in which they are cultivated. One approach to mitigating overuse is to engage in diversification of resources. Efforts have been made within industry to explore alternatives to cotton, such as flax.

The paper presents a practice-led project that creatively explored the use of flax fibres, cultivated locally in the Midlands UK, towards new material concepts. The aim was to encourage links between designers and fibre manufacturers, fostering a deeper connection with local resource flows. The



project drew on craft-practice and materials science to develop composite materials that have both functional capability and an aesthetic connection with place. Motifs associated with textile manufacturing that is historically connected with the region, such as Nottinghamshire lace, were appropriated within the materials. The paper provides technical and theoretical background; gives an overview of methodology; and presents several new materials resulting from the work.

## 6. The Potential of Rural Crafts in Promoting Community Empowerment through Participatory Design Intervention -A Case Study of a Project concerning Huayao Ethnic Minority Community

Authors: Professor Baosheng Wang, Professor Tie Ji and Yuanyuan Yang, School of Design, Hunan University, China

### Abstract

Finding solutions to the social issues in rural communities has aroused strong academic interest of varied disciplines, including the design field. This paper seeks to explore the potential of rural crafts in promoting community empowerment through participatory design intervention based on a case study of a project concerning Huayao Ethnic Minority community in China. Firstly, the research background was explained including the relevant theories of the prestigious scholars in both western countries and East Asia, and the research methodology. Then, the knowledge of local assets was gained mainly through field survey. Next, the technique tiaohua, one type of local cross-stitching, was chosen for participatory design experiment. The participatory design process based on the technique of tiaohua is a reiterative cycle and each cycle includes five stages: Knowledge Acquisition, Concept Generation, Preliminary Prototyping, Motif Design and Final Prototyping. The authors went further to explain the co-design process through an analysis of the design works. Finally, the authors summarized the paradigm of utilizing rural crafts for promoting community empowerment through participatory design intervention. Moreover, the limitations of this paper were pointed out and future research plans were proposed.

## 7. Personal Imagination and Collective Identification: Chinese Implication of Handmade Design

Authors: Yanzu Li, Tsinghua University, China and Li Zhang, Beijing Information Science & Technology University, China

### Abstract

'Handmade' is one of the most salient concepts in contemporary China. This article will distinguish the philosophical implications of three ideas—handmade, handiwork, and handicrafts—and will discuss four key issues in handmade design: how to 1) deconstruct the raw materials and manufacturing process of traditional crafts and reconstruct it into the innovated product design 2) transform 'handmade' to 'design', and 3) explain the representation of global and national meanings of handmade design. This paper argues that handmade design in contemporary China has at least twofold implication by methods of case study and personal reflectively observation: handmade activity is practiced as a private religious belief, and portrays one's imagination of future lifestyles; and handmade things are a contemporary and cultural tag of Chinese national identity. I will argue these conclusions based on historical experience and today's handmade design cases, and

will pursue a further inquiry: Is the current passion for handmade only a fad, or is it a hint of a forthcoming revival of Chinese design?

#### 8. Circular interdependency: a mindful design investigation into a natural living system.

Author: Gerbrand van Melle, AUT University, New Zealand

##### Abstract

This research asks 'To what extent can autonomy, circularity and self-reference inform design methods and direct interdependent design outcomes?' At the centre of the inquiry is a colony of domesticated bees and the manner in which design practice might operate as an enhancer of digital, material, and methodological potential to obtain a better understanding of systems in which the outcome is unpredictable. Here the act of design is a circular interdependent investigation into a continuously changing environment. The design process inquires into the incorporation of both artificial and natural methods of object creation.

Audio recordings from inside a beehive were translated into 3D shapes. Based on geometric hexagonal tessellation and triggered by the frequency of the bee wings' movement, a digital honeycomb cell moved in rotational symmetry. These shapes were 3D printed in beeswax. The objects were placed back into the hive to allow the living organism to respond and create the final artefacts. Here growing processes intersected with making processes.

The aim is to work in nature, and to work with nature, and by learning from natural living systems to also make as nature. A possible future resilient design future might not just be biomimetic, it could turn neobiological.

#### 9. The Role of Craft in Creative Innovation: Skin, cloth and metal

Authors: Dr Katherine Townsend, Nottingham Trent University and Dr Kristina Niedderer, University of Wolverhampton, UK

##### Abstract

This paper explores the central idea of creative innovation in the crafts through research methodologies informed by experiential knowledge of fashion, textiles and jewellery practices. The relationship between the body, materials and technology is reinforced through discussion of aspects of two projects, *Crafting Anatomies* (Townsend et al 2015) and *Flex-It* (Dean and Niedderer 2014) which the authors were involved in and which draw on references to advanced, modern and historical crafting contexts. The paper seeks to demonstrate how craft, and research through craft, can facilitate creative innovation by mediating the recursive interaction between analogue and digital techniques (Adamson 2015).

In *Crafting Anatomies*, skin as material and clothing, is the starting point from which to craft new biological, surgical and wearable outcomes, informed by fashion and textile approaches. *Flex-It* explores elasticity as a medium for emotional expression in silver jewellery design and production, and how complex pieces devised using established techniques to incorporate moving parts, can be produced using additive manufacturing.

The examples demonstrate how craft continually reinvents itself, by contributing to its own development while benefitting the wider areas of human experience and existence.

## Future space

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

### 1. Design - for and with the others?

Author: Michael Krohn, Zurich University of the Arts, Switzerland

#### Abstract

This contribution debates, as an outcome of several Master Thesis Works conducted by graduate students and research groups at the Zurich University of the Arts, the relevance and the value of “Social Design” for the design discipline as well as for the design education on a higher level.

Undoubtedly the global stream of humans, cultures and habits sends signals for the design of objects, services and spaces. May it be for underserved, refugees or immigrants; one expects the consideration of design for the specific needs and challenges of the concerned humans.

The intercultural dialogue and the global fragmentation shape the future working environment for designers. How to deal with multicultural affordances and non-linear developments in the society? How to implement multicultural perception on objects and spaces? This contribution enables an unfamiliar and controversial view on the role of design in the intercultural and interdisciplinary field of social interactions.

It presents methods and arguments, how designers are able to implement a multi-perspective view on their own work. These methods are results from research and practice. They define a strategy for the design impact on social issues. Design can act as a catalyst for social change: this should be underlined with this article.

### 2. Urban Social Initiatives and Co-Creation

Authors: Birgitte Geert Jensen and Jorgen Rasmussen, Aarhus School of Architecture, Denmark

#### Abstract

As part of the 2014 fall semester study programme, Studio Design and Social Innovation, from Aarhus School of Architecture, collaborated with DemokraCity on a community initiative project to revitalize TILST, a town located on the outskirts of Aarhus, Denmark.

Democracy focuses on urban social initiatives and co-creation design projects that encourage citizens' community involvement, commitment, and collaboration.

Initiated by the Aarhus City Council, “NEW ANGLES ON TILST” aims at involving residents and local stakeholders directly in the development and planning of the neighbourhoods in close interaction with municipal staff and architects.

Located approximately 10 km west of Aarhus, Tilst is a suburban area with large city blocks and traditional residential areas. The area has an unofficial reputation as a dormitory town and is known to have problems with misdemeanour crimes and vandalism due to social class segregation.

This paper will describe how interventions in Tilst, in collaboration with local residents, help devise social initiatives that aim at improving the local community identity. The project is concerned with examining the potentials of a place, and with initiating a new use and story for the site, thereby building a new identity and creating value for the area.

### 3. Design the Campus: Introducing a Toolkit for Developing Creative Learning Spaces

Authors: Katja Thoring, Pieter Desmet and Petra Badke-Schaub Delft University of Technology, Germany; Roland M. Mueller Berlin School of Economics and La, Germany

#### Abstract

Design education involves various teaching, learning, and designing activities, such as idea generation, writing, sketching, computer-work, planning, lecturing and listening to presentations, team work, discussions, model making, and prototyping. All these activities require particular environments. The question how these activities could be facilitated through the physical environment of the design educational institutions gained a lot of interest, recently. Designing such creative learning spaces in a way that triggers the best possible creative performance of the students, is relevant for both, design educators and students who want to improve their individual classrooms, and architects or interior architects who are planning entire design schools.

This paper presents a toolkit that can be used to facilitate design decisions in spatial design processes of creative learning environments. It consists of three card-sets: 1) a card-set with inspirational examples from other institutions, 2) a card-set to phrase the problem space, and 3) a card-set to sketch design solutions. The underlying principles of this toolkit were developed based on a) a qualitative research approach using cultural probes among design students of two different institutions, and b) expert interviews with design educators and architects.

### 4. Cultural Diversity – a strong didactic design tool?

Authors: Mette Mikkelsen and Maria Kirk Mikkelsen, Designskolen Kolding, Denmark

#### Abstract

Understanding the design process and the methodological approach is part of the basic training for students at Design School Kolding. We use the 5C Model/The DSKD Method Cards (Friis and Gelting 2011) as a tool to implement this training. The model divides design methods into four different categories:

- How to create knowledge about what is (1) by experience or (2) by thinking
- How to create knowledge about what might be (3) by experience or (4) by thinking

In September 2015 a group of undergraduates and teachers teamed up with Brazilian students and professors in Sao Paulo to execute a course about the use of design methods in problem solving.

During the design course cultural diversity appeared on two levels:

- In the students' projects when doing user research, as well as in the collaboration between Danish and Brazilian students.
- On a didactic level when dealing with situations that are unknown.

Based on the above case study this paper discusses the use of cultural diversity in a design process from a design theoretical and a didactic perspective.

## 5. Design Thinking to Co-Create a Shared Future

Author: Ramneek Majithia, Pearl Academy, India

### Abstract

'Around the world designers are creating better communities by working with citizen groups to improve the human experience and empower the youth. 'INDIAFRICA is a unique people to people initiative that aims at engaging the youth in intercultural dialogue across geographical boundaries to build a shared vision for the future.

This paper presents the experience of conducting a set of five 'Design Thinking' workshops at various locations in and around Johannesburg under the 'Indiafrica' Initiative. These workshops were conducted at locations panning from townships with community centers offering different courses to unemployed school leavers, youth center rehabilitating gangster community with digital media courses, to students pursuing higher education in management and leadership courses.

This paper further shares how during these workshops simple idea of making tea established a common understanding to address complex issues and inspire positive action. It also brought the new knowledge of expanding international networks in creating multiple outcomes that can impact across boundaries. Through these meaningful interactions/ collaborations, and a true participation of motivated youth from low-income group across countries, we can make a difference and can positively design solutions towards co-creating a beautiful future.

## 6. Architectural Prefabrication Pavilions as a Site for Cultural Diversity

Author: Annabel Pretty, Unitec Institute of Technology, New Zealand

### Abstract

This paper looks at the re-activation of public spaces using large scale artefacts, within the greater Auckland region. Twelve large scale projects incorporating a culturally diverse range of second year Architecture students' projects in two vastly different locations within the urban city boundaries: Glow@Artweek Auckland.

Silo Park is the centre for urban regeneration within a former oil refinery, covered in an impermeable membrane to prevent oil contamination, and Devonport Windsor Park, an Edwardian residential area.

120 BAS students initially grouped in 37 groups, pitched their ideas for invigorating the two sites to a diverse range of people, such as City Councillors, Architect's, Artweek Auckland, Devonport Business, and Pānuku Development Auckland. The resultant pitch sees the groups merge ideas, cultural context, language and design methodologies, into twelve diverse light sculptures.

This paper would critique three projects; A Pacific Island group bases their concept around the famous Swiss book *The Rainbow Fish* renaming their project RainGlow Fish, using CD's as scales: a predominantly Bangladeshi group calls themselves Al- Noor, from Arabic light, and a group of Shengyang, PRC students on a joint Architecture programme, becomes the lead group for a field of fireflies, *Be the fireflies* after only being in the country for two weeks.

## 7. The Never Ending Project into Future Design Spaces

Authors: Dolly Daou, Swinburne University of Technology, Australia, Eduardo Lytton and Jane Smith, School of Visual Arts, USA, Gérard Vallin, Jean Le Lay, Pelayo Bustillo Macias and Pierre-Yvon Carnoy, ESAG-Penninghen, France

### Abstract

The Never Ending Project is an international collaboration between ESAG Penninghen, Paris, Swinburne University of Technology, Melbourne, and the School of Visual Arts Interior Design (SVAID), New York. The project was initiated in Paris, June 2014. The 2015 brief invited interior design/architecture students from the three universities to design a drone docking and control station. This paper will explore how this project offered an insight on innovative future spaces for design education and practice through the: creativity of the brief, dynamic teamwork of the international collaborators, and using various technologies to effectively communicate and transfer design ideas between continents. The difference in time zones between Melbourne, Paris and New York allowed the students to work on the project twenty-four hours a day from the 14th-20th of September 2015. The design travelled sequentially from Melbourne to Paris, then New York and the process continued the following day for six days. Every time the design reached a new destination it was adapted according to each of the university's site restrictions, respecting the differences in the design cultural identities. Innovative educational and technological practices sustained this design process and successfully expanded this six-day intensive design studio beyond the physical walls of traditional design spaces and practices to offer a glimpse of future design environments.

## 8. Social intersections. Social media spaces as sites for creative pedagogies

Author: Eve Stirling, Sheffield Hallam University, UK

### Abstract

Social media is pervasive in the lives of both students studying and those working in the creative industries. The mass socialisation of digital and online communications has meant that content is authored, curated, critiqued and reconfigured by a mass of users. Through the collective efforts of the users – posting, liking, commenting and sharing – connection and collaboration takes place.

This paper focuses on the hyper-layered nature of social media use by students studying on Design courses at a university in the UK. It explores data across Instagram, Pinterest, What's app, Snapchat and Facebook as sites of creative productions. Visual analysis of students' social media profiles is presented and compared with those from the creative industries to explore the social intersections of creative production spaces.

Social media spaces are sites of creative production, where the two ecosocial systems of trainee and trained converge. The relationship between the trainee designers studying in a university and the trained designers in the external industry is changing. There is a context collapse between creative learning, production and working practices. Present digital spaces that connect students and creative industries through their hyperlinked eco-social environments and explore what this could offer as a creative pedagogic approach.



## 9. Design Fiction: A Countermeasure For Technology Surprise

Author: E. Scott Denison, I The Ohio State University, USA

### Abstract

What is the future of design? Design practice, research and thinking have advanced to impact an interdisciplinary array of new and complex problems. Concurrently, design is converging with technology, and artificial intelligence could soon confront challenges formerly the domain of humanity. How will these shifts affect not only design but also society and culture? Design is inseparable from culture. Prown (1993, p. 1) asserts that we can study material culture. "[...] that human-made objects reflect [...] the beliefs of the larger society to which these individuals belonged." And Bell (1976, p. xv) describes culture, "[...] as an effort to provide a coherent set of answers to the existential predicaments that confront all human beings in the passage of their lives". If culture strains to provide answers to our existential questions, and design exert influence on that culture, do designers grasp their roles as contributors to culture, society, and behaviour? If we can gain some insight from our material past, can we also gain insights from the future? Design fiction asserts that we can approach future artefacts and speculations to study the possible ramifications from decisions made in the present. This paper proposes that the use of future scenarios and methodologies such as design fiction should become part of design education to address these needs.

## Sustainability

Chairperson: Professor Venu Dhupa, Director, VSDB Consultancy

### 1. Sustainability, overcoming the disconnect

Author: Thomas Rumage, Ringling College of Art and Design, USA

### Abstract

If Sustainability is such a good idea and noble goal, why aren't we doing it? The primary reason is that most of us do not have a context for being either sustainable or unsustainable. We have a mental image of how the world works, but we do not see/recognize any immediate, or future, harm directly caused by our lifestyle. And therein lies the disconnect. While there is no inherent desire to be unsustainable, the cumulative, collective and continuous impact of our actions and activities generates the harm. Our actions demonstrate that we do not actually believe that all things are connected. Functionally, we are a goal directed species on a process oriented planet and our operational preference is for linear and disconnected procedures on a planet dependent upon cyclical interconnectedness.

Ultimately achieving sustainability is about changing personal and social consciousness. It is about shifting from thinking in silos to systems thinking. That is why the potential for becoming sustainable lies in art and design as those fields provide us with the means and capabilities to see, think and feel differently as well as act in a manner that provides us quality of life in the context of 1 planet living.

## 2. The Square Mile Project

Authors: Yvette Vaughan-Jones, Visiting Arts, UK

### Abstract

Square Mile took as its starting point the idea that people when connected with their immediate environs will look, learn and care about how that place is designed governed and maintained. The project invited local artists to work with environmental scientists to map their square mile through arts – film dance, photography etc. An international artist in residence then came and, using the material generated by the local people, created an artistic intervention to sit alongside the work and uploaded this onto the internet. The project was carried out in 6 cities internationally and 6 cities in the UK.

We took the view that an artist's response to the environment is fourfold - firstly as commentator, raising awareness and debate about the issues through art; secondly as facilitator working with people to investigate issues through art and to posit solutions; thirdly by leading practice with innovative solutions and fourthly through providing the alternative to mass consumption and consumerism. The Square Mile creates the platform for artists to work in each of these four ways to create innovative, sustainable practices to enhance the sense of place. In This Place allows further investigation and analysis of this work.

## 3. Are We Ready? Visual Memory and Catastrophe

Authors: Jill Powell, Academy of Design Australia, Australia and Carlo Pagoda, Academy of Design Australia, Australia

### Abstract

This paper explores how visual artefacts might be used to ready densely populated cities threatened by catastrophic events in Australia.

The City of Melbourne recently became a member of the prestigious Rockefeller Foundation's 100 Resilient Cities Network. The Melbourne-based authors perceived disconnect between twin notions of readiness and resilience in their hometown where risk was perceived as low. They felt there was limited collective visual, auditory or tactile memory, or experience of catastrophic damage or loss of life on which to build robust resilience.

As designers and image-makers, they were interested in investigating if visual cues in the form of cultural artefacts could help build readiness and resilience in the city's four million people as a model for future sustainable social development.

Case study analysis was used to compare and contrast how developed and developing communities use artefacts to build resilience, especially when limited or no electronic communications is available. Findings suggested visual cues repeatedly reinforced through cultural artefacts have been successful in making some communities more ready and resilient than others.

In concluding, the authors discuss how artefacts might be used to build capacity and sustained long-term resilience among Melbourne urbanites in the face of natural and man-made catastrophes.

#### 4. Solar Gateway Horse

Author: Jo Fairfax, Jo Fairfax Studio, UK

##### Abstract

I am a visual artist interested in innovation and winner of many awards. My work has been seen nationally and internationally. This project shows a sustainable approach that creates an educational legacy.

I designed a gateway feature for the East Midlands. The site is an old grassed coal mine facing the M1. The locals was severely affected as a result. I proposed a solar panelled pit pony 220m wide with an LED perimeter changing colour with the wind.

The solar horse, connected to the National Grid, would create an annual fund used to maintain the artwork and local good causes like helping local colliery bands with their equipment, outfits and rehearsal spaces. The community which once benefited from the earth now benefited from the sun via an artwork on their site. Poetically and conceptually reconnecting the emotive heart of the community.

The project was shelved when the HS2's route was announced to go through the site.

The key principle is transferrable. A site specific response that is sustainable, educational and benefits a wide community creating a poetic and practical legacy.

I'd like to present the project with images and speak about the relevance of this connected and sustainable approach.

#### 5. Exploring the Social Functions of Public Art

Authors: Melanie Buffington, Virginia Commonwealth University, USA and Supriya Manandhar, Virginia Commonwealth University, Nepal

##### Abstract

This theoretical paper proposes a framework to assist in understanding the various ways that works of public art function in societies. Rather than a rigid typology, the objective is to construct a flexible framework that can assist in understanding the wide variety of public artworks and how they alter, shape, and enhance the public spaces where they are placed. By first describing the concept of public art and then finding ways to apply this description, we are hoping to use this conceptual framework to shape the development of future public spaces.

As the concept of a 'public' space is changing, it is crucial that we think about the democratic nature of public spaces and the role that art plays in these spaces. Further as we take the view espoused by Bailyn (1960) that education is the transmission of culture across generations, public art is a form of education. When groups erect works of public art in their communities, they are typically created with lasting materials to enable that group to project their ideas and beliefs to future citizens. Building a deeper understanding of public art and how it functions in societies can assist building sustainable communities.