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# **DESIGNING GLOBALISATION DESIGN**

## Ashley HALL<sup>1</sup> and Shuxin CHENG<sup>2</sup>

<sup>1</sup>Royal College of Art, London, UK <sup>2</sup>Central Academy of Fine Arts, Beijing, China

#### ABSTRACT

Designing globalisation design is interdisciplinary experimental design workshop collaboration between the Design Schools at the Royal College of Art in London and the Central Academy of Fine Arts in Beijing. The workshop developed from a joint desire by the co-authors to bring together insights and experiences from teaching cross-cultural design led innovation, design research from a series of publications on design and globalisation, and strategic commercial design consulting experiences for mass manufacturers. Globalisation is often considered to be a transnational issue that is distant from day-to-day design practices and although there is some awareness of the issues, these are rarely tackled and taught as specific methods in design schools. The aims of the workshop were to explore; if postgraduate design students could bridge the gap between the phenomenon of globalisation and their own design practice, bring to life new design concepts that illuminate the possibilities of socio-cultural impact from receiving and exporting globalised and localised designs that tackle globalisation issues, and to explore if different design approaches to global issues emerge from within or across different design disciplines and cultures. The workshop that took place in Beijing in the autumn of 2017 had 26 postgraduate participants who were engaged through lectures, tutorials and workshop activities. Through comparative analysis and case studies our results highlight different perspectives from design disciplines and illustrate the potential to engage students in tangible design outputs that connect globalisation concerns with design methods that can create products that tackle some of the opportunities and issues. We discovered a variety of approaches to tackling cultural influence with some embracing the opportunities of more ubiquitous mass-produced products while others focussed on localising solution or enhancing the ability of minority cultures to resist or exploit globalising technologies and markets. We believe this research makes a contribution to design education approaches for tackling globalisation and illustrates that design students can appreciate both the potential for design projects to have global impact and understand their agency in this context.

Keywords: Globalisation, design methods, interdisciplinary, cross-culture, design innovation

#### **1** INTRODUCTION

Designing is a global activity that affects nearly all human life on our planet and although industrial design education focuses on products and services, less attention is devoted to the impact both cultural and social that mass produced and locally made objects have when they are exported or imported into other geographies and cultures. The motivation for the experimental postgraduate design teaching collaboration between the Royal College of Art in London and the Central Academy of Fine Arts in Beijing aimed to develop an opportunity to explore the area of designing for globalisation.

Both institutions have strategic goals linking to the issues and opportunities of globalisation and graduate students who go on to make significant impacts in the world through creative influence. The Royal College of Art's School of Design has around 50 nationalities represented in the student body and in common with many universities recognises that it is graduating students who will go on to practice in a global context. Since 2006 it has been collaborating with universities around the world including Australia, Chile, China, Ghana, India, Israel-Palestine, Russia, South Africa and Thailand through its Go Global project [1] to develop cross cultural design educational collaborations, many of which have tackled themes related to the effects of globalisation. The RCA has also established the Global Innovation Design double master's programme that partners with institutions in Asia and the USA with the aim of training global design thinking and cross-cultural capability. The Central

Academy of Fine Arts (CAFA) has been executing a pilot experiment for the education reformation of design and art for the past three years. The School of Design dissolved the disciplinary barriers from traditional design majors including graphic design, fashion design, product design, vehicle design, and interaction design through systematically reframing the Big Design concept towards strategy design, technology design, thinking design, industry design and design theory. The importance of transdisciplinary places an essential role for the new system of both undergraduates and postgraduate education at CAFA. The teaching collaboration puts into practice earlier research by one of the authors on ubiquitous tendencies in global industrial design [2], how design is a core facilitator of creative destruction [3], and the risk of globalised design education in reducing creative variety [4]. It also brings experiences by the authors who have collaborated on commercial consulting projects for clients developing new strategies for globalised product designs. The overall aims were to:

- Develop teaching methods aimed at designing for globalisation
- Explore new disciplinary perspectives and methods for designing globalisation
- Investigate if students were able to engage with globalisation and make design decisions based on potential impacts of positive and negative consequences
- Explore the relationships that designers see in localised and globalised design strategies

The collaborative teaching workshop took place over 4 days in September 2017 at CAFA in Beijing with 26 postgraduate design students from more than 10 disciplines. The backgrounds of the participants included: product design, photography art, jewellery design, fashion design, graphic design, animation, art curating, state branding design, transportation design, visual communication, etc. The nationalities are mainly Chinese but also included visiting Japanese and American students.

#### 2 LITERATURE

Globalisation and cultural impact has increased interest in China following President Xi Jinping's call to celebrate the diversity of China's 56 ethic groups and for more confidence and autonomy for Chinese creativity and cultural product exports. Xi's report highlighted the responsibility and mission in supporting and promoting cultural innovation and creation aiming to accelerate China's cultural development through constant innovation. This was promoted as central for Chinese culture to continue to flourish [5]. China's Belt and Road policy aims to boost globalisation and national infrastructure projects are also impacting with major investment in roads, ports [6] and high-speed rail networks [7] bringing large numbers of people into new areas and allowing internal and international economic ("Going Global") and cultural exchange to accelerate at a much faster pace.

China's industrial production has huge global impact with 90.6% of the world's computers, 80% of air conditioners, and 80% of solar cells, 70.6% of mobile phones, 60% of world shoes and 45.1 % of world ships manufactured within the country [8]. However, it would be a mistake to image this is a recent development. Berg [9] cites the Dutch trading 1,000,000 pieces of Chinese porcelain at the end of the seventeenth century, and the Dutch East India Company imported 43,000,000 million pieces from the beginning of the seventeenth century to the end of the eighteenth century. English, French, Swedish and Danish Companies shipped another 30,000,000 pieces. The porcelain city of Jingdezhen in Jiangxi province in central-eastern China exported much of this produce and was rebuilt in the later seventeenth century. It was said to have a population of over a million people, eight hundred kilns and three to four thousand factories in one of the earliest examples of successful mass production. Moreover, it led to the creation of import substitution and Hobsbawm [10] claimed that this was a major factor in the British industrial revolution although Berg dismisses the scale of this claim [9]. Donald Norman commented on the contemporary issues of design's impact on globalisation thus:

'Once upon a time, when I visited other countries, I would head to the department stores so I could experience the wide cultural variations in such things as cookware, cutlery and tools for crafts and gardening. Today, I seldom do this anymore because all the stores look the same. Rice cookers and woks may have originated in Japan and China, but today they can be found in kitchen appliance stores all over the world. Italian, German and American appliances are for sale in Asia. Asian appliances are for sale in Italy, Germany and America. The country of design and manufacture no longer matters much.' [11]

Negative impacts of globalisation via designed products can include an ubiquitisation of products, cultural conformity and reduction of creative capacity that fuels creative destruction. While positive impacts can include a democratisation of technical capability, communications, business opportunities, access to information and cultural exchange [12] [13]. In the context of design education and industrial

design the authors have explored contemporary issues with cross cultural influence across geographies and socio-spatial groups, the ubiquitisation of products, the reduction of variety in global design education models and the lack of debate on design's globalisation influence [1] [2] [3] [12] [14] [15] [16] [17]. In addition, Brezing *et al* [18] identified issues with the application of western design educational models in China and the domination of western design methods comes in for strong criticism by Diethem in the decolonising design debate [19]. Novoa [20] describes the issues of educating homogenous student cohorts for global design practice, virtual and local design teams unable to empathise with each other, rapid technological change, the role of the university as a global educator and new means of communicating and manufacturing. He goes on to recommend the need for new paradigms to cope with these changes. It is clear then that design education has struggled to deal with the responsibility and impact of the globalisation of design practice and that attempts need to be made to bring new educational models into play.

## **3 STRUCTURING GLOBALISATION DESIGN**

The designing globalisation design workshop took place in four sessions with 2-3 days between each session allowing students to reflect on activities between each session. Our overall aim was to see which methods students adopted to tackle globalisation design. The first session introduced ideas of creative destruction, globalisation and culture and introduced a brief to bring an object to the next session to stimulate globalisation conversation. The second session introduced ideas of designing with culture and product aesthetics. Students were asked to use a printed map to begin deconstructing the globalised and localised attributes of the object they brought along with them (Fig.1).



Figure 1. Map for extracting globalisation and localisation product attributes

At the end of this session students were asked to use the insights they had gained to design or redesign a product/artefact that: localised a global design, globalised a local design, disrupt a design that they felt was behaving badly, comment or criticise a global-local aspect or celebrate a global-local aspect of the selected design. While briefing the students we presented examples of both the advantages and disadvantages of design in relation to its globalising and localising influences and left it for students to decide where their interests, motivations and ethics lay. We were unsure exactly how students would react to the workshop and how ideas of globalisation which can often seem abstract and more the concern of politicians and economists than practicing designers would engage. Another aspect focussed on how people would differentiate and relate to global-local influences derived from products, and if they could appreciate how these influence daily lives. The student group contained a diverse mix of design disciplines alongside industrial design and we aimed to uncover to what extent discussion and impact of globalisation featured in those areas. The workshop was bilingual in English and Mandarin demonstrating the global perspective of the topic itself.

## 4 DESIGNING GLOBALISATION DESIGN

All 26 students completed the workshop and presented design concepts with models, drawings and renderings to illustrate their ideas. The first session's mapping exercise introduced students to analysing and reflecting on the localised and globalised aspects which helped them to understand the workshop concept. We have selected a couple of examples to discuss the variety of design approaches to designing globalisation design. Shadow Puppet (Fig 2 left top) was chosen by student Chenyu Xu, who analysed the product from its traditional Chinese material, colour, manufacture technique,

movements, communication, value and economic benefits. Although in her mapping, there is some overlap between "local" and "global" perspectives, the analysis identified the translation of a Chinese local product into a global context. Casio watch (Fig 2 on the left bottom) was chosen by Xinmo Li, a student from product design. As a global brand it was designed in Japan and manufactured in Thailand. He summarised some of the benefits from this design within its local context and its global contribution.

From the final design outputs, we have selected a number of examples to discuss the variety of design approaches to designing globalisation design. Emotion Cola (Fig 2. left) designed by Yilin Wang, was an experimental design concept that removes the product - Coca-Cola - and instead replaces it with a branded emotional experience delivered at the press of a button. This both disrupted the brand and could potentially reduce the huge wastage of empty cans by replacing them with a can for life delivering a sustainability benefit. The design solution understood the heart of the consumer proposition as a physical-emotional hit. It asks some interesting questions around whether localised emotion brand hits could vary and whether the future globalisation of ubiquitous products may eventually fragment to more local variants. The solution functioned as both a speculative critique of an extreme globalised product but also pointed towards some interesting future innovation avenues. The embroidered hairdryer (Fig. 3 right) designed by Weiyi Zhang considered a related experimental idea for providing closer cultural communication of globalised ubiquitous products. It uses 5 different levels to communicate the hair drying experience through embroidery messaging using a local-globallocal pattern as instructions. The embroidery design doubles as the information system for product use and is a good example of how the creative destruction cultural contamination model can increase variety [3]. It illustrates how a ubiquitous global product uses local signs and experiences to adjust the product communication so that it is more locally relevant, but also to do this through local cultural symbols. In doing this it aims to strengthen local cultures against ubiquitisation. However, learning how to communicate local attributes and design with traditional cultural symbols that represent a modern context is challenging.



Figure 2. Shadow Puppet (left top), Casio Watch (left bottom) Emotion Cola (centre), and Embroidery Hairdryer (right)

The insect repellent - balm bottle project (Fig. 4 top) designed by Yitian Luan, took a traditional Chinese product which has been manufactured and sold locally for decades and explored how its historical evolution has produced a very minimal and less impactful current design. The design proposal was to re-localise and re-contextualise the product as a way to create a stronger identity in order to globally strengthen the differentiation of the design creating greater marketplace awareness and potential. The design language emphasises classic traditional Chinese landscape forms tying in the idea of it being a natural product and one that relates to the outdoors (insect repellent and reducing sting and bites). It's an example of how product ubiquitisation can be reversed by the designer in order to re-localise the design and provide greater cultural attachment. Another effect of this strategy is to create a stronger cultural identity export aimed towards increasing global cultural influence. The Lifelong butterfly project designed by Chenyu Xu (Fig. 4 bottom) introduced an idea for a different communication strategy for cultural export. This involved shadow play for a modern design using people and butterfly's lifecycles. It introduced an example of local to global by generating a very curious set of images that ask the user to be involved and questioned whether local to global understanding always needs to be simplified and easily understood through images. This project

argues against this trend proposing instead a design feature that resists easy globalised communication and instead encourages curiosity in reading the designs and through this process enhances cultural exchange.



Figure 3. Insect Repellent Balm Bottle (Top) and Butterfly Plates (Bottom)

All four projects illustrate different strategies for dealing with cultural exchange and globalisation showing how design students can develop creative methods for bridging the gap between local designs and global influences. It indicates that designers can connect what can appear to be abstract ideas of globalisation to design practice and crucially to appreciate their own agency in this context.

## 5 ANALYSIS

We have analysed the design results using a qualitative analysis combined with participant observation during the workshop. Our qualitative analysis compared the results of 10 categories for insights into responses to globalization issues in the 26 student's work. There were developed by searching for emerging clusters of methods and themes from amongst the completed projects. We found that 13 of the projects exhibited clear globalisation directions while 9 were localised and the remainder unclear. However, this contrasted when the direction of cultural flow was taken into consideration with 9 showing clear influences moving from China to the world and only 3 from the world to China while a surprising 12 design solutions showed clear ubiquitous tendencies with design solutions that had very little in terms of a dominant aesthetic cultural identity. A different but related category looked for cultural innovation strategy and found 13 where this was not evident and 10 where it was clear. Category 7 considered the creative destruction potential of each design and returned the same numbers (13, 10). When we looked at the experimental design verses design for manufacture balance this resulted in 15 DFM and 6 EXP with the remainder unclear. The final category looked at underlying motivations with 11 having clear sustainability (including cultural sustainability) motivations, 5 had cultural differentiation and 3 were focussed on emotional design. Whilst caution must be exercised in attributing significance to the exact proportions due to the number of participants involved, the general trends and issues raised signal the need for more investigation.

## 6 CONCLUSIONS

Both the student project examples and the comparative analysis observations point towards evidence connecting globalisation to design methods producing tangible results illustrating a breadth of approaches from ubiquitisation to differentiating global influences through design. Some students sought to focus on maintaining and enhancing local cultures and variety while a significant proportion chose instead to develop ubiquitous products that on the one hand could be seen to be conforming while on the other hand democratising global design choice. At the conclusion it was clear to the workshop team and participating students that it was possible for individual designers to develop designs that had significant cultural impact both on local people and in diverse global locations.

Our investigation has explored how design is one of the central factors acting on globalisation and that design education can engage to connect global concerns to individual designer's practices. One of our observations was a lack of design methods that actively tackle cultural differentiation and the very high level of ubiquitous products that was from one perspective a major concern in potentially reducing cultural variety. Following on from this workshop we aim to continue our collaboration to explore the subject area of designing for globalisation and develop additional teaching methods for tackling the associated cultural diversity and sustainability issues. There is a gap in knowledge, education and in designing for globalisation creating a need for developing new teaching and learning methods that tackle globalisation design as an educational strategy through cross-cultural collaboration.

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