Aidan Rowe teaches design fundamentals, interactive media, design theory, and information design. His research, curatorial and practice interests are in design and education. Recent practice-based work explores human computer interaction, net art, and information aesthetics. Written and pedagogic work revolves around understanding and improving design education in practical and theoretical forms. He has lectured and taught design in Canada, Japan, Korea, Germany, Hong Kong, France, and the UK.

Aidan Rowe는 design fundamentals, interactive media, design theory와 information design을 교육한다. 그의 연구, 큐레이티브, 그리고 실무적 관심영역은 디자인과 교육이다. 최근의 작업은 human computer interaction, net art, 그리고 정보 미학이다. 저술과 교육작업은 디자인 교육을 실천적 이론적 형태로 이해하고 향상하는 것을 중심으로 한다. 캐나다, 일본, 한국, 독일, 홍콩, 프랑스와 영국에서 디자인을 강의하고 교육한다.
ABSTRACT

Technologies and globalization have drastically changed how we design and who we design for and with. Historically design served as both a producer and representative of a specific culture – designed artefacts represented a particular history and society. Additionally the participants in the design process – client, designer and producer – also shared common histories, language and values.

Digital technologies have drastically expanded the possibilities for design, creating opportunities that move beyond traditional geographies and shared histories and languages. With these opportunities also come challenges – how do we collaborate through technologies? How do we communicate effectively when we do not share common histories or a common language? How can we design for, or with, a different culture?

These are the challenges currently facing design. This paper explores the relationship between culture, communication and technology and the new landscape and possibilities afforded by design. This paper focuses on design education and makes the case for an educational environment that interrogates this relationship – between culture, communication and technology, enabling students to situate their own design practice and future.

I present a variety of projects that allow design students in Asia and in North America to work together – from a collaborative cultural identity project pairing up students from the two continents to a large international exhibition that brings together work from students of design from Asia, North America and the UK.

The paper concludes by examining the benefits and challenges of using culture, communication and technology as a focal point to enable smart design.
INTRODUCTION

“It is through artefacts that cultural values are communicated. Design is, therefore, an important medium of communication which expresses the values of the system within which it functions.” (Moolosi, Popovic, and Hickling-Hudson 2008: 177)

The world of design has dramatically changed. New communication and production technologies have drastically transformed how we design and who we design for and with. The once dominant model of local design, fabrication and consumption, and the shared languages and understanding that accompanied this locality, has expanded to include a variety of alternative design scenarios. Where once designer, producer and user shared a physical location – now these activities are often undertaken in different countries and continents. (Bohemia, Harman, & Lauche 2009:18) These expanded communication models also present opportunities for design – designers now have dramatically increased possibility to practice internationally. Where once design was concerned solely with, and able to confront, local issues there are opportunities of engaging with truly worldwide questions. Design is now truly a global affair.

These changing design models also affect the relationship between design and culture. Historically design has served as both a producer of and representative of culture-designed artefacts embodied and communicated a particular history, language and society. (Moolosi, Popovic, and Hickling-Hudson 2008: 177) Moving outside of a shared and common culture, for designer and user, presents new design possibilities. While offering opportunities the changing landscape of design also present a plethora of challenges. How do we successfully collaborative through technologies? When we do not share common histories or languages how do we effectively communicate? How can we design for, or with, a different culture? How do we ensure that we take advantage of the technologies to design smartly?

These are the challenges facing the design profession, and in turn, design education. This paper explores the relationship between culture, communication and technology and the new landscape and possibilities afforded to design. Specifically the paper focuses on design education and makes the case for a pedagogy that explores and interrogates this relationship between culture, communication and technology enabling students to situate their own design practice and future. The paper presents two collaborative projects that allowed design students in Asia and North America to work together. In one project students from two design schools were paired up to explore issues of communication and cultural identity; the second example documents an international collaborative exhibition that brought work together from students and staff of design from Asia, North America and the UK. The paper concludes by examining some of the benefits and challenges of using culture, communication and technology as a focal point in design education. Possibilities are raised in relation to future practices for design education and the design profession to enable smart design.

CHANGE IN DESIGN PRACTICE AND EDUCATION

The last three decades have seen dramatic technological change in the design profession – creating new opportunities, markets and practices. From the introduction of desktop publishing in the 1980s to the rise of the world wide web in the 90s to the more recent possibilities presented by 3D printing the link between design practice and technological change has continued to flourish. In the last decade we have seen the solidification of the online and digital environment. The rise in the use of email and web 2.0 technologies like Skype, wikis and blogs allow new opportunities for communication and collaboration. Design practice has been quick to adapt and take advantage of these technologies – as both a platform for communication and as space to design for. For example, designers have explored and situated their practice in new design areas like the World Wide Web, e-commerce and online advertising. Designers have also taken advantage of the communicative possibilities – whether pitching their services internationally, working to collaborate with global partners or sourcing suppliers outside their local area. The design industry has moved into global and cross-cultural communication and production – where once designer, client and consumer were physically located together and shared a common cultural context, today an artefact may be designed on one continent, produced on another and sold in a third. (Bohemia, Harman, & Lauche 2009:18)

There are unique benefits to this design globalization – from a business point of view new markets are opened and economies of scale and scope come into play. From a more holistic point of view rich histories of practice are available and as Moolosi, Popovic, and Hickling-Hudson note the exploration of collaboration in and with new cultures provides a “point of departure for new design knowledge and new strategies in design thinking”, potentially pushing innovation in design. (2008: 187)

Distinct challenges though, related to design globalization, arise from these practices, as Bohemia and Harmen note “it is often a complex challenge to successfully navigate and negotiate cross-cultural, cross-disciplinary, cross-organizational, and cross-geographical exchanges.” (2008: 59) How do we ensure that design globalization is not solely focused on cost efficiencies? How do we prepare designers for these “cross-geographical exchanges”? How do we ensure that access to new cultures and practices are genuine and positive, not merely superficial or exploitative?

These are some of the challenges faced by the design industry and design education. In many instances design education has not been as adept and quick to grasp the possibilities presented by these new technologies, only more recently have we seen more coherent and holistic education practices that concern globalization and culture emerge from design programs. And while universities have looked to internationalize, this has often been driven by a desire to enter new markets and attract new students. There is a growing consensus that there is a need for design education to probe and explore issues of culture and globalization. In addition to preparing design students for international opportunities and collaboration there are also rich and valuable learning possibilities presented. (Bohemia & Harman 2008: 60) (Hall & Twemlow 2011)

One of the key possibilities presented from designing in a global context is the recognition by students of their capacity to affect change in the world. Moving education from inside the design class studios into the real world through international collaboration confirms the global possibilities of design, in addition to creating what
Lombardi terms “authentic learning” – education that is rich, powerful and genuine. (2007: 2)

The two projects featured below have been developed to interrogate and explore issues of culture with the goal of enabling smart design. Intentionally we have explored issues of culture, communication and how technology can facilitate these exchanges. The goal has been to situate an authentic learning environment that enables cross-cultural communication while also furthering design practice, enabling the students to think and practice critically at local and global levels. (Canniffe 2011) (Postman and Weingartner 1969: 2)

**BRANDING CITIES: UNIVERSITY OF ALBERTA & HONG KONG DESIGN INSTITUTE**

In the winter semester of 2010 students from the Visual Communication Design programme at the University of Alberta (UofA) and from the Hong Kong Design Institute (HKDI) collaborated on a project entitled Branding Cities. This project brought together 30 students to work on the brief. 15 students from HKDI would focus on branding Edmonton, Canada (where the UofA is located) and 15 students from the UofA would work on branding Hong Kong, China.

Branding Cities was designed by staff at HKDI and the UofA as a project that would explore issues of culture, community and communication. To document and facilitate the project a blog was established, each UofA student was paired up with a HKDI student and each would serve as an advisor / client to their partner throughout the project.

Students began by researching their assigned city. A variety of research methods were used to collect initial data, a key approach was facilitated through the use of Flickr Galleries. A Flickr Gallery allows users to collect and curate imagery from other users – you are able to search through Flickr’s library of images and then collect together a selection. Students from HKDI began searching for and collecting imagery related to Edmonton while UofA students did the same for Hong Kong. Once collected students analysed the images and pulled together key words for their assigned locations. Students then presented their findings (Flickr Galleries and key words) to their partners for feedback. Students then had an opportunity to reflect and refine the Gallery selections.

With the initial research process completed, the next stage was the development of the brand identities for the cities. This component went through three stages of refinement and reflection with partners critiquing and giving feedback on the work. The final brand identities were presented online to their partners and to the local classes.

While the main task of the brief was a fairly standard design project – developing a brand identity for a client, the addition of the culture and communication elements helped to create a richer project that provided numerous other benefits for the students.

To begin with, students had to undertake research, both primary and secondary, for cultural groups that are removed (physically, historically, and socially) from the students themselves. Even though the UofA students had some knowledge of Hong
Kong, they still had to explore means of better understanding the culture and place. Hong Kong students studying at the UofA were invited in to talk about their culture and students also investigated other cultural representations - film, music, popular culture, etc.

Additionally, the students needed to devise means of communication and collaboration to work with their overseas partners. As noted a blog was set up for the overall project; students also employed email, Flickr and Skype to work together. Exploring alternative communicative models was useful for a variety of purposes - for example, it offered different contributory possibilities to students than normal class-based discussions in addition to recording their interactions with their international partners. As the blog records comments, students had different opportunities for reflection on feedback and longer term, considered discussions were possible. As Bruner notes it is principally through interacting with others that students "find out what the culture is about and how it conceives the world". (1996:20) As one UofA student noted "Using the blog was great - I could really consider my feedback."

Students also had to assume the roles of designer and client – they needed to document and communicate their own work but they also had to guide and critique their partner's work. Allowing opportunities for students to move from passive to active, where they are responsible for analyzing and providing feedback is an important learning and developmental opportunity. "Working with my partner was both frustrating and enlightening. Having to critique their work was really difficult and opened my eyes." (Comment from VCD Student)

The project also enabled opportunities of further exploration and reflection on our students' own culture, a crucial point. Projects that take the interrogation of culture and communication as their focus offer the opportunity of distance, reflection and communication as their focus offer the opportunity of distance, reflection and introspection. As Frascara notes the ultimate goal of design education is concerned with fostering "the development of thinking, judging, collecting information, organizing it, managing resources, and producing visual communications that are effective and sensitive to users, contents, and contexts". (2007: 67) The Branding Cities project allowed 30 students the opportunity to collaborate across cultures and to design in a global context. (Bohemia & Harman: 60)

In addition to the focused collaborative Branding Cities project we also explored issues of culture and communication in a large multi-university project.

**BLURRING BOUNDARIES**

In 2008 the design department at Ewha Womens University in Seoul, Korea approached the Department of Art & Design at the University of Alberta, Canada with the offer to join their annual exchange exhibition entitled WAVE. This exhibition brought together work from a variety of art and design programmes from around the world with the University of Alberta planning to host the exhibition in 2009. An overall theme for the WAVE exhibition of Blurring Boundaries was set and students and staff from the participating schools created work to this theme. Each school juried their submissions and the selected pieces were then sent to the University of Alberta. The 2009 Blurring Boundaries exhibition brought together over 165 pieces of work from five art and design programmes from around the world – with contributing schools from Canada, Korea, England and Wales. The exhibition opened in Canada and then moved to Korea. Prizes were also awarded to top student works.

The Blurring Boundaries theme for the exhibition took as its focal point the blurring of cultural boundaries. Staff and students interrogated this theme to create work for the exhibition. The project was worked into the curriculum at the UofA and students devised different means of exploring issues related to culture: how do we define culture? How do we represent culture? How is a new culture created?

Students used communication technologies as a means to research the brief and for their own specific responses. Skype conference calls were set up with participating schools in other countries allowing students to discuss and debate their projects and plans. Students from schools on different continents used these communication tools to collaborate on joint submissions, demonstrating what Broadbent and Cross refer to as "collaborative design". (2003: 445) The show opening was digitally broadcast and Flickr galleries were set up to document and communicate all the work contained to contributors and the general public.

From an educational point of view the Blurring Boundaries exhibition provided a variety of benefits to participating students. As staff and students were working to the same brief – that of exploring the boundaries of culture – students were able to discuss and see how their global peers created work in response to the shared brief. All contributors could interrogate their work to the show's theme but also to the other show pieces. As one UofA student noted "The Blurring Boundaries project offered a new perspective and changed how I think about what design could be."

Additionally, as one of the main results of this collaborative project was a major exhibition that opened in Canada and then moved to Korea this project also took in the communicative nature of design. We were moving design out of the classroom and placing it in an environment for consideration and consumption by the general public. This not only became a major promotion piece – with local, national and international coverage – for the programmes and schools but also became a focal point for our design students to evaluate the work in gallery settings. (Rowe 2009)

This project also broadened and communicated the idea that design is not concerned solely with commercial activity. Here design was situated in a non-commercial environment dealing with complex, complicated and human issues. As Hall and Twemlow note it is imperative for design education to recognize and embrace this broader definition of design. (2011)

The WAVE Blurring Boundaries exhibition served as a very visual and public means of collecting work from a variety of international contributors. This allowed students (and staff) to interrogate work from around the world, explore issues of communication and collaboration, compare and contrast their work in relation to others and reflect upon how culture served as a contributing factor to the production of the work.

**CONCLUSION**

As technologies of communication continue to develop and proliferate there will be continued opportunity and need for dialogue and discussion across countries and
Continued globalization will ensure that opportunities for design will continue to flourish—allowing designers to work in new territories and cultures. To fully take advantage of these opportunities design students need an education where they can work in cross-cultural collaborative settings. Students need to be able to explore how they can work together globally, how they can communicate across different cultures and histories to establish their own design practice.

In this paper I have argued for the value of a design education that explores and interrogates the relationship between culture, communication and technology to help define the new landscape and possibilities afforded to design. The two projects presented explore these issues and document work that moves our conception of design practice to a more complex, rich and genuine one. The goal is to ensure that learning is linked with a “deep understanding” of how people interact and communicate in and across cultures. (Kelley & Littman 2005:8) Embedding these practices into design education will help to ensure we are educating designers that are both articulate and concerned global citizens and are able to practice design in a smart and informed manner.

ACKNOWLEDGEMENTS

The author would like to thank all the project participants and collaborators, specifically: Lecturer Sandra Wong and Senior Lecturer Thomas Kan at the Hong Kong Design Institute, China; and, Professor Byungkwon Oh and Assistant Professor InSohngi Kim at Ewha Woman’s University, Korea.
디자인과 교육의 관계에 대한 논의

최근 30년간 디자인의 장에서 새로운 기회가 나타나기 시작하였다. 디자인과 교육의 관계에 대한 논의가 점점 활발해졌다. 1980년대 디자인의 장에서 새로운 기회가 나타나기 시작한 시기부터 2010년대까지 디자인과 교육의 관계에 대한 연구가 활발하게 진행되었다. 디자인의 장은 디자인과 교육의 관계를 통해 새로운 기회를 창출하고 있으며, 이를 통해 디자인과 교육의 관계에 대한 연구가 활발하게 진행되고 있다.

디자인과 교육의 관계에 대한 논의는 디자인의 장에서 새로운 기회를 창출하고 있으며, 이를 통해 디자인과 교육의 관계에 대한 연구가 활발하게 진행되고 있다.
Branding Cities: University of Alberta & Hong Kong design institute

2010년 개학기에 University of Alberta (UofA)의 시디카지노아이 선생이 프로그램 학생들과 Hong Kong Design Institute (HKDI) 학생들이 'Branding Cities'라는 제목의 프로젝트를 진행했다. 이 프로젝트는 30명의 학생들을 모으는 '브랜딩시티'라는 컨셉으로부터 시작되었다. UofA 학생들은 '시절'과 '자연', '환경'이라는 주제를 다루었다.

Branding Cities는 HKDI의 스페셜리스트로서의 전문성에 의한 환경과 커뮤니티와 커뮤니케이션의 문제를 탐구하는 프로젝트로, 이 프로젝트는 학생들이 더욱 확장하기 위해 필요하다고 생각된다. 각 UofA 학생들은 HKDI 학생들과 함께 협력하여 프로젝트 내의 아이디어 / 칼라의 합작하여 작업을 진행하였다.

학생들은 활동을 도입하고 시작하기 전에, 다양한 리서치 방법을 이르러 학생들에게 사용되었다. 이 중 학생들은 Flickr Gallery를 사용한 주요 아이디어가 확장되었다. Flickr Gallery는 유학과 다른 축대로부터 이미지를 보고 조직하는 것을 허용한다. 즉 Flickr의 이미지 라이브러리에 학생들이 자신의 아이디어를 공유할 수 있었다. HKDI 학생들은 UofA와 관련된 이미지를 검색하고 도우미가 제공하여 UofA 학생들이 환경에 대해 심각하게 생각했다. 수학된 학생들은 이러한 이미지를 분석하고 활동에 대한 키워드를 모았다. 그 후 학생들은 그들만이 만든 것(Flickr Galleries와와 카드를 파트너 에게 전달하고 따서 분석하였다. 그린 학생들은 그들의 Gallery 샘플을 수집하고 키워드를 기록하였다.

첫 리서치 과정이 끝나고 다음 단계는 도시의 브랜드 아이덴티티 개발이다. 이 과정은 작품에 대한 반응과 피드백을 주는 브랜드와 함께 세상의 개선과 고찰을 거쳤다. 최종 브랜드 아이덴티티는 파트너와 현장의 학생들에게 오프라인으로 프레젠테이션되었다.

brief의 주요 이용자가 가리키는 데 대해 브랜드 아이덴티티를 개발하는 데 스케일의 다양한 디자인 프로젝트인 이론, 문화와 커뮤니케이션 요소를 추가로 학생들에게 많은 아이디어를 제공하는 중요한 프로젝트가 되었다.


최종, 외부 전시회와 같은 사람들에 대한 커뮤니케이션에 활용할 수 있는 요소가 있었다. 설계, 환경, 학습, 교육의 모델, 그리고 학생들이 제출한 작품은 University of Alberta로부터 보내졌다. 2009 Blurring Boundaries 전시회는 전 세계 다섯 개의 아트와 디자인 프로젝트로부터 165개가 넘
한국, 잉글랜드, 웨일즈의 학교들이 출품했다. 전시회는 캐나다에서 열렸고 그 후 한국으로 옮겨졌다. 최고의 학생 작품들은 상을 수여받았다.

전시회의 Blurring Boundaries라는 테마는 보니에서 문화와 비운처에 초점을 맞추었다. 스타터와 학교들이 전시회의 작품을 만들기 위해 이 주제를 조사했다. 이 프로젝트는 uOA와의 커뮤니케이션으로 보이지만 학생들은 문화와 관련된 이슈를 탐구하는 다양한 수단을 고안했다. 문화를 어떻게 정의하는가에 대한 문제를 어떻게 해결하는가에 대해 새로운 문화가 창조가되는가?

학생들은 brief를 리서치하고 자신만의 답을 찾는 수단으로 커뮤니케이션 테크놀로지를 사용했다. 다른 나라와의 학교 관계를 정립하고 전단에 나설 수 있음을 협력하여 Broadbeat와 Case의 "풍모 연구 디자인의 collaborative design" (2003: 445)이라고 보고 부분에 보여주었다. 제작으로서 디자인 방식을 받았고 모든 작품을 기획하고 출품자와 직면하여 전달하기 위해 Flickr 커뮤니티가 설치되었다.

교육적인 관점에서 볼 때 Blurring Boundaries 전시회는 학생들에게 다양한 이해를 주었다. 학생과 스타터의 문화적 순서를 탐구하는 특질을 broad한 작업을 했기 때문에 출생 동료들이 공통된 brief에 대해 어떻게 작업을 만들든지 보고는 그가 가능했다. 모든 출품자의 전시 회의 주제와 맞춘 자신의 작품을 만들었고 또한 다른 건물의 작품을 조사할 수 있었다. 한 uOA 학생이 기술했다 "Blurring Boundaries 프로젝트는 새로운 시각을 주었고 다양성에 대한 생각을 바꾸었다."

전시회는 이 협업 프로젝트의 주요 결과 중 하나는 캐나다에서 열리고 한국으로 이동하는 중요 전시회의 대부분이 이 프로젝트는 또한 디자인 커뮤니케이션에 중요한 역할을 했다. 우리 디자이너가 수업에서 삼각점을 창출하고 싶어할 수 있는 환경에 갔다 놓았다. 이것은 이 프로젝트들 과 학문에 대한 지식, 국가의, 국제적 보도의 중요한 흐름들이 있음에 따라 이러한 다양한 학생들의 경험은 환경에서 작품을 창조하는 초점을 되었다(Rowe 2009).

또한 이 프로젝트들은 디자인가 상업적 활동을 하는 이들의 생각을 확장하고 전달했다. 여기서 디자인은 복잡하고 인간적인 이슈를 다루는 비판적인 접근 방식을 중요했다. Hall and Twemlow가 기술 하듯이 디자이너는 이러한 복잡한 정의를 인식하고 포용하는 것이 디자인교육에 필요한 것이다.

WAVE Blurring Boundaries 전시회는 다양한 국제적 출구로부터 작품들을 보는 매우 시각적이고 공개적인 수단으로 이용되었다. 이것은 협업과 전 세계의 학생을 볼 수 있도록 커뮤니티와 협력의 이슈를 탐구하며 저작권에 자신의 작품을 보이고, 대조하면서 문화가 작곡에 어떻게 가이드하는지를 고찰하게 됐다.

결론
커뮤니케이션 기술과 방대한 정보고 전달되면서 국가와 대화를 나누는 대화와 토론의 필요와 기회는 계속될 것이다.(DuMar 2011)

전시회는 세계화의 이슈와 디자인가가 중요하여 디자이너들은 새로운 영역과 문화에서 이해가 필요하다. 이는 그 기회를 이용할 수 있는 여러 보수적이고 보수적인 이슈를 다루고, 대조하면서 문화가 작곡에 어떻게 가이드하는지를 고찰하게 됐다.

이 논문에서는 문화, 커뮤니케이션, 그리고나로지의 관계를 탐구하며 디자인자들에게 새로운 전략과 기회를 제공하는 다양한 문화를 고안하였다. 저작권과 프로젝트는 이러한 문화를 다루며, 우리의 디자인이 실해 개념을 보다 복잡하고 풍부하고 진정한 것으로 보다 쉽게 접근할 수 있게 했다.

참고자료

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