Mark Strachan  
Swinburne University of Technology

The Role of Slavery in Design Education

Keywords: Slavery, Systems, Service, Design, Education

Introduction
In Australian design education traditional undergraduate design briefs frequently remain within known boundaries, theoretically framed for the purpose of teaching particular design themes, techniques and processes within discipline silos and their practices.

This paper is an exemplar of how design education can engage with a difficult topic, where issues of economy, production and human experience can provide insights to design practice and policy. The paper illustrates how a significant and challenging topic can generate valuable learning contexts for students using systems and service design pedagogies, and further demonstrates how constructive dialogue and engagement can lead to meaningful and rewarding learning experiences. These are powerful in terms of how a demanding topic, such as slavery, combined with a systems mindset and a service design-based methodologies, can enlighten students to their wider role and potential as both a designer and citizen.

The Studio
The Systems & Services studio was established in 2006. The purpose of the interdisciplinary studio was to introduce all undergraduate students from Communication Design, Multimedia Design, Industrial Design and Interior Design to the methods and tools employed in systems thinking and service design practice. The subject also embraced sustainability as an overarching theme to encourage a broader appreciation of the context in which design operates. The studio also established its credentials by becoming a University-wide sustainability elective contributing to the inclusive and participatory nature of systems and service design. This also contributed to enriching the learning experiences and providing the sustainable goals and mindsets for validating many of the processes and outcomes undertaken by the students (Strachan, 2010).

The studio has been taught formally at Swinburne University since the beginning of 2007. While it would be straightforward to deal with commercially oriented service experiences e.g. retail, banking & finance and public transport, the studio moves
beyond these conventional encounters. It adopted themes with the intent of challenging the students to engage and think beyond the immediacy of their own normative discipline practices and to see the world from a systematic viewpoint and one predicated on sustainable futures. As Peter Senge recognises in his 1990’s book *The Fifth Discipline* (Senge, 1990), people are agents. People are able to act upon both the structures and systems that dictate our lives. One of the core assertions of the studio is to argue that designers – steeped in generating the ‘new’ - are better placed to bring about change. We are, after all, designing preferred futures.

The topic of *Modern Day Slavery* was introduced by collaborating closely with Slavery Links, an Australian secular charity, to explore how systems and services methodologies could be applied to address and counter slavery issues that may be encountered by Australians. The studio utilised Slavery Link’s definitive book titled ‘Australians and modern slavery’ (Howell, 2011). The book defines slavery. It describes the several forms that slavery takes in the Asia Pacific region. It analyses how Australians encounter slavery in everyday living, in travel and when doing business or consuming. These possibilities of encounter become inputs to the design pedagogy described in this paper.

**What is Modern Slavery?**
In Australia we are accustomed to having our freedom, dignity and self-determination. So, how do we encounter slavery and why is it a valuable topic in design education? It is estimated that 27 million people worldwide (Bales, 2005) that are enslaved and do not have the freedoms we take for granted. For the purpose of this paper, a strictly legal definition of slavery refers to the act of exercising ownership/the experience of being owned. It is “a distinct phenomenon to be discerned, understood and dealt with as slavery, not as something else” (Slavery Links Australia, 2012, Pg 1).

Historically, the 19th Century Atlantic slave trade was abolished throughout the British territories in 1807. In modern times there are two key international treaties that have addressed slavery; one in 1926 and the other in 1956. The 1956 Supplementary Convention on the Abolition of Slavery (United Nations, 1956) is recognised as the most relevant treaty framework for comprehending slavery and for understanding its systemic causes. The Supplementary Convention has been adopted by Australia and (mostly) implemented in Australia’s Commonwealth Criminal Code.

Slavery is such a far-reaching and relevant topic as it embodies many endemic issues and consequences that can be seen to contribute to matters such as climate
change, wildlife depletion and inequitable trade environments. A recent article published by the BBC (McGrath, 2014), drew parallels to the global decline of fish stocks and the use of child slaves. Which on the one hand impacts our ecosystems causing imbalances as species decline and, on the other hand, leads to food shortages, loss of economic independence, regional destabilization and eventually to the possibility of conflict.

Slavery Links argues that within Australia’s Asia Pacific context, the persistence of slavery in the region necessitates a systems view of slavery and the steps required to bring about change. They have identified four “engines” of slavery that enable systems of slavery to persist. To quote the Brief, the engines operate in a summative way:

Poverty and
+ Powerlessness and
+ Crime / corruption and
+ Conflict

= Four engines that work together to keep slave-making systems operating.

The framework, was developed in Howell 2011, was summarized in two papers which can be found online (Howell and Evans, 2012; Howell 2013). This framework shows that each “engine” needs to be addressed together with the others. The framework challenges design students to think through what a comprehensive response would be like and how a service would operate in a holistic manner.

The Brief continues:

Slavery is an insidious practice and it emerges in many guises. Slave-making systems place the most vulnerable groups at risk. We can identify groups who are at risk based on gender, race, religion, caste or ability. Women, or people of so-called low caste, or a particular clan or tribe, or people with a particular skin colour, or people with a disability: people from these groups can be set aside from mainstream society. Having been set aside or excluded from the mainstream, people in these groups are more vulnerable, more exposed, more able to be captured as workers or harvested as slaves. Slavery Links argues that all four engines of slavery need to be addressed comprehensively (Howell, 2011).
The Challenge
The studio participants are organized into interdisciplinary teams and, by drawing upon input and material from Slavery Links, they are tasked to envision new and innovative ways that could help mitigate slavery and its consequences.

The studio addresses the wider context in which orthodox design disciplines practice and is specifically aimed at addressing the intangible nature of systems and services i.e. of processes and procedures as opposed to one of artifacts. While such systems and services directly involve tangible artifacts that the users interact with, the studio is specifically looking at the overall design and dynamics of a system and service and how those tangible elements are integrated to create valuable and meaningful outcomes. Consequently, the project does not include the design of a specific product, an interface or a publication i.e. while these may be derived during their developments they are not assessed on the explicit merits of those individual components. They are however assessed specifically on qualities of the design of the systems and services and the combination of any artifacts and individual elements operating as part of a holistic solution.

Awareness of slavery issues in Australia is one thing, but how is it possible to bring about long term change? Through a process of investigation and analysis, the teams explore one of three selected forms of slavery identified by Slavery Links as having a particular impact in Australia and as being amenable to team study. These forms are: Forced marriage, child labour and labour trafficking. The students develop visually descriptive mappings that capture the systemic relationships and processes involved. Each project takes on its own direction and, for example, while they scope out the extent and complexity of the topic, they employ different forms of the mappings to highlight the fail points in the system and identify points of potential intervention and/or change.

As the teams research their topics and become familiar with the issues, they also create personas of the victims of slavery and the other stakeholders involved in their particular slavery system. Using further mapping techniques and the generation of narratives they are able to create scenarios to enable them to empathise with those involved. This user-centred approach, predicated on empathy, is arguably one of the most powerful attributes that a designer - and, indeed, something that humanity as a whole should exercise more readily. Consequently, the ability to see through the eyes of your personas makes the project more tangible and meaningful and the appreciation of their perspective - victims and perpetrators alike - is essential. The
narratives combined with their analyses are translated into user journeys to help understand the dynamics and interactions that occur over time. These are instrumental in defining the activities and transactions that occur — both in the immediacy of the frontline and in behind-the-scenes processes — to visually articulate the chain of events that constitute the slavery system.

Once the teams are accustomed to the key methods employed in the studio and recognised the impact of slave-making systems, we direct their attention to systems change and how, on a human scale, to bring about and sustain that change. They explore a number of scenarios and look to a projected date in the future that is sufficiently real to be comprehensible but sufficiently far away enough to free them from being overwhelmed or restrained by conventional thinking and practices. By exercising their creativity they are encouraged to explore entirely new and/or radical System and Service that focuses on how a solution can be designed and brought about that eliminate or significantly decrease the likelihood and consequences of slavery.

The teams work strictly within the legal definition of slavery. Apart from this constraint, the brief and its interpretation, is deliberately open and not prescriptive so as not to prejudice the originality of the team’s approach and direction. As well as employing established tools and methods used in Service Design, they are also encouraged to develop and experiment with their own mapping techniques and methods for deciphering the complexity of their project. Nevertheless, the overall intent is to identify the opportunities that will bring about positive and beneficial change.

**Findings and Feedback**

Developing the faculty to view situations from a top down perspective combined with the reasoning to see the potential to adopt bottom-up approaches provides the students with a powerful strategy to deal with complex situations. Whether this is dealing with the confronting challenges that slavery poses or, whether it is firmly seated in commercial enterprise, employing the frameworks, methodologies and mindsets of Systems & Services can give the students the confidence to take on challenges that would otherwise be overwhelming and to formidable.

To highlight some of the methodologies and tools employed in the studio, we draw upon feedback from the students that articulate their experiences.
At the outset, it soon becomes apparent that for many, they were entering unchartered territory:

the foreignness of the topics discussed were [sic] intriguing. I quickly understood that the semester ahead was going to demand a level of creativity and strategic thinking that I had yet to apply but knew I possessed somewhere deep within my skill set as a designer.

In dealing with the initial proposition of the studio, the students narrow down on a particular aspect of slavery and can respond in a number of ways, for example, one student reflected: ‘We had our design problem, child labour in the palm oil industry, the solution should be simple; go in take the children out and send them home’.

However the complexity soon begins to become apparent:

but then a perpetrator’s business just hires more children, or worse begins trafficking children. So we’ve fixed nothing. Our ‘problem’ was actually a symptom of a number of larger problems; government corruption, industrial crime, and a powerless and poor workforce that is vulnerable to exploitation.

Figure 1: Palm Oil Plantation worker. Creating personas enable the students to start understanding their ‘users’ and the attributes that are applicable to their circumstance.
The experience the students go through is challenging. Reflecting both the complexity of dealing with the slavery topic and the seemingly intractable nature of systems design. This isn’t a sugar-coated learning experience but one in which an enthusiastic and supportive teaching encourages students to persist in the efforts and understandings. The process needs time and patience:

When the brief of ending a form of slavery was introduced to the class it seemed like it was going to be an impossible task to complete in one semester. I found it especially frustrating and difficult when you start to look at possible solutions and the issue becomes a ‘wicked’ problem. It was very easy to become demoralised. The classes were challenging and really pushed you to be creative yet practical. By relating the brief back to slavery I think it really shifted my perception of what I can do as a designer and how much of a difference I can make.

The intricacies and web of consequences shows the pervasive nature of slavery. The students were encouraged to spend time defining the problem and expanding the solution set. In a small and contained way, the students were applying a type of action research approach that would be encouraged by Rittel and Webber (1973). Experience has shown that students can work through such complexity, with guidance. Here a student explains how they developed an entirely new perspective:

Now our design problem has seemingly to have become impossibly huge and complex, so we re-defined our problem again; its not getting children out of child labour, because that’s a symptom, and we can’t overhaul the entire existing production complex; because that’s fundamentally flawed, which is a social dilemma of a developing nation. And this is where we found our design solution, creating our own system free from the constraints of the old system.
Figure 2: Prevailing situation forced Marriage. The students produce a variety of maps including ones that illustrate the existing circumstances of their ‘users’.

The students also explained how they felt their skills had develop over the duration of the subject:

the ability to analyse causality and address the underlying issues that will be present in and around my work. To analyse and recognise patterns at work, find the underlying issues and the key points where people interact with both social and designed systems.
Figure 3: Slavery Exists: Students are encouraged to develop their own forms and styles of mapping, for example, they have students here have generated an informative formal overview of the relationships of the key entities involved in their project.

To accomplish this, others reflected on the mapping processes that were central to the problem solving and design developments:

The techniques we learnt and used were extremely helpful. Things such as Journey Maps, Stakeholder Maps and Personas allowed me to better understand exactly who we were designing for and where we could intervene.
The importance of appreciating the users was also highlighted:

Understanding System & Service design is extremely important in creating standout and effective designs no matter what the discipline. It pushes you to really consider how design will be used and received by focusing strictly on the user. Whilst I had given thought to the user before, I had never shaped my creative process around them.
Figure 6: Journey Mapping. An example of a positive user journey ‘after’ the students intervention to contrast to the users previous experiences. Note use of colour and ascendancy in comparison to Figure 5.

Establishing empathy was also recognised as a vital part of the process:

Going more deeply into the personas proved to be very helpful also. Particularly with the topic of ‘slavery,’ where empathy is so important. Knowing the background and basic information of individuals is crucial to designing for people.
Diyor Ubayez

PERSONAL INFORMATION

Born: March 14, 1956 (age 57), rural Uzbekistan
Occupation: Farmer
Family situation: Impoverished; but sustainable

EDUCATION

Dyor achieved a high standard rural high school education in the Soviet system. For his soviet national service he became an agricultural volunteer and learnt mechanical engineering.

HABITS

Key Values: Conservative; Sunni Islam
Hobbies: Backgammon, Tea, Music
Desires: Better future for his grandchildren; Better farming equipment
Regular ritual: Tea with the family at his Dacha
Sources of Fustration: Abysimal returns on cotton, constant interruptions of his grandchildrens education from cottonproduction
Strengths: hardworking, Knowledgable
Weaknesses: Poor income, Nostalgic outlook

Figure 7: Cotton Farmer in Uzbekistan. Narratives relating to specific personas and their prevailing situation are encouraged to build a deeper appreciation of their circumstances.

Such techniques form the backbone of the studio and highlight how thorough the considerations can be:

For example the use of visually transposing ideas and concepts into further developments and designs. The act of a user journey, helped to be more detailed and think more thoroughly about details that I would normally miss out or not think about.

These are then translated into videos as the students enact scenarios base on the characters.
Figure 8: Illustrates how the Four Engines of Slavery can be contextualised as part of an analysis of Forced Marriage.

One of the other techniques is quite confronting in terms of participation for many students. Here we use enactments as way to physically ‘feel’ and to imagine the experience and emotions that different actors/stakeholders play:

I found the enactment hard, because personally I do not enjoy the ‘acting out’ side. Yet, I felt, in terms of our project, it was a very useful tool for showing how our ideas would work in real life.

This experiential form of learning process brings a new reality to the students; a way in which they can gain insights to inform and improve their developments in an iterative manner.
Figure 9: Cocoa production Service mapping. Key stages in a service mapping are revealed in a step-by-step process that reveals how their proposed solutions will operate.

At the conclusion of the studio we also see evidence of how the studio has broaden the awareness of the complex systems that surround us and also how systems and services have a bearing on their own discipline specific practices and future design practices:

I can see how my design work in the future will be interacting with any number of complex existing systems, this will happen in many ways often overtly and intentionally, but just as likely subtly and in many cases unavoidably. We don’t design in a bubble, and we need to acknowledge that in our work, I feel like that’s what I will take away from Design for Systems and Services.

Conclusion
The Systems and Services studio has illustrated how service design and strategic systems approaches can heighten students’ awareness of design and its application to what is an unfamiliar and seemingly overwhelming problem. By providing a framework for understanding the role of design in a broader context and applying service design methodologies students were able to re-orientate their own
perspective and understandings; and realise how their disciplines can embrace and contribute to both behavior and social change.

The value and impact of this studio and the adoption of slavery as a topic has been corroborated through the students’ reflections but also through a number of students who have been motivated to independently support the activities of Slavery Links where some have attended Parliamentary hearings, created posters, multimedia content and supported exhibitions. This bodes well in many ways.

In summary, there is a place for slavery as a topic in contemporary design education. Something that is beneficial to academics, students and our collective futures: The active participation and on-going engagement with expert organisations and adherence to evidence-based research methods provides a persuasive model for providing students with the confidence and strategies to tackle complex and confronting challenges.

Acknowledgements
Roscoe Howell of Slavery Links
REFERENCES


UNITED NATIONS (1956). Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery, Economic and Social Council resolution 608(XXI), Geneva