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21-23 SEPT
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Proceedings of the
Australia & New Zealand
Association of Planning
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Edited by Andrew Butt and Melissa Kennedy

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Introduction

Andrew Butt

*Community Planning and Development Program
La Trobe University, Bendigo*

The annual meeting of the Australia and New Zealand Association of Planning Schools has traditionally rotated between the planning programs at universities in both countries. Most recently, ANZAPS had the privilege of hosting the World Planning Schools Congress in 2011, which, while interrupting the usual ANZAPS schedule, offered a chance to meet with planning educators from around the world, to share ideas and offer antipodean perspectives. Thanks must go to Paul Maginn at UWA for taking the lead (and for so much hard work) on a successful world congress.

This year ANZAPS reverts to a more humble yet familiar format. For the first time ANZAPS will be held in a small regional Australian city. This year's program has been organised by the Community Planning and Development Program at La Trobe University, Bendigo, a program that has offered planning related degrees since 2001, although most evidently since 2007 with the introduction of undergraduate and coursework postgraduate programs that have sought to offer a focus on planning as it relates to rural and regional Australia, while maintaining the skills and interests of students in metropolitan issues.

This year's program offers over 30 papers, most peer-reviewed. Included are a number of themes that are of a central interest to this school; the nature and practice issues associated with experiential learning and the role and approach of planning education of and for indigenous issues are two key examples. A broader set of themes of contemporary interest in planning education (and higher education generally) is also included. These relate to issues such as the role and dilemmas of studio teaching, pressures for large class sizes, and student engagement. We also have a healthy number of papers dealing with planning research and practice issues, many reflecting on the educational scope of this research.

Many of the issues discussed point to a changing higher educational environment, one where the traditions of planning education as an experiential and practice-focussed discipline offer lessons for other disciplines, but also present resourcing challenges to our respective institutions. Conferences such as this offer a chance to reflect on our shared notions of a good planning education, and maintaining this despite these pressures.

This conference will also, once again, discuss the future form, intent and structure of this association. For close to two decades ANZAPS has maintained an informal trans-Tasman character and an opportunity for discussion, debate and shared learning within our discipline. A future challenge will be to sustain this informality while at the same time ensuring an enduring structure and a productive engagement with critical planning issues in New Zealand, Australia and also globally.

Contents

Peer Reviewed Full Papers

Housing Estate of Mind: Evaluating the role of Urban Design in the Riverwood Public Housing Redevelopment <i>Gordon Bijen</i>	3
Encountering Ethics and Politics through International Planning Field Studies <i>Andrew Butt & Rangajeewa Ratnayake</i>	13
Culture Matters: An analysis of Ethnic Segregation and Congregation in Sydney Australia using Centographic Method <i>Tingting Cui & Awais Piracha</i>	22
Two or More Sides to the Debate on the use of Land Use Planning David Fingland	42
Coastal Planning, Education and the Australian Context <i>Murray Herron, John Rollo and David Jones</i>	50
Dancing with the Cows: theorising hot heritage in Newmarket saleyards and abattoirs, Melbourne <i>Jean Hillier</i>	60
Fighting the Good Fight: What Glaswegian and Torontonians Planners Say about their Work <i>John T. Jackson,</i>	71
Meet the Moot: Teaching Environment and Natural Resources Law To Non-Law Students Through Moot Trials <i>Rebecca Leshinsky</i>	83
Planning research and educational partnerships with Indigenous Communities: Practice, Realities and Lessons <i>Darryl Low Choy and David Jones</i>	91
The Problem of Recognition: An Exploration of the Establishment and Accreditation of a New Zealand Planning Programme <i>Ian Luxmoore & Caroline Miller</i>	105
The spaces we work in: consultation about Curtin's Architecture and Planning building <i>Diana MacCallum and Shahed Khan</i>	114
What Do Current Planning Students and Recent Graduates Think Planners Do? <i>Lachlan McClure¹, Ruth Potts², Aysin Dedekorkut-Howes² and Mellini Sloan¹</i>	122
Satisfactory performance by whose measure? The challenges of delivering a professional planning degree in a post-modern world at the University of New England, Armidale. <i>Paul McFarland & Robyn Bartel</i>	134
The effectiveness of computer games for planning education: A SimCity case study <i>John Minnery and Glen Searle</i>	142
Teaching Sustainable Urbanism Practice Via Collaborative Interdisciplinary Studios <i>Michael Neuman</i>	155
Fear of Crime in the Built Environment <i>Rangajeewa Ratnayake</i>	165
Contemporary Planning Education and Indigenous Cultural Competency Agendas: Erasing Terra Nullius, Respect and Responsibility <i>Mark Rose & David Jones</i>	177
Using the Campus as a Living Laboratory for Research Projects	

<i>Joanna Ross & Christine Cheyne</i>	186
Extending planning education into primary and secondary schools through research <i>Julie Rudner¹, Ichiro Omiya², Rikutaro Manabe³</i>	194
A comparison of the motivations, rhetoric and controversy surrounding recent planning reforms in New South Wales, Australia and Ontario, Canada <i>Laura Schatz & Awais Piracha</i>	207
Facilitating First Year Students' Engagement with Planning Education: Utilising Student Affinity for Technology to Increase Cohort Cohesion and Decrease Attrition <i>Mellini Sloan, Severine Mayere and Robert Webb</i>	219
Urban Forests along Sydney Transport Corridors: the Possible Role of LiDAR in Future Planning and Management <i>Wang, M-Z., Merrick, J. R. and Amati, M.</i>	228
The Shock of the Huge: Teaching Urban Planning through Experiential Learning in Large Classes <i>Carolyn Whitzman¹ Crystal Legacy² & Catherine Harris¹</i>	237
Teaching planning beyond the national context: pedagogic analyses of international fieldtrip experiences <i>Tan Yigitcanlar</i>	247
Studios for the Masses: Can student collaboration replace the master-apprentice relationship in design instruction? <i>Kelly Zuniga</i>	260
<i>Non-Reviewed Papers</i>	
Existing Experiential Learning Practice in Australian and New Zealand Planning Programs <i>Johanna Rosier, Claudia Baldwin, Christine Slade</i>	269
Understanding Everyday Teaching Experiences: the Institutions, the Students and Possibilities for the Studio <i>Caryl Bosman, Aysin Dedekorkut-Howes and Ruth Potts</i>	276
<i>Abstracts Only</i>	
How the Corner Store Milk Bar transformed into the Service Station and the Coffee Shop: Life and Community Loss in Suburban Bendigo <i>Trevor Budge</i>	276
The Value of International Study Tours for Planning Education: Content or Transformation? <i>Trevor Budge</i>	276
Preliminary review of the relationship between Aboriginal 'sense of place' and the regional landscape in the context of value-led regional planning <i>Rachael Cole-Hawthorne & Darryl Low Choy</i> <i>Griffith University</i>	277
Marine Spatial Planning – Are the Skills and Knowledge Really Different? <i>Hamish Rennie</i>	277
The Rural Difference – Education outcomes sought by rural planners <i>Angus Witherby</i>	277
Regional planning as survival: the unrecognized Bedouin villages in Israel/Palestine <i>Oren Yiftachel</i>	277

Housing Estate of Mind: Evaluating the role of Urban Design in the Riverwood Public Housing Redevelopment

Gordon Bijen

University of Western Sydney

Abstract

Public housing is an essential aspect of urban life, however public housing and particularly public housing estates, have become 'homes of last resort' as social and policy change have served to concentrate disadvantaged households within these neighbourhoods. In recent years there has been an explicit move to combat disadvantage by State Housing Authorities (SHA's) such as Housing NSW, through the renewal of estates into mixed income neighbourhoods. There has been considerable research into the impact of the 'social mix' objectives of these renewals however; there is a clear gap in the understanding of the role that the physical design of a space may contribute to the effectiveness of large scale public housing renewal. Following research conducted in the inner south Sydney estate at Riverwood during 2009, the data collected has been re-examined to elucidate the impact of estate redevelopment upon place attachment.

Keywords: Urban Renewal, Place Attachment, Neighbourhood Design, Public Housing Redevelopment

Introduction

Across the Western world Social Housing Providers (SHPs) are embarking on large scale estate renewal projects. These projects are hoped to be somewhat of a "magic bullet" aimed squarely at the tenant and asset management challenges that have left many estates as "homes of last resort" in recent decades. These renewal projects are achieved by using mechanisms within the planning system to increase dwelling density on-site and improving social mix by attracting private investment through the introduction of up to 70% private dwellings (Housing NSW, 2011). Additionally the built form undergoes massive change, with new construction replacing existing dwellings.

Popular discourse suggests that there is a correlation between the design of an urban space and the social outcomes that are played out within them (Talen, 2002). Well designed, 'pleasant' places are purported to enjoy higher rates of civic engagement, stronger employment rates and lower levels of crime and anti-social behaviour (Jacobs, 1961). Conversely, poorly designed spaces are claimed to have poor social outcomes attributed to them (Newman, 1972; Coleman, 1985).

There has been considerable research into the impact of the social mix objectives of public housing renewal however there is a clear gap in the understanding of the role that the physical design of a space may contribute to community life

This paper seeks to understand the nature and impact of these renewals upon the community and determine if the physical design of the new development has an influence upon the success of the renewal projects. To examine this hypothesis the literature surrounding the discourses of remedial urban design and place attachment will be explored and applied to observations made in the NSW Social housing estate of Riverwood.

The Significance of Place and Design

Place is, as planners, our focus. It is this focus on place that distinguishes planners from other professions, and while "place-based" renewal schemes are en vogue, the theoretical underpinnings of the stated objectives are problematic at best.

Place, despite planner's and architect's best efforts is an enigmatic concept. Casey (1997) has identified that place first emerges within Aristotle's philosophy as 'topos'; the notion of place as existence. Dovey (2011) describes this notion of place as a form of ontological ground, that "to exist is to exist in a place" (pg.4). Modern revivals of this thinking include Heidegger (1927) and Norberg Schulz (1980) which bolster the view of place as experience. For others (Altman and Low, 1992; Relph, 1976; Tuan, 1977) place is a construction, a space with meaning attached. This allows spaces to be subjective, with differing layers of meaning for different groups. Attachment to place becomes something that can be measured, considered and most importantly expressed, a phenomenon harnessed within the growing literature of participatory planning and community consultation.

The difficulty presented by this range of concepts about place is that quite often they are in tension with one another, the objective space-as-ontological-ground of Heidegger through notions of place a construction (Foucault, 1979) to place as a re/producer of society (Lefebvre, 1974). Recent theories have tried to steer the discussion to new spaces combining elements of collective social theory to explain place.

“Real space” is identified by Hillier (2008) to be sorely lacking at the heart of the dominant social theory, and questions the apparent unwillingness to theorise the “principle manifestation (of space) in our everyday lives” (p.223). As a solution to the apparent stalemate between social theorists and built environment professionals he offers the services of the space syntax theoretical model. The space syntax model is particularly well developed for describing place phenomena on public housing estates as these were the urban environments that were used for the construction of the theory, the decline of estates “presented a challenge (to existing) socio-spatial thought. (p.224). By putting place as the prime consideration, Hillier claims that social and economic processes can be shown to be reflections of spatial patterns and relationships. This space-first focus has not been without criticism, with many environmental designers and academics dismissing the Space Syntax model as environmental determinism (Seamon, 1994) however the model provides a powerful conceptual toolkit, one which allows practitioners to understand what influence place has upon the community but also how place is experienced, and re/produced.

Place is a concept that has been extensively explored by environmental psychologists. Of particular importance is the notion of place attachment, a cognitive bond between person and place (Kamalipour et al., 2012.) This parallel investigation of place has a lot to offer the practitioners of urban planning. For planners the dual concepts of *social* and *physical* predictors of place allow an attempt to measure the impact of urban renewal projects. Social predictors of place can be given as the community ties and networks that present the opportunity for people to engage with. These predictors are generally measured in outcome familiar to planners, those of social capital, inclusion, social engagement etc.

Physical predictors are of more interest to this research, the way in which the physical environment impacts on place. The scale, bulk and form of the urban environment present a somewhat endless opportunity to investigate the relationship that communities have with their surrounds. These are concepts that are not alien to built environment professionals, as there has long been an attempt by planners to create neighbourhoods and cities that are safe, vibrant and supportive of residents and visitors (Stein, 1928; Howard, 1902; Lynch, 1960; Wheeler, 2004). Neighbourhood is a core concept of this research; however when exploring attachment to place there can be a methodological tension between mathematical models like Space Syntax and the discussion of the subjective experience of a long term resident. Wheeler explains:

“Neighbourhood is a subjective term. For some it refers only to a few blocks around the home, or even just a few neighbouring houses or buildings. For others it may include a square mile or more, a large area containing hundreds of blocks and tens of thousands of residents or workers. The “hood” may also denote a particular cultural or social grouping of people living in proximity of one another, with little relation to any physical attributes.” (2004: 181)

For the most part, neighbourhoods are defined by built environment professionals as spaces which share common physical and social characteristics and possess “physical boundaries and focal points which, while perhaps not clearly readable to the non-resident, provide a sense of place or personal identity for the resident” (Stollard, 1991:24). Perhaps the most influential definition of neighbourhood comes from Clarence Perry, who proposed a community focused on a central public asset, with arterial thoroughfares forming defacto boundaries. This model has found favour over the last decades and has guided the development of much of Western suburbia.

Broadening the concept of neighbourhood is a particularly important. By demarcating neighbourhoods public goods, issues and social ties can be identified and addressed far more effectively. Jacobs devotes much of her treatise *The Death and Life of Great American Cities* to arguing for the innate social foundations of neighbourhoods and how they can have significant impact upon the liveability of the city. “Good” neighbourhoods, writes Jacobs “grow networks of small scale, everyday public life and thus trust and social control” (1961:119). However, Jacobs warns that to try and instil this growth by rebuilding (but not considering the design of the redevelopment) we fall into the deception of ‘salvation by bricks’ under which public housing has suffered much already.

Over time, theoretical discussion congeals into identifiable, practical concepts. Phenomenological exploration of the urban lifeworld, can be seen in *Death and Life* (Jacobs, 1961). The arguments that the street layout (pathways), built form and diversity of land uses are the key to vital urban environments and communities are present in the urban design goals of New Urbanism and traditional neighbourhood design. Similarly, Foucauldian notions of observation and constructed power relationships underlie the increasingly popular design toolkit of Crime Prevention Through Environmental Design (Parnaby, 2007). Each seeks to address the various “shortfalls” of modern urban life, be they car dependence, high rates of crime, or sustainability issues. Social outcomes are however, often abstractly portrayed. Each of the aforementioned thoroughly discuss the community, safety in urban space and the common good, however all fail to capitalise on the community development opportunities that rise from these more attractive, safer, and more sustainable spaces (Talen, 2002;Stollard, 1991).

Within public housing estate renewal and urban renewal in general, the focus upon physical change is championed to create the new place. By erasing the existing built form, urban designers are free to construct “masterplanned” estates. Vale (2002) states that this departure from the inferior design of public dwellings and estates is useful in the development of public housing communities. This is due to the distinctiveness of public dwellings within neighbourhoods which make an easy target for much of the stigma that weighs upon tenant communities. Bothwell, Grindoz and Lang (1998) describe how Traditional Neighbourhood Design (TND) (Closely aligned with New Urbanism) has been used within the United States HOPE IV program. They propose that Traditional Neighbourhood Design (TND) can be used to establish “architecture of engagement” (1998:111). Using the US example of Diggs Town, Bothwell et al demonstrates how TND has been used to constructing opportunities for outdoor socialising as well as setting up defensible space. Bothwell et al. assert that “Physical design constitutes an independent variable that influences social structure” (1998), deploying Lefebvre’s concept that while “space” is a social construct, society is equally a spatial construct.

Architecture has long been used to create and augment “place”. Villages deploy the square as their primary architectural feature, creating a space to socialise, conduct business and maintain order. Likewise, civic buildings such as courthouses legitimate authority by their appearance and position within the city. However place does not necessarily have a geographic position. Nomad settlements function and form operate independent of a changing spatial location. This is best exemplified by the Tabernacle of the post-Exodus Israelites as described in the Books of Exodus and Joshua. The Tabernacle represented to the Israelites the dwelling place of God on Earth, and despite the location of this structure moving on multiple occasions, the significance of the Tabernacle did not change (Strong, 2003). The implication of this is that settlement structures are important to the way people experience the lifeworld and attribute meaning to place, it also suggests that there may be some level of common design language that influences the very essence of urbanism (Hillier, 1989; Alexander, 1964).

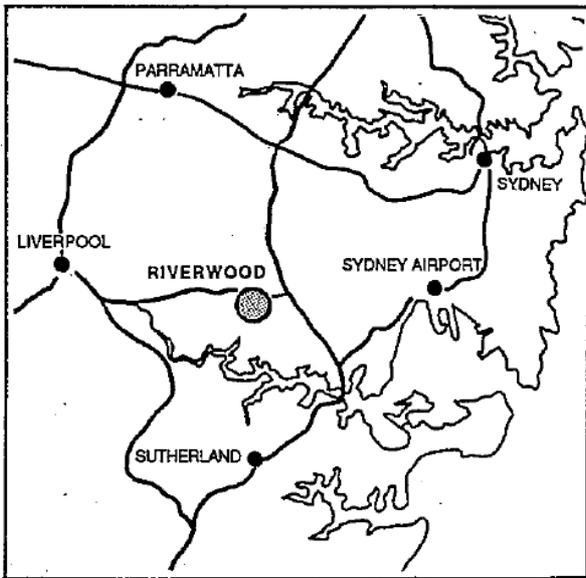
Applied to public housing renewal, there is potential for urban design and development to disrupt or enhance the lived experience of the tenant community. The nature and scale of the new development often dwarfs the original urban space, bringing new opportunities for communities to attach meaning and re/produce local culture. This paper explores ways in which existing place-identities can be used to shape and inform urban design using the redevelopment of the Riverwood public housing estate in inner South Western Sydney. Empirical research entailed archival analysis, a series of semi structured interviews, a self-administered survey and a focus group involving members of the tenant community.

The Neighbourhood Improvement Program in Riverwood, NSW

Riverwood is an established residential suburb with its commercial centre focused around the intersection of Belmore Road and the East Hills railway line. The suburb is located approximately 18km south west of the Sydney CBD and is situated within the Local Government Areas (LGA’s) of Canterbury and Hurstville. Riverwood was originally named Herne Bay after the adjacent tributary of the Georges River but was later renamed after community action (Pollon, 1988).

Riverwood has had a long association with public housing, beginning with the establishment of the Herne Bay Community Housing Centre on 27th March, 1946 (Madden, 2001). This program was undertaken by the NSW Housing Commission and was designed to address the chronic housing shortage resulting from a lack of housing development during the war and the return of servicemen from overseas (Pettigrew, 2005).

In addition to the converting existing buildings to housing units, the Housing Commission remodelled a number of buildings into various shops, factories, schools and community services (police and post offices) in an effort to establish a self-sufficient community (Madden, 2001). Over time it became evident that, despite efforts, it was hard to create a community as the converted wartime buildings were not suitable for long term occupation.



Figures 1 and 2: Riverwood within the Sydney context. Source: Conybeare Morrison and Partners 1996, GoogleMaps, 2012

By the late 1950s the deterioration of the buildings led to the progressive demolition of the “horror huts” (Madden, 2001:191). In 1964 the current subdivision of Riverwood Housing Estate was completed, including much of the current built form. The new design included a large proportion of two and three storey flats as well as some cottages. “A primary school, a cluster of shops and large areas of parkland...formed part of the estate” (Madden 2001:191). This plan anticipated a population of 3700. The development of the site was completed in 1976 with the opening of the twin eight storey apartment towers, built to accommodate the growing demand for smaller dwellings (see Figure 3).

By the mid 1990s much of the housing stock in the Riverwood Estate was in poor condition, presenting considerable management and maintenance costs. This asset concern combined with a profound change in tenant characteristics saw the Riverwood Estate increasingly marginalised and “in danger of becoming a welfare ghetto” (NSW DoH, 1996:3). Demographic characteristics of the Estate hinted at a disjointed and non-cohesive community. The 1991 Census revealed that within the Estate the NSW Department of Housing had 3300 tenants of which there was:

- “A large proportion of women, children and single parent families;
- A large proportion of older residents (over 60) and young children (under 14);
- A large number of overseas born residents, in particular non English speaking countries (Arabic and South East Asian);
- A low level of individual income, qualification or employment ; and
- A high proportion of dependency on social security payments.” (Conybeare, Morrison and Partners, 1996:8)

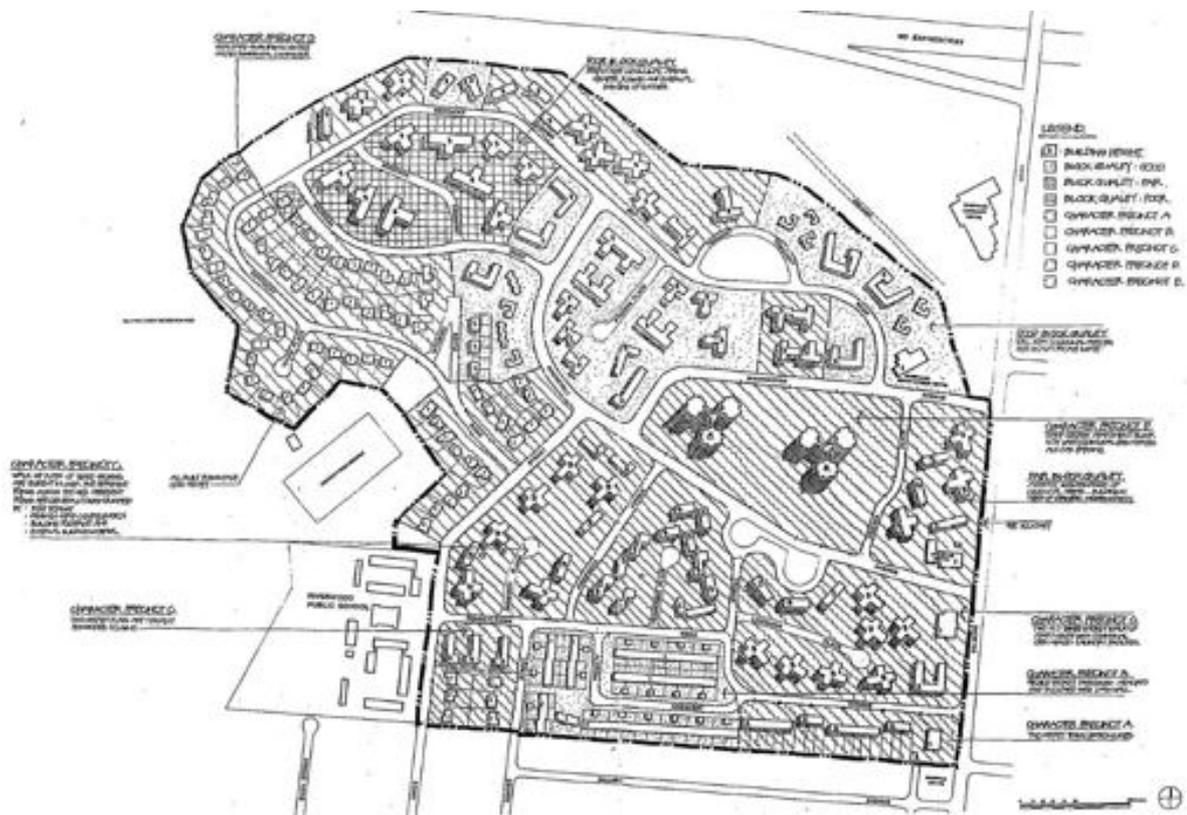


Figure 3: Map of Riverwood Housing Estate showing built form prior to NIP works. Source: Conybeare, Morrison and Partners 1996

While these issues highlight social concerns and reflect DoH eligibility criteria, it was interpreted that a physical response could be made to improve the amenity experienced. Through community consultation it was elucidated that there were significant concerns with the security and safety on the Estate. Many residents felt that the lack of dwelling privacy, fencing and landscaping was intimidating and that they felt unsafe in and around their own homes (Conybeare, Morrison and Partners, 1996). Tenants were of the opinion that improvements could be made to the Estate to remedy these concerns. Proposed remedies included measures at household, building and estate scales, including better lighting and housing, increased pedestrian amenity and private gardens (NSW DoH, 1996).

The Neighbourhood Improvement Program (NIP) was envisaged to be a comprehensive plan to combat the “emerging social and physical crises” (Judd, Randolph & Carmichael, 2001:7) on public housing estates. As such it addressed the asset based issues of the urban fabric and implemented support programs to aid improvement to the quality of life. A key feature of the NIP was its inherent flexibility, and a lack of a rigid ‘one size fits all’ mentality. This allowed the improvement program to be tailored to the specific needs of the subject estate. The Riverwood NIP, while incorporating social interventions was dominated by a commitment to improve the asset and subsequent environmental quality (Georgiou, 2009).

From the community consultation a masterplan detailing the opportunities and proposed improvements was formulated. Major goals were to:

- Establish a spatial framework within the estate to clearly define its central focus, activity zones, paths, edges and green hubs;
- Upgrade two and three storey walkup flats and bedsit accommodation within the area (including balconies and laundries); and
- Form bold open space links beyond the estate in order to reverse the presently introverted character of the site (Conybeare, Morrison and Partners, 1996:14).

Taking this consultation into consideration a number of renewal strategies were prepared for the walk-up buildings. These ranged from complete interior remodelling to a series of ‘plug on’ additions. A major objective of the Riverwood NIP was to achieve a “cost effective refurbishment of buildings and external spaces” (NSW DoH, Undated). Subsequently, a strategy of partial interior remodelling and providing ‘plug on’ additions was pursued. Plug on balconies were added, providing semi-private space and substantially

increased the living space of the units. Interior remodelling consisted of renovation work where required and the provision of interior laundries (NSW DoH, 1996c:13).



FIGURE 4,5,6 and 7: Original dwelling in 1964; Three alternative NIP treatments. Source: Madden 2001, Photographs taken by Researcher, 2009.

Plug on additions were designed to be modular, which provided simple retrofitting and the ability to build in cost effective character for individual buildings. The construction of the balconies provided a number of benefits which help fulfil other goals of the NIP. These included increasing opportunities for passive surveillance, defining visual character and providing opportunity for informal social activity.

The Riverwood NIP set out to ‘normalise’ the estate- to integrate it with the wider suburb and reduce its identification as public housing. To achieve this, a wide-ranging plan was formulated with the following objectives:

- “improve the amenity and appearance of the area;
- Clearly define spaces;
- Enclose each building within boundary fences to emphasise ownership;
- Upgrade presently under-utilised public space; and
- Form firm open space links beyond the estate to reverse the introverted character of the estate (NSW DoH, 1996a).



FIGURE 8 and 9: Defined spaces, combined with CPTED principles create safe and legible open spaces. Source: Photographs taken by Researcher, 2009.

These changes were intended to provide a new living environment for tenants, with a focus on improving the “sense of place” described by Woodward (1997).

Place Attachment and the NIP:

In terms of the Riverwood NIP we are given a clear case study of how place attachment can be modified by implementing changes to the built environment. As Davison and Rowden (2012) assert urban renewal “will invariably have an impact upon the physical form, meanings and experiences of a place” (pg.189). As previously stated, the NIP was a physical response which sought to stabilise the resident community. The Riverwood estate was difficult to manage, with high proportions of households in rental arrears or requesting rehousing to different estates. It was hypothesised that by creating a more appealing living environment that these issues might be addressed. For the purposes of this paper, the results of a tenant survey and Housing New South Wales tenant data will be used as a proxy for place attachment.

The methodology deployed for this paper was to approach the concept of place from two directions, specifically, place as experience and spatial form using discourse analysis, photographic survey and a tenant survey. The survey instrument was designed to elucidate the tenant experience of the NIP’s impact upon the estate. Questions were based within the literature of place management and urban design, with a strong focus upon discerning the way residents used space, how and where they socialised and the strength of their bond to their home and the estate. These results were then compared to the tenancy management records of HNSW to test if a correlation between the two existed.

One of the key objectives of the redevelopment was to reassign confused open space to places and individual buildings, creating a sense of neighbourhood identity and reducing perceived isolation of individual unit blocks (NSW DoH, 1996a). Woodward identifies the consequences of confused space, asserting “what is missing here (estates), but enjoyed in other neighbourhoods in towns and cities across Australia, could be best described as a ‘sense of place’” (1997:27).

Architectural consultants identified that this lack of place was caused by shortfalls in the original ‘organic’ urban design solution (Conybeare Morrison and Partners, 1996). A lack of site foci, undefined areas of public and private space and an undefined hierarchy of linkages meant the site was unappealing and unsuitable for walking or other outdoor activity. In addition to discouraging social activity, the design contrasted Riverwood against surrounding neighbourhoods, serving to isolate residents from both each other and out of the estate.

Survey data reveals that the work to define spaces has been successful with the majority of respondents reporting that they enjoy a strong feeling of safety in their neighbourhood (see Figure). The definition of a linkage hierarchy among public spaces has provided a pleasant and safe walking environment, creating neighbourhoods people *want* to live in rather than willing to live in.

As can be seen in Figures 10 and 11 there is a high degree of neighbourhood pride and satisfaction, which are regarded by many to be the foundations of community stability and development (Duany, A. and Plater-Zyberk, E. 1994, Wheeler 2004).

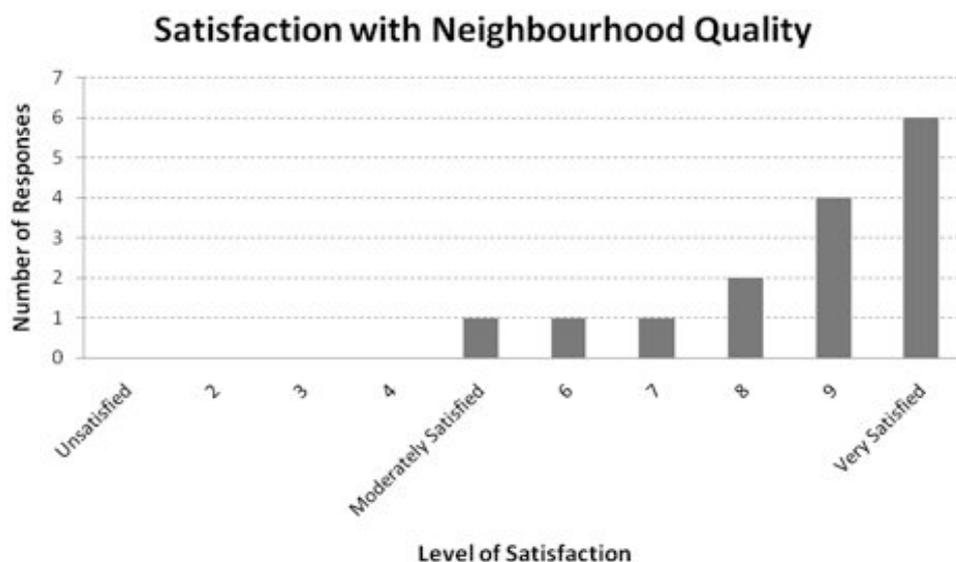


FIGURE 10: Satisfaction with neighbourhood quality of Riverwood, survey results. Source: Self-administered survey, 2009.

Neighbourhood Engendered Pride

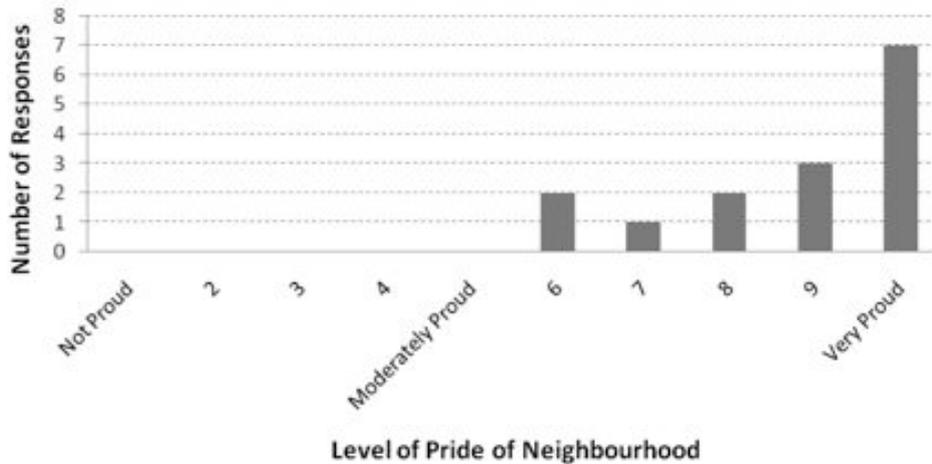


FIGURE 11: Neighbourhood engendered pride in Riverwood, survey results. Source: Self-administered survey, 2009.

Survey and interview results show that the NIP has had a positive impact upon place attachment for Riverwood, with many respondents reporting a high degree of neighbourhood engendered pride and attachment. HNSW has not undertaken the qualitative data collection (Nejaim, 2009); however the asset management data revealed that the NIP had been successful in stabilising the community.

Figure 12 shows the frequency of rehousing requests made within the Riverwood estate. The downward trend since the NIP is apparent however the recent increase in rehousing requests is unclear. Figure 13 shows the steady decrease of tenancies in arrears on the Riverwood estate, this demonstrates a growing desirability of the estate, with tenants more willing to make punctual rent payments. Figure 14 shows the average vacancy rate recorded for the Riverwood estate. The downward trend is apparent confirming the tenants improved willingness to live there.

Approved Transfers in Riverwood (2001-2009)

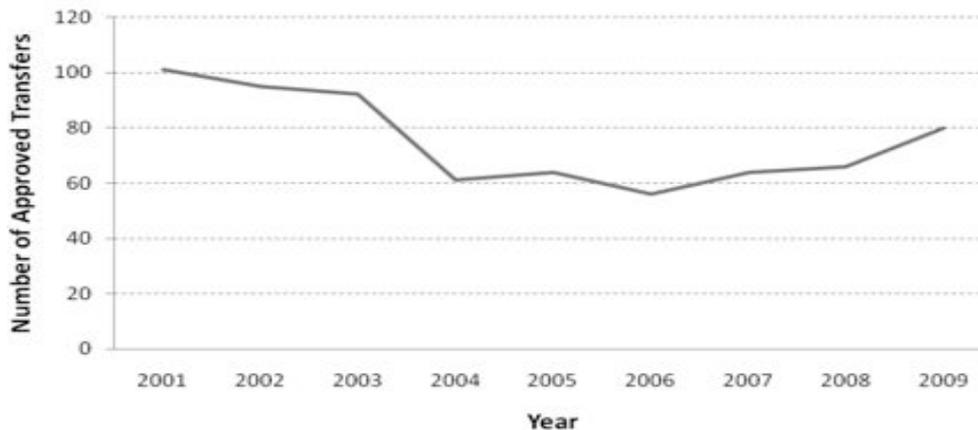


FIGURE 12: Approved transfers in the year, 2001-2009. Source: Housing NSW, 2009.

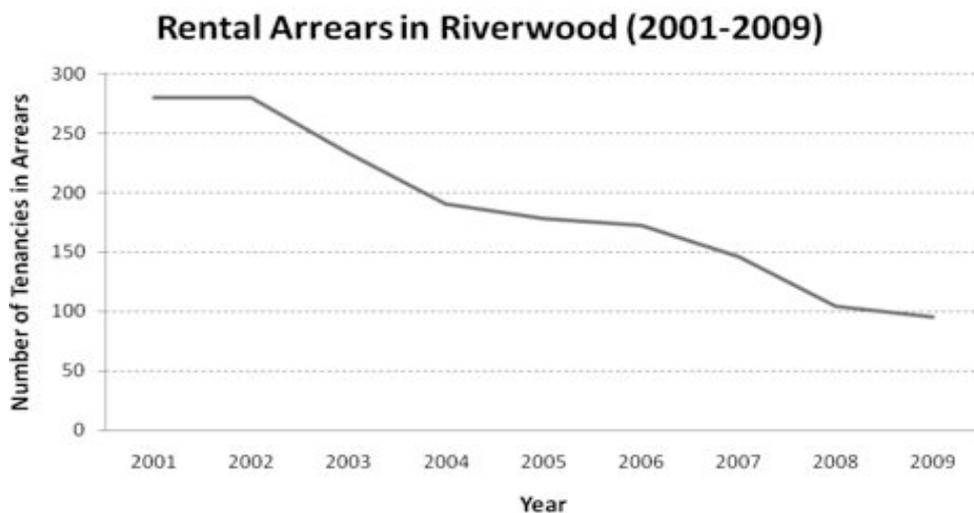


FIGURE 13: Rental arrears in the year, 2001-2009. Source: Housing NSW, 2009.

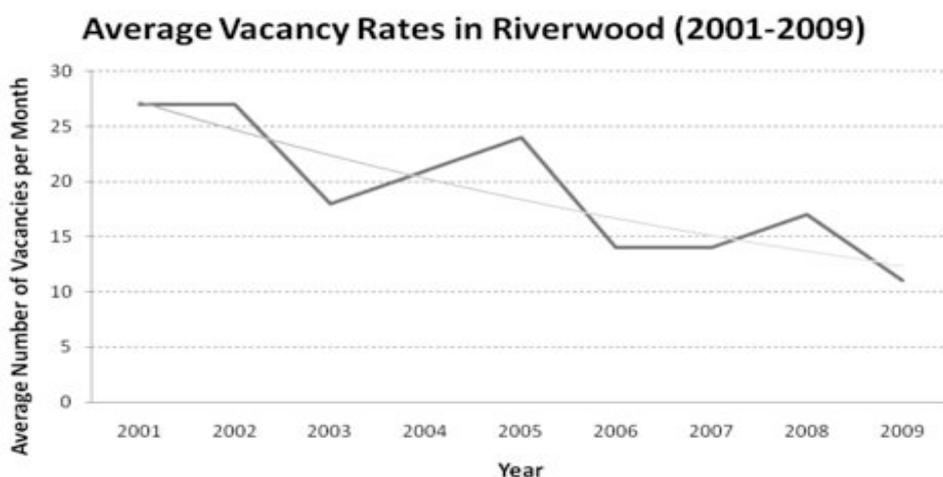


FIGURE 14: Average Vacancy Rates for DoH assets 1996. Source NSW DoH, 1996.

This correlation between the qualitative and quantitative data supports the hypothesis that physical modification of existing urban form can have an impact upon place attachment. This is encouraging for future work into this area as there remains to be any conclusive work exploring the effects of the current “estate renewal” model favoured by State Housing Authorities upon tenant communities and place attachment.

Conclusion

Through the discussion of the relevant literature and the exploration of the Riverwood case study, this paper set out to link improvement in the built environment to an increase in the experienced place attachment for the community. Analysis of the collected data demonstrates that providing an environment that is attractive and allows people to socialise, enjoy privacy, and engage with space made a measurable improvement to place attachment in Riverwood. This has the flow on effects for HNSW as the administrative cost of tenant management are reduced and the benefits of any community development work undertaken is likely to have a greater impact. Despite this link being made, SHA’s are not undertaking this style of redevelopment, preferring large scale “estate renewal”, there remains to be seen if similar impacts upon the people-place relationship can be detected when there is such extensive change to the urban and social fabric. Further research and investigation is warranted to ensure the best outcomes for SHA’s, tenant communities and other stakeholders.

References

Alexander, C. (1964) *Notes on the synthesis of Form*, New York: Oxford University Press

Altman I, and Low, S. (1992) *Place Attachment*. Plenum Press, New York

Bothwell, S., Gindroz, R. and Lang, R. (1998), “Restoring community through traditional neighbourhood design: A Case Study of Diggs Town Public Housing”, *Housing Policy Debate*, Vol. 9, Issue 1, pp.89-114.

Casey, E. (1997) *The Fate of Place*, University of California Press

- Coleman, A. (1985), *Utopia on trial: vision and reality in planned housing*, Hilary Shipman, London.
- Conybeare, Morrison and Partners (1996) *Riverwood masterplanning and estate improvement study*. New South Wales Department of Housing, Sydney.
- Davison, G. and Rowden, E. (2012) "There's something about Subi': Defending and creating neighbourhood character in Perth, Australia", *Journal of Urban Design*, Vol. 17, Issue 2, pp.189-212
- Dovey, K. (2010) *Becoming Places*, Routledge
- Duany, A. and Plater-Zyberk, E. (1994), *The new urbanism: toward an architecture of community*. McGraw-Hill. New York.
- Jacobs, J. (1961), *The death and life of great American cities*. Random House, New York.
- Foucault, M. (1979) *Discipline and Punish*, New York: Vintage
- Heidegger, M. (1927) *Being and Time*, New York: Harper
- Howard, E. (1902) *Garden Cities of To-morrow*, London: S. Sonnenschein & Co
- Hillier, B. (2008) "Space and spatiality: what the built environment needs from social theory", *Building Research and Information*, Vol 36, Issue 3, pp. 216-230.
- Hillier, B. and Hanson, J. (1984) *The Social Logic of Space*, Cambridge: Cambridge University Press
- Le Corbusier, (1927), *The city of to-morrow and its planning*. Dover Publications, New York.
- Lefebvre, H. (1991) *The Production of Space*, Oxford: Blackwell
- Lynch, K. (1964) *The Image of the City*, Cambridge, MA: MIT Press
- Madden, B. (2001), *Hernia Bay: Sydney's wartime hospitals at Riverwood*. Canterbury and District Historical Society, Campsie.
- Newman, O. (1972), *Defensible space: crime prevention through urban design*. Macmillan, New York
- New South Wales Department of Housing, (1996a). *Riverwood looking good*. New South Wales Department of Housing, Sydney.
- New South Wales Department of Housing (1996b), *New South Wales public housing design: a short history*. New South Wales Department of Housing, Sydney.
- New South Wales Department of Housing (1996c), *Riverwood Strategy Statement 1997/98*. Unpublished internal document
- New South Wales Department of Housing (Undated), *Riverwood NIP Stage 2 Feasibility Sketches*, Unpublished internal document
- Norberg-Schulz, C. (1980) *Genius Loci*, New York: Rizzoli.
- Parnaby, P. (2007) "Crime prevention through environmental design: financial hardship, the dynamics of power, and the prospects of governance", *Crime, Law and Social Change*, Vol.48, Issue 3-5, pp.73-85
- Pollon, F. (1988), *The book of Sydney suburbs*, Angus and Robertson Publishers, Sydney.
- Relph, E. (1976) *Place and Placelessness*, London: Pion
- Seamon, D. (1994) "The life of the place: a phenomenological commentary on Bill Hillier's theory of space syntax", *Nordic Journal of Architectural Research*, Vol. 7, Issue 1, pp.35-48.
- Stollard, P. (1991), *Crime prevention through housing design*. Chapman and Hall, London.
- Strong, J. (2003) *The Tabernacle of Israel: Its Structure and Symbolism*, Kregel Publications
- Talen, E. (2002), "The social goals of new urbanism", *Housing Policy Debate*, Volume 13, Issue 1, pp.165-188.
- Tuan, Y. (1977) *Space and Place: The Perspective of Experience*, University of Minnesota Press
- Vale, L. (2002), *Reclaiming public housing: a half-century of struggle in three public neighbourhoods*. Harvard University Press, Cambridge.
- Wheeler, S. (2004), *Planning for sustainability*. Routledge, New York.
- Woodward, R. (1997), "Paradise lost: reflections on some failings of Radburn" *Australian Planner*, Vol. 34, No. 1, pp. 25-29

Encountering Ethics and Politics through International Planning Field Studies

Andrew Butt & Rangajeewa Ratnayake

Community Planning & Development Program, La Trobe University, Bendigo

Abstract

The possibilities of internationalised planning curricula are manifold. For students this includes scope to expand their horizons for planning careers and to develop reflective understandings of planning issues in their 'home' environment. For educators, it provides a fertile environment for exploring cross-cultural encounter, space to investigate varied planning traditions, and to situate examples used throughout the literature and in class-based settings. These possibilities are well-discussed in literature emanating from a range of disciplines, including planning. In planning, professional and academic discourse offers a way for students to communicate and conceptualise field studies within a common (universal) understanding of traditions of planning practice and public policy solutions. The ethical and political implications of working internationally can, however, be masked within this situation. Planning is inherently political, and contextual yet the explicit dilemmas of the political and economic setting can appear hidden within a short, project-focussed, planning field studies exercise. Using the example of three field/project visits in tsunami and conflict affected areas of Sri Lanka, this paper will explore issues in incorporating awareness of ethical dilemmas and political settings into the project.

Keywords: *ethics, cultural literacy, international study*

Introduction

The desire for an internationalised curriculum in Australian universities, including within planning programs, is considered central to the development of culturally competent professionals able to work within diverse settings and environments. For planning educators, the dilemmas of meeting these objectives include a need to consider the possibilities and limitations of a globalised approach to planning, and the capacity to demonstrate diversity through various education settings. While these objectives are often interwoven into the classroom setting, the international field study example is considered to offer a most effective way to explore the practices of planning in 'other' settings, and to provide examples for reflection in the 'home' setting. Activities including student exchanges, overseas (travelling) studio projects and study tours provide instances of this approach within tertiary study.

The planning student experience of these activities is wide-ranging, and strongly personalised, but typically includes an expanded awareness of the scope of professional planning practice and the development of a *critical reflexivity* in relation to previously assumed norms of planning and urbanism at home. Further, an often-reported outcome relates to learning from the encounter of difference with consequent benefits for engagement and communication in planning practice (Abramson 2005, Yigitcanlar et al 2009, Butt et al, 2011). This final issue, while broad, suggests a range of questions regarding the cultural, political and socio-economic setting of the international experience. It is this final subject that is the focus of this paper; the way in which Australian planning students consider the ethical and political setting in relation to project activities and personal encounter in a developing nation. The paper will report on student feedback and supervisors' observations over three annual international field studies programs in Sri Lanka undertaken alongside local planning students with consideration of the planning values and knowledge that appear universal to the discipline and those contingent upon the cultural, economic and political setting.

Planning and International Experience

The internationalisation of planning practice and education is challenging for students and professionals. Dilemmas of understanding, assumptions of professional norms and challenges to the value of knowledge are overt, yet these experiences potentially serve three important purposes. They create reflection in values and cultural literacy in engagement and encounter, create a sense of participation in a 'globalised' profession. Ultimately they expand and deepen students' knowledge, skills and experience, which are valuable for students' personal and professional development and relevant in any setting.

The internationalisation of planning education is often recognised in course and subject design and through student demand, with many students demonstrating a strong personal and professional interest in international study opportunities. The possibilities of international careers in planning among Australian students, whether in the developed or developing worlds, are considered positively. The forms that this 'internationalisation' takes vary and could be considered to include attention to 'global' issues of population,

governance and urbanization, the encounter provided by the presence of international student cohorts and also the opportunities to study abroad as a studio/project or on exchange.

International engagement opportunities feature in higher education in Australia and elsewhere, most strongly in relation to the attraction of international (fee paying) students, but also through the recognition of the relevance of international research linkages, student exchanges and student mobility. Harman (2005) describes the emergence of an internationalisation *imperative* within Australian higher education in recent years, and while dominated (perhaps fleetingly) by an international education 'market', the benefits of encounter and outward movement are seen positively. Similarly, Absolum and Vadura (2006) recognise that "simply adding international content is not enough" (p332) in their study of students at the University of South Australia; students consider *interaction* to be a critical part of their education. Clifford (2009) identifies that less 'pure' disciplines are able to contextualise these experiences well – a seeming advantage for planning education.

Internationalised planning curricula are identified in the literature as a product of an expressed need and awareness from staff and students. Ali and Doan (2006), for example, identify emergent strategies for internationalisation in their survey of planning curricula in the United States. Goldstein et al (2005) suggest a globalisation in the planning academy, and describe a multi-national collaborative project where, despite some limits to 'direct relevance' of the experience, the development of culturally aware professionals was enhanced. Dandekar (2009) offers support for international encounter and collaboration in smaller planning schools due to more limited opportunities for encounter.

In Australia, the value of an internationalised planning curriculum is identified as critical in the *Accreditation Policy for Recognition of Urban and Regional Planning Qualifications* (PIA, 2010) where a capacity to work in diverse communities is identified as a critical professional competency. In their review of Australian planning education for Planning Institute of Australia (PIA), Gurran et al (2008) discuss adaptation to 'unfamiliar' settings and appreciating international concerns as important inclusions for contemporary planning education.

Ethics, Politics and Experiential Learning

In disciplines such as planning, experiential modes of teaching and learning are often common and have a long history through fieldwork and studio/project activity. A primary intention of such experiential approaches is to explore a range of themes and issues through the context of a project, problem or encounter. Consequently (and evidently), context matters; with the social, environmental and political setting being entangled in the project space. For students, this means that such factors are central to the project task, rather than a potentially decontextualized example in the classroom. Such approaches, while potentially powerful, also assume and rely on this understanding, notwithstanding the preparation and pre-briefing that is typically associated with these activities. In this regard, the ethics, cultures and politics of doing planning are in fact given prominence in informing and guiding method and practice. In an international setting these elements are amplified through cross-cultural understanding, or lack thereof, and familiarity with the agenda for planning practice and priorities.

The dilemma of planning as a universal and local project has been identified in the internationalisation of planning knowledge and practice since the early 20th Century (Ward 2000 & 2010), with developmental phases of the post-colonial era being the most acute examples of where context, cultures and priorities have collided with an international (usually developed world) agenda for planning. That this began to change as difference became increasingly acknowledged (Sanyal, 2010) has not necessarily reduced the individual (ethical) dilemma of identifying what useful and universal professional knowledge suits international transfer and what is culturally contingent, or based-in-place. Un-weaving this difference is of import not only to international circumstance, but is also central to reflexion in practice and the communicative 'turn' in planning and consequently to the ethical stance of planners working both at 'home' and internationally.

Healey (2012) identifies that while the decline in the unitary 'modernisation' myth in planning has allowed, and indeed required, reconsideration of the transferability of knowledge, practice and techniques scope remains for shared learning and exchange of knowledge, despite the packaging and decontextualizing of so many examples in contemporary practice. She contends that while ideas and assumed 'good' practices still flow, they continue to risk a new hegemony at the expense of locally-developed invention. Yet rejecting such transfer potentially results in extreme localism – hence the need for universality of some ideas, with others being contingent on context. Healey concludes that a 'dynamic contingency' or reflective consideration of universal planning ideas is necessary – however this throws up new challenges for internationalised education and students and professionals negotiating this dynamism by making choices regarding the suitability of transfer for their developing planning knowledge. The crucial questions appear to relate to the capacity to make judgements regarding an appropriate stance or action (or planning practice) that is neither ill-suited nor lacking cognisance of the setting, while recognising that elements of 'good' planning practice are potentially pervasive, including those relating to an ethical stance such as equity, justice, as well as

aspects more technical in nature. Bender (2012) reflects on Bourdieu's notion of *habitus*, or assumed norms in practice, to demonstrate how deeply structural these might be in planning. Again this challenges the ethical stance of planners to consider and separate *aconscious* knowledge and practice from contextually contingent aims and values, and perhaps international immersion offers this opportunity most readily. In this reading, Bourdieu (1977) offers an internalised (or individualised) reflection on communal practices or dispositions – when professional practices are considered in an international setting, such assumed norms cross between cultural (individual) actions and professional (and sometimes institutional) practices, with the two facets both aligned and divergent within national and professional cultures.

Consequently, for students involved in international settings, ethical dilemmas exist not only in knowing, and in learning from habits in practice grounded in culturally contingent settings, but also in reflecting on suitable lessons for transference – an issue that extends in both directions. In this regard, we consider a range of potentially 'contingent' issues that consistently confront our Australian planning students in Sri Lanka: (i) the exercise of patronage politics and power, (ii) the resources and priorities of development and (iii) the nature of informality in the use of space and the development of the urban environment. At times each of these issues have confronted and confounded students, requiring navigation and negotiation of ethical questions of the application of lessons and knowledge from elsewhere and the applicability of 'universal' planning ideals, all while operating in the familiar context of (nearly) familiar planning language, historical conventions and administrative structures. We outline these issues below.

Sri Lankan Planning: from post-colonial lessons to globalisation

The contemporary Sri Lankan planning system is largely a product of a British colonial heritage. Similar to other colonies, British colonial government introduced statutory frameworks to enforce and prepare development plans in cities and regions in Sri Lanka (*Housing and Town Improvement Ordinance* 1918; *Town and Country Planning Ordinance* 1946). This planning system produced a rigid, top down, centralized master-planning approach that dominated in 1930s and 1940s. The involvement of planners such as Patrick Abercrombie and agencies including the United Nations Development Program (UNDP) reinforced the 'borrowed' planning of the colonial era even after Sri Lanka gained independence in 1948. Master-planning approaches combined with rigid textbook planning continued until the 1970s - for example, the Colombo Master Plan of 1974. These were broadly consistent with centralised planning approaches exercised in other areas of public policy during the post-independence period, such as those in economic development. The goals of past master-plans were not successfully implemented and therefore such plans did not produce the desired development at the ground level (Steinberg 1984, van Horen, 2002). This has been attributed to the often-identified drawbacks of master planning processes including inflexibility, lack of fluidity, inability to tackle uncertainty and inability to cope with the rapid urban growth that occurred in main urban areas during 1980s (Horen et al, 2004) as well as to the suitability of goals to local problems. Unresponsive and rigid planning legislation that supported the master-planning process also fuelled the situation. The new economic liberalization policies that had been introduced in Sri Lanka from 1978 changed the urban landscape at an unprecedented rate. The out-dated statutory framework, centralized institutional structure and inflexible processes of planning were poorly suited to the emerging trends of economic and population change in the 1980s. The pressures of urbanization emerged as the critical planning issue from this period.

Emergent approaches to planning

In order to manage the growth, guide the future development in urban areas with an integrated perspective and effectively enforce the statutory planning framework, the Urban Development Authority (UDA) was established in the 1980s. The UDA planning process provided a new framework to prepare much needed strategic plans with a more flexible structure planning perspective. The *Colombo Metropolitan Regional Structure Plan* (CMRSP) (UDA, 1998) and the *Colombo City Development Plan* (UDA, 2001) are two examples of this new trend, which went beyond conventional master-planning processes.

The introduction of the National Planning Department (NPPD) in 2001 offered a statutory framework to prepare a national level structure plan and provincial level plans (*Town and Country Planning (Amendment) Act*, 2001). This resulted in the NPPD preparing a national level structure plan to 2030 with potential growth centres across the island (*National Physical Structure Plan*, 2005). Subsequently, the plan has proposed nationally important strategic projects including ports, domestic and international airports and highways. Since 2005, the incumbent government has taken measures to implement identified strategic projects (often through foreign direct investment) particularly evident in the Southern Growth Centre area under the *Hambantota Regional Development Plan* (Urban Development Authority 2007). The Hambantota plan has received much needed political patronage from the Sri Lankan President (as this is his hometown) and the international funds to construct an international airport, harbour, international cricket stadium, and several infrastructure projects (water, transport and others) have mainly involved investment from Chinese government agencies (De Alwis, 2010).

Contemporary Sri Lankan planning in a global setting

The new developments described above have not been exclusive to Sri Lanka. It is a local response to changes that have occurred with globalization led by neo-liberal economic forces. Since the introduction of neo-liberal economic policies from 1977, physical planning needed to operate within a new market economy. The development of an approach to planning that sought to support foreign direct investment, decentralized decision-making, explored models of public participation and the developed the rule of law, influenced planning in Sri Lanka as a system and practice (Steinberg, 1984). The introduction of regionalism through regional planning, amendments to planning laws to prepare plans, control developments and involve the public were linked to the influence of globalization and market-led investments, as well as to shifting notions of 'good' planning. Further, the Sri Lankan planning system has adopted a more flexible strategic planning approach in relation to both land use and economic development planning. The introduction of exclusive economic zones under the Board of Investment (BOI) in Greater Colombo and other regional areas are a good example of this emergent flexible-development agenda in planning. As in the immediate post-colonial period, planning approaches have borrowed from contemporary international approaches; North American, Singaporean and European models (Munasinghe 2007, King 2004, Ward 2010) in areas of planning practice (for example a communicative 'turn') and in areas of development priorities (decentralisation, expressways, ring-roads for example). In this regard, planning process, legal frameworks, implementing institutions and planning language are very similar and easily exchangeable for Australian students and practitioners.

How is Sri Lankan planning unfamiliar to Australian planners?

As Healey (2012) describes, the universal knowledge and practice of planning is contrasted with elements that are contextualised in place. From an Australian planning perspective, the 'contingent' or 'unfamiliar' roles of planning, planners and conceptions of planning relate to issues including the visible exercise of power and patronage, the collisions of traditional and introduced models of administration, resources to realise planning outcomes and the informality of urbanization and development in general.

Politics, centrality and power

Like many other developing nations, Sri Lanka has a very centralized political and administrative structure. Planning is practiced within this framework. Theoretically, planning is a devolved activity through the devolution of several powers to regions and local governments under the 13th Amendment to the Sri Lankan Constitution (*Constitution of Sri Lanka* 1977). Therefore, at present, Sri Lanka has national level political and administrative structures to prepare and implement physical plans as well as provincial level administrative and Local Authority (LA) level structures to prepare and implement provincial level and local level plans. However, in practice, like other political activities, planning process and implementation procedures operate within the structures of a centralized political system.

Demonstrably, planning and politics are inherently linked, perhaps more overtly than in many other jurisdictions. Similarly to many developing nations, planning in Sri Lanka is a project of a state-directed future (Rakodi, 2001) and, while planners are equipped to operate in a neutral way, Sri Lankan provincial council and local authorities have organised along sectoral lines with relationships to central power. They do not have autonomy to guide their future in policy making. Nor do they have a fiscal base to realise development plan proposals. Hence, their autonomy has been crippled and they have been reduced to focusing on crisis management, waste management and a handful of welfare services. Therefore, strategic decision-making at the local level has been practically impossible due to lack of autonomy in decision making, weak fiscal base, restrictions imposed on the central government's borrowings and the weak financial position of the central government to invest in infrastructure, as in other developing nations (Rakodi, 2001) The prevailing provincial and local government systems has resulted in dependency on the central government. Instead of implementing proactive plans, provincial and local government have become agencies to disseminate central political agendas and strengthen the voter base of the centre.

Most provincial and local governments are poorly equipped with professional planners, engineers, architects, and technical officers. Nor do they have modern facilities to prepare and enforce statutory plans such as computers, databases, software and Geographical Information Systems (GIS). Again this is connected with a weak fiscal base of the LA to recruit professionals and also a lack of funds from the central government to employ such professionals. This has resulted in central government planning agencies, for example the UDA and NPPD, wholly (and sometimes remotely) preparing plans for provincial level and local level entities. While legally it is expected that the LA will contribute to planning, their capacity for contribution is minimal, resulting a lack of "ownership" from provincial politicians and community stakeholders.

Formal, informal practice and politics

As in many other countries in the developing world, two forms of development practices exist in Sri Lanka: formal planning practice (statutory practice) and informal development practice. The former is the "rulebook" practice where planning approvals, implementation of action projects, land acquisitions etc. are undertaken

according to regulation provided in the development plan and other documents. The latter, informal, procedure of development occurs outside of the development plan. This includes unauthorized constructions, unauthorized reclamation of land for development activities and unauthorized land conversion for housing. This is not a recent phenomenon and it has existed in mainly urban areas in Sri Lanka at least since independence.

One reason for the informal practice is the lack of public familiarity with regularised procedure in relation to tenure, construction and subdivision. Another reason for this is the behaviour of law-makers, administrators and politicians. Local and higher level politicians consistently neglect the system due to legitimate *political* reasons (electoral advantage). This often results in short-term precedent over long term strategy, for example in implementing zoning regulations. Typically, illegal construction is ignored where political advantage is identified. Patronage politics deregulates planning by exempting those with political contacts from directly complying with regulation. In addition, more direct corruption through bribery of both politicians and planners is evident (The Sunday Times, 2012).

An important outcome of these informal practices is the prevalence of informal development, mainly in urban areas. A vast number of squatter settlements (REEL, 1998), unauthorized constructions and unauthorized land filling occur on a day-to-day basis in all cities in Sri Lanka. Of course, this is not unique to Sri Lanka – it is happening in most developing nations, often at much greater rates.

Yet such informality in development and process cannot simply be understood as an absence of planning. Informality is commonly understood as a form of 'institutionalised regulation' (Castells & Portres, 1989). In this view, informality is imagined as a 'para-legal' process (Chatterjee, 2004) or 'extra legal' (de Soto, 1989). Informality in planning has also been understood in terms of wealth and power (Roy, 2009). However, informality has also been identified as a feature in planning which can be used as a valuable strategy (Innes et al, 2007). From this perspective, planning strategies should not be limited to prescribed or proscribed activities. This idea of informality implies a casual, flexible and spontaneous framework for planning strategies and development activities, which are very much aligned with neo-liberal principles. But informal planning in Sri Lanka and other developing nations are, in reality, often very much related to deregulation, politicization, limited resources and the fragility of authority (Roy, 2009).

This is where we consider informality reveals considerable ethical challenges. While normalised in practice, informality in planning of Sri Lanka is associated with poverty and power. Squatter settlements and related activities are often termed as illegal developments, yet some State-led land developments can also occur through informal practices. For example, land fillings for development projects are conducted by the state and land subdivisions are permitted without following proper legal process. Similarly, the wealthy produce informal landscapes of development in peri-urban areas and thus produce informal urbanization. Class, connection and power ensure infrastructure, services and legitimacy.

Informality in planning can also be attributed to social relationships and traditions. That the exception of certain regulations can be based on friendship, contacts and party support reflects the social values of the country. At the same time, allowing substandard housing and land development for the poor denotes tradition and socio-cultural relations, expectations and priorities. However, cultural values conflict with globalised expectations of governance. The extent to which the practices of informality should be accepted (or tolerated) given the power relations at their heart is a crucial ethical dilemma for planners.

These practices are internalized in the planning and administrative culture. Therefore, local planning students can easily comprehend these hidden dynamics and its relationship to development in the local built environment. However, foreign planners and planning students need to realise this duality: the formal functioning planning system backed by legality and the informal, unwritten and invisible system that has strong links to politics. This is not to suppose an absence of informal power relationships in Australian planning, but rather to emphasise the very apparent duality of formality and informality as (both competing and at times complementary) explicit, and largely unremarkable, elements of the development process in Sri Lanka.

The international planning project: Australian students' encounter with ethical challenges

Since 2010 the authors have participated in the design and co-ordination of three annual planning projects involving Australian planning students from La Trobe University (both undergraduate and postgraduate, with and without some form of professional experience in Australia) travelling to Sri Lanka to undertake regional and local strategy development with students in a later years of an undergraduate at Moratuwa University, Sri Lanka. Project locations and focus have varied, however, the intent has remained on engaging in the processes of local communication, data collection and strategy development in a mixed team-work setting. Project activities have generally focussed on spatial planning issues, but have sought to encompass elements of community engagement, local economic development and exploration of local governance issues. Some learning outcomes and students experiences from past activities have been reported elsewhere (Butt et al, 2011) and are considered to include negotiating varied cultures of planning practice,

developing cross-cultural literacies and building a reflective approach to planning activities at home. The authors of this paper have a background in planning and planning education in each country, and had been previously involved in planning exchange activities in Australia and Sri Lanka organised through a Planning Institute of Australia-Red Cross post-tsunami project.

The projects have involved the mixed student groups undertaking field studies, survey activities and community meetings over various years in a number of locations, typically non-metropolitan urban centres in Sri Lanka. These have included the mainly rural Uva Province in the south-eastern highlands, Hambantota which is a tsunami-affected city in the south where significant new investment in metropolitan-scale infrastructure is occurring and Trincomalee, a city on the east coast where both post-tsunami and post-conflict redevelopment remain priorities. The project field activities were supported by lectures, seminars and workshops in the field setting and on return to the Sri Lankan university. The project activities have been framed within consequent visits to Australia from Sri Lankan staff and students and ongoing student association connections.

Over 50 students have visited Sri Lanka and responses to the program have been obtained through pre and post visit surveys, interviews, student reports and author observations for each visit and additionally, in early 2012, an independently-facilitated focus group comprising a sample of students and graduates from each of the three project visits (2010-2012). Student feedback has identified that these activities have been supported by the shared knowledge and language of planning theory and practice (Healey's 'universals'), as a consequence of their studies. In contrast, Australian students have also identified that they have been challenged by the different understandings of critical issues (culturally contingent) in development and the local agenda for planning practice. These issues include housing, transport, cultural practices in the use of public space, informal development, political objectives and the priorities for planning policy.

Student Awareness and Response: understanding, transference and ethical encounter

Student responses have tended to consistently identify a desire to learn from a new setting as an objective and motivation for participation – an ethical standpoint for planning professionals. Of course in part this is a self-selecting group of willing participants seeking an international experience. However, on return, reflections vary in two critical ways; in terms of the capacity to offer input rather than to simply 'observe', and in relation to the lessons this experience provides for practice or professionalism back in Australia.

Working along with Sri Lankan planning students confronts Australian planning students. For some students disjunctures between their planning knowledge and local practice results in a variety of participation responses in cross-cultural communication. Students dedicated considerable discussion and response to their preparedness for identifying planning priorities and for understanding the limits and boundaries to planning in Sri Lanka. The unfamiliarity of development (informality) contrasts with the familiar language and structures of planning as expressed through legislation and strategy, as learned by students in their home context. Walking between these extremes is a challenge identified by many participants.

"...the issues are so different, I couldn't see what to do." (Student Response 2010)

"...no matter where planning is practiced the fundamental planning principles are the same however the manner in which it is practiced and implemented must reflect the local situation." (Student Response 2011)

"What works in one country may not work in other - one solution is not the only solution" (Student Response 2011)

Critically, students are often strongly aware of the lack of direct applicability of their own (Australian) planning project examples, however *expressing* relevant planning ideas within the mixed student team in the project setting often emerges as a greater challenge. Many identified that the modes of communication and indeed of cultural practices of working in group-settings and the roles and status of participants, including local agencies, are more fundamental. Survey and interview findings tend to indicate that while students are aware of the need to develop cross-cultural literacies the skills in this area their pre-tour expectations appeared to under-estimate this challenge when in Sri Lanka. Many students indicated their literacies were not as developed as they had hoped. In this regard, student responses included:

"...Australian students tend to speak first, rather than listen." (Student Observation, 2012)

"The experience reminded me that all you can do sometimes is sit and watch, instead of trying to influence activities...in a cross-cultural situation." (Student Observation, 2012)

The authors observed a range of student responses including those who adamantly attempt to apply their 'Australian' planning knowledge and techniques, to those who appear to retreat from participation – and of course many participants operating between these extremes. Each student has had to negotiate his or her capacity to actively participate socially within the group and in relation to their knowledge of planning within the local context. Some students take on a different identity within the group than they are accustomed to,

while others enact a familiar or accentuated role in group-work as they adjust to the different modes and expectations of student group work, a cultural factor in the practice of planning. For some, the experience represents an opportunity to influence projects with assumed 'universal' planning knowledge – for others it suggests they lack useful contribution.

Encountering Power and politics

Similarly, contrasting views are held in relation to transferability to Australian planning practice. While a majority consider the experience as useful for reflection on practice at home, others consider the differences too great to extract value and transferable lessons. In some ways the starkness of the Sri Lankan situation suggests explicit linkages between power, politics and planning in ways that are masked and implicit in an Australian context.

The authors observed an awareness among students of the implications of politics in decision-making and the power relationships evident in the built-form of the urban landscape – particularly the informality of development and land use. The overt ethical challenges of working in a post-conflict society where political power has become increasingly centralised appears evident to all fieldwork participants from the early stages of the visit. These situations are discussed at length in pre-tour briefings and general media coverage of Sri Lankan politics generates interest prior to and during visits. The ethical implications of this (what?) for planning practice, while discussed are often poorly considered among students, but become clearer after discussions with Sri Lankan students and planners, and through field observations.

“...I have gained an appreciation of the bureaucratic and social barriers to planning in a developing country” (Student Response 2010)

For students, the ethical challenges of considering these processes as being either immovable problems, opportunities for change, or culturally appropriate responses to local circumstance arises consistently in in-country discussions and also after our return. Student responses reflect both their unease with the jarring informality, and surprise and a desire to understand how such systems and places function despite the apparent lack of order and formality typical in urban Australia.

“...with less order and structure in the public realm including roads, shopping strips, and other civic spaces can still actually function efficiently” (Student Response 2011)

“Being in an unfamiliar and at times uncomfortable environment was challenging. (Student Response, 2011)”

The way in which these reflections on spatial patterning are linked to understandings of power and politics in Australia is less clear from student responses. Australian students typically view the role of planning in Sri Lanka sceptically, with a difficulty in seeing a role for the institutions and systems of planning in what appears to be a chaotic built environment. Further, the role of 'non-planning' stakeholders (both public and private) in influencing development is more apparent in many locations, although this of course has parallels in the entrepreneurial governance models of Australian cities and regions. This understanding indicates a different reading of the way in which forms of development occur and the representations of urbanization, with a consequent planning response.

Student discussions indicate that many of their learnings emerged in time. In part this may be a product of the immediacy and short-term encounter of the fieldwork activity. Perhaps this indicates a dilemma in Healey's "dynamic contingency" (2012) insofar as the recognition of issues of difference is not always immediately evident. Student reflections may also be an indication of the uncertainty associated with developing confidence in professional knowledge experienced by students anyway (although many have professional experience to some extent), and consequently the challenge of applying and extracting appropriate planning 'practices' in an otherwise unfamiliar setting. Comments from students reveal:

“...there were hidden learning outcomes...” (Student Response 2011)

“...what you learn you don't find out until you return to Australia.” (Student Response 2011)

Lessons for cross-cultural encounter and local planning

Healey (2012) challenges planners to recognise a pathway between assumptions of universal knowledge and the surrender of any applicability beyond narrow local contexts by the development of *dynamic contingencies*; she calls for a *reflexivity* in applying what planners know and do to new circumstances. This, while sensible, proves difficult to know and learn. For Australian students undertaking joint projects in Sri Lanka, it is apparent that while planning offers some universal possibilities, there is a general acceptance that local priorities and problems may not be best addressed with practice examples from elsewhere. This creates a dilemma for students in discovering what useful and transferable knowledge and skills they have.

The authors, over several visits, have found that students are able to best uncover this through engagement with local students and planners and through participation in data collection, discussions with local

stakeholders and through broad and wide-ranging discussions regarding history, politics and culture. These are approaches that take time however, and building relationships beyond the overseas project period is essential to students recognising similarities and differences in approaches to planning. Reflection, dialogue and cultural awareness each play a part in refining and defining how their developing planning knowledge has a role in a new place. These steps present challenges relating to modes of communication (not simply language), expectations of project work and time constraints for students in a full curriculum in both countries.

Over the period of three annual visits, we have sought to increasingly emphasise engagement and dialogue, using planning examples and practices as an important, but in some ways secondary, vehicle for these activities. The universality of planning knowledge and language, while useful, at times appears to mask difference, whereas skills in communication, engagement and thorough observation and reflection appears to serve students better in equipping them to participate while away, and bring useful learning back to Australia.

Conclusions

Planning internationally presents significant ethical challenges that include those relating to the transferability of knowledge and practice. In educating students through international encounter, these challenges are heightened through the development of a 'planning' literacy, in addition to cultural literacy. The experiences of international study offer scope to learn adaptive and reflective practice, and typically students are aware of the limitations of a universal approach to planning, despite the historical tendencies in this regard and the shared language and understandings of planning students from different countries. However, moving from this awareness to making effective choices about applicability of practice approaches and examples, and understanding the potential positive roles of international practice is challenging for students (and no doubt for practitioners).

Engagement with local planners and planning students helps in this regard, but additional engagement with communities, local data collection and shared group project activities over as long a period as possible present added ways for students to truly reflect on what they actually know which has application, what is transferable and how this might be adapted. Discussions before, during and after such visits covering a range of contextual issues; politics, historical land management, economic structure and others, in addition to planning background, is required to begin a process of taking students through a process of ethical encounter with their own knowledge and culture, albeit in another place, and the recognition of adaptive 'dynamically contingent' approaches to planning practice in new contexts and settings.

References

- Abramson (2005) 'The "Studio Abroad" as a Mode of Transcultural Engagement in Urban Planning' *Journal of Planning Education and Research* 25(1)
- Absalom, M. & Vadura, K. (2006) 'Student Perceptions of Internationalization of the Curriculum: An Australian case study' *Arts and Humanities in Higher Education* 5(3) pp317-334
- Ali, A. & Doan, P (2006) 'A Survey of Undergraduate Course Syllabi and a Hybrid Course on Global Urban Topics' *Journal of Planning Education and Research* 26(2) pp222-236
- Binder, G (2012) Theory(izing)/practice: The model of recursive cultural adaptation, *Planning Theory* <online only - forthcoming>
- Bourdieu P (1977) *Outline of a Theory of Practice*, Cambridge University Press UK
- Budge, T, Butt, A and Ratnayake, R 2009, 'Cross Cultural Learning from the Tsunami: Professional Planners from Australia and Sri Lanka', *Bhumi* 1(1): 44-55.
- Butt, A, Budge, T, Ratnayake, R and Mahanama, PKS (2011) 'Planning education and inter-cultural collaboration: awareness, innovation, reflection and preparation for practice' Proceedings of the 3rd World Planning Schools Congress/ANZAPS, 4-8 July 2011, Perth, WA
- Campbell H and Marshall R (1999) 'Ethical frameworks and planning theory' *International Journal of Urban and Regional Research* 23(3) pp464-478
- Castells, M. and Portres, A. (1989) 'World underneath: The origins, dynamics and effects of the informal economy', in Portres, A (ed) *The informal economy: studies in advanced and less developed countries*, Johns Hopkins University Press, Baltimore, USA
- Chatterjee, P. 2004. *The politics of the Governed: reflections on popular politics in most of the world*. New York: Colombia Press.
- Clifford, V (2009) 'Engaging the disciplines in internationalising the curriculum' *International Journal for Academic Development* 14(2) pp133-143

- Dandekar, H (2009) 'Commentary: A Multiuniversity Planning Studio at the World Planning Congress : An Opportunity for International Planning Education', *Journal of Planning Education and Research* 28(3) pp382-390
- De Silva, M (2010) 'The China factor in post- war Sri Lanka' *Inter- Asia Cultural Studies*, 11(3) pp434- 446
- de Soto, H (2000) *The mystery of capital: why capitalism triumphs in the West and fails everywhere else*. New York, 42Basic Books.
- Goldstein, H. Bollens, S., Feser E. and Silver, C. (2006) 'An Experiment in the Internationalization of Planning Education: The NEURUS Program', *Journal of Planning Education and Research* 25(4) pp349-363
- Gurran, N., Norman, B. & Glesson, B. (2008) Planning Education Discussion Paper, Prepared for the Planning Institute of Australia, Canberra
- Harman, G. (2005) 'Internationalization of Australian Higher Education: A Critical Review of Literature and Research', in Ninnes, P & Hellstén, M. (eds.), *Internationalizing Higher Education*, Springer pp119-140.
- Healey P, (2012) 'The universal and the contingent: Some reflections on the transnational flow of planning ideas and practices' *Planning Theory* 11(2) pp188-207
- Hudalah, D. and Johan, D. (2007) 'Spatial planning in transitional Indonesia' *International Planning Studies*, 12(3) pp291-303
- Innes, J, Connick, S & Booher, D. (2007) 'Informality as a planning strategy: Collaborative water management in the CALFED Bay-Delta Program' *Journal of the American Planning Association* 73(2) pp195-210
- Innes,J., Connick, and Booher, D. 2007. Informality as a planning strategy: Collaborative water management in the CALFED bay- Delta Program. *Journal of the American Planning Association* 73: (2)195-210
- King, A (2004) *Spaces of Global Cultures: Architecture, Urbanism, Identity*, Routledge, London
- Munasinghe J.N., (2007), 'Internationalizing in a Nationalizing Context: Rethinking History of Modern Town Planning in Sri Lanka' *Proceedings of 9th International Congress of Asian Planning Schools Congress*, Colombo, Sri Lanka,
- PIA (2010) Education Policy for Recognition of Australian Planning Qualifications (Urban and Regional Planning Chapter), Planning Institute of Australia, Canberra
- Rakodi, C. 2001. 'Forget planning, put politics first? Priorities for urban management in developing countries' *International Journal of Applied Earth Observation* 3(3) pp209- 223
- Roy, A. 2009. 'Why India cannot plan its cities: Informality, insurgency and idiom of urbanization' *Planning Theory* 8(1) pp76 – 87.
- Sanyal, B (2010) 'Similarity or Differences? What to Emphasize Now for Effective Planning Practice' in Healey, P & Upton, R (eds) *Crossing Borders: International Exchange and Planning Practice*, RTPI, London
- Steinberg,F. (1984) 'Town planning and neocolonial modernisation of Colombo, *International Journal of Urban and Regional Research* 8 (4) pp530-548.
- The Sunday Times*, 2012 ' Illegal buildings on state land to go', 24 June 2012, Colombo
- Urban Development Authority.1998. Colombo metropolitan regional structure plan. Vol 1, Synthesis. Battaramulle,Sri Lanka :Urban Development Authority/Ministry of Housing and urban Development
- van Horen, B (2002) 'Colombo', *Cities*, 19 (3) pp217-227
- van Horen, B, Leaf, M and Pinnawala, S. (2004) 'Localising a global discipline: Designing a new planning program in Sri Lanka' *Journal of Planning Education and Research* 23(3) pp255- 268.
- Ward, S (2000) "Re-examining the International Diffusion of Planning" in Freestone, R. (ed) *Urban Planning in a Changing World: The twentieth century experience*, Spon
- Ward, S (2010) 'Transnational planners in a post-colonial world' in Healey, P & Upton, R (eds) *Crossing Borders: International Exchange and Planning Practice*, RTPI, London
- Yigitcanlar, T., Mayere, S., McCartney, R., and Mohamed, M.Z., (2009) 'Providing innovative planning education experience: teaching regional planning in an international context' *Proceedings of the ANZAPS Conference*, 28-30 August 2009, Brisbane

Culture Matters: An analysis of Ethnic Segregation and Congregation in Sydney Australia using Centographic Method

Tingting Cui & Awais Piracha

Geography and Urban Studies, University of Western Sydney

Abstract

The dynamics of ethnic segregation or congregation are a recurrent topic of discussion due to the worries that severe forms of such segregation or congregation will lead to social polarization and stigma for particular communities and areas. These impacts are especially pronounced in the global cities due to the presence of large and increasing number of immigrants. Better understanding of segregation/congregation dynamics can help governments in formulating policies to prevent undesirable outcomes. Most of the past research on this topic has pointed to the social-economic factors such as household income, English proficiency and education level as the major determinants that lead to ethnic segregation or concentration. Focusing on the context in Sydney, this paper presents research findings that demonstrate cultural origins also have strong influence on the level of ethnic congregation. The research for the first time utilises the centographic method to investigate the spatial distribution pattern of ethnic populations in Sydney using the 2006 ABS census data for the country of birthplace at a fine grain suburban scale. The research illustrates that migrants originating from North-west Europe, South Africa, Americas and New Zealand tend to have low level of congregation. On the other hand people from Asia, the Middle East and Eastern and Southern Europe have higher levels of congregation. This paper presents detailed analysis of congregation/segregation of immigrant communities as well as an in-depth discussion on what explains such patterns.

Keywords: ethnic segregation, Sydney, centographic method, Geographic Information Systems

Introduction

The issue of ethnic segregation and congregation is a recurrent research theme, due to its profound (potential) social impacts. Ethnic segregation and/or congregation occurs where members of a minority group are not dispersed across residential spaces in relation to the rest of the population (Knox & Pinch, 2010) As Berry and Laponce (1994) point out, ethnic segregation is a major source of social tensions and political conflicts, and there is a need for more creative and in-depth research both in academic theory and at the practice level. The main concern is that the firm and lasting concentration, regardless of the community profiles such as socio-economic status, will prevent members in the communities from communicating with the wider society. In the severe form, for example, in some American cities, the disadvantages of living in these areas are profound and can be passed down the generations. Children in these areas would have less vocational and educational opportunities and might be stigmatised to poverty and disadvantage (Burnley, 1999). Also, this strong residential distribution pattern has generated severe impacts on the housing market. For example Chinese property developers and real estate firms have targeted their market to people from Hong Kong and Taiwan in the Monterey Park in Los Angeles (Pamuk, 2004).

Sydney is a city of immigration on a world scale. In 2006, 1,630,359 people were born overseas, which accounts for 39.6% of its total population. The high level of cultural diversity stimulates economic development at local and regional levels and improves Sydney's prospects as a global city (Burnley, 1999). However, there are also concerns that Sydney will experience a high level of social polarisation similar to the ghettos of Hispanic-Americans and/or African-Americans in US cities (Healy, 1996). It is thus important to carefully analyse the spatial distribution and the extent of concentration of these immigrant communities.

Most of the major models and theories on ethnic segregation/congregation focus on the US cities' context. However, this research may not be sufficient in guiding decision-makers or planning educators to deliver appropriate planning policies and education programs in Australia, as the immigration and cultural context are very different from America. Therefore, more focused analysis of Sydney's unique ethnic residential distribution patterns is required. Although recent research on Sydney's ethnic segregation/congregation suggests that it is not severe like in ghettos in the US cities, strong segregation/congregation exists in some areas for some ethnic communities in western Sydney (Burnley, 1999). The existing research on Sydney focuses on analysing the ethnic components using Index of Segregation (IS) on Statistical Local Area (SLA) or Census Collection District (CCD). This paper attempts to explore the dynamic patterns of ethnic segregation/congregation trends at a finer suburban spatial scale.

There are three aims of this research. Firstly, it seeks to explore the spatial distribution patterns of ethnic communities in the Sydney metropolitan area who were born overseas. Secondly, it aims to analyse which of the investigated ethnic groups are more segregated or congregated than others, and in which locations these concentrations tend to occur. Thirdly, the research looks into the possible explanations of the pattern of segregation or congregation found in Sydney.

This paper first conducts a review of the studies on ethnic segregation, with particular focus on the reasons leading to ethnic segregation, the types of segregation, and the effects and outcomes generated by segregation. Then, it compares the methods and indices previously used to measure the level of segregation. After that, it utilizes the centographic method in assessing the level of ethnic segregation/congregation using the birthplace data. In the end, the report draws conclusions on the spatial segregation patterns in Sydney.

Ethnic segregation / congregation and its dynamics

Most of the American research on ethnic spatial distribution attempts to explore the ethnic segregation/congregation patterns among Black and Hispanic 'ghettos' in the US cities. Research has identified that such severe form of ethnic segregation/congregation is the result of the immigration history and economic context of the US. The rapidly increasing industrialization in the early 20th century and the fast growing status of America in the world in the late 20th century and early 21st century greatly increased the demand for labour. The motivation was to fill jobs, mostly unskilled, in manufacturing and low-level services. In response, a vast number of Black and Hispanic people migrants filled this gap. Housing for these immigrants was quite often built near the manufacturing plants, resulting in high concentrations of Blacks and Hispanic workers. In addition, after the World War I, the United States became increasingly isolationist, and partly as a result, the flow of European immigrants was sharply reduced (Massey & Denton, 1993). These factors contributed to the development of ghettos in the US cities.

Even though the dynamics and factors of the America's ghetto-form segregation are very unique and different from the situations in other countries, it still has generated a great amount of concern in other countries that similar segregation will happen and will generate severe social problems. Studies have been conducted on the ethnic residential patterns among the major cities in the world such as Amsterdam (Deurloo & Musterd, 1998), and Paris (Rhein, 1998). All these studies suggest that the spatial segregation of immigrant groups in these cities is far from the ghetto-type segregation as in the US cities. But still there are considerable ethnic segregation/congregation patterns existing. Such segregation/congregation comprises a highly complex set of demographic and social processes that are far more complex than the classical or newly established models (Rhein, 1998). Also, the process of ethnic segregation/congregation is unique according to the different social, economic, demographic and political context of the cities in different countries. Therefore, the comprehensive understanding of the ethnic segregation/congregation in different nations is important for appropriate policy response.

Numerous factors contribute to ethnic segregation. These include cultural and religious requirements, language, socio-economic status, preference, etc. In general, the variable influence of these factors on location outcomes can be classified in two categories, namely, self-congregation and the forced segregation, each with their own temporal and spatial relationships.

Self-congregation occurs when individuals, families and groups of a particular ethnicity have a greater level rather than lower level of choice to locate with others of the same or similar ethnicity for social, cultural and economic reasons. In *Urban Social Geography*, Knox and Pinch (2010) argue that gathering occurs because of mutual support within group members. People are more likely to seek help and support from ones who share similar cultural or language backgrounds since communications are more convenient. The second reason for self-congregation is cultural preservation. Residential congregation to a considerable extent supports the viability of ethnic institutions and businesses since it can generate a large consumer threshold. Thirdly, the desire to create cohesiveness leads minority groups to cluster. For example, the members of minority groups may gather together for defending against discrimination and other hostility from the wider society (Knox & Pinch, 2010).

In this regard, colonies and enclaves are usually referred to as this type of self-congregation. 'Colonies' are relatively small and temporary congregation of ethnicities. Members of each ethnicity seek temporary support when they first enter into a new environment. 'Enclaves' are used for groups or areas in parts of cities, and they are affected by the internal cohesion within the group members. Compared to 'colonies', 'enclaves' are more stable. For both 'colonies' and 'enclaves' the external effects of discrimination are likely to be minimal. For example, the Irish, Polish, German and Italian communities in American cities are usually considered to be 'enclaves' (Peach, 1975). Although some scholars argue that any form of ethnic segregation/congregation may generate negative effects since it reduces the opportunities the ethnic members of communicating with the wider society, many cultural studies have addressed that immigrants benefit from such concentration as well (Dunn, 1998).

In comparison with self-congregation, forced segregations have received more attention in scholarly studies (Bashi & Hughes, 1997, Hamnett, 1994, Racine, 2002). Segregation occurs when individuals, families and groups of a particular ethnicity have a lower level, rather than a higher level of choice to locate with others of the same or similar ethnicity due to social or economic status. Such segregations are formed by external social forces or economic limitations. Ethnic groups with particular racial or religious backgrounds are discriminated or excluded by the majority groups and have to gather within areas of low-quality living conditions. This congregation, in turn, generates further disadvantages to ethnic communities because of the decrease in social exposure and communications with wider urban contexts (Knox & Pinch, 2010). One example in this case is the frequently discussed 'ghettos' in the downtown centres in many American cities. The areas are occupied by African-American or Hispanic-American minorities. People within these areas often suffer from undesirable physical and social environment. The living conditions and supporting infrastructure is of low quality, and the areas usually experience high rates of poverty and unemployment (Green & Pick, 2006). In addition, such socioeconomic disadvantages of the residents tend to pass down to next generations - that is by virtue of their being born in a ghetto area, children would have less vocational and educational opportunities and might be condemned to poverty and disadvantage. (Burnley, 1999).

The external impacts from social and economic transformation may strengthen the effects of ethnic segregation/congregation. It is generally perceived that the process of globalisation has accelerated ethnic segregation (Sassen, 2003, Pamuk, 2004). Globalisation fosters economic development in global cities and therefore stimulates job demand. However, due to the required labour distribution in the new economic structure, jobs become polarised at the high-skill and low-skill ends of the occupational spectrum, with a hollowing out of mid-level occupations (Castell, 1989). In response, a great number of immigrants arrive to these global cities to seek employment opportunities. These immigrants who hold limited language proficiency and familiarity with the local labour market tend to participate in the low-skill occupations. As a result of the aforementioned interactive factors, the globalisation intensifies migrant segregations. After reviewing the globalisation process in Sydney, Baum (1997) confirmed this process.

Another external factor affecting ethnic segregation/congregation is policies, particularly, migration policies. Indeed, migration policies in different periods of time reflect labour and population requirements of host nations. These migration policies set out some incentives to attract certain type of applicants. Some of these incentives and restrictions directly relate to ethnic backgrounds and result in immigrants with similar ethnic backgrounds coming in a relatively short period of time. For example, the White Australia Policy in Australia, which had restricted immigration from non-white regions, generated great impact on segregation/congregation for some ethnic groups. After the year 1973 when the White Australia Policy was abolished, a sudden increase in immigration from the Middle East, Asia and South America resulted in these ethnic groups to segregate/congregate more than their Southeast European counterparts who had a long immigration history in Australia starting from as early as the 1940s (Burnley, 1999).

Research conducted by Dunn (1998) in Cabramatta in Sydney suggested that some level of residential congregation can generate positive impacts for immigrants. However, there are also critics of ethnic segregation since segregation can limit individual and family choices within an ethnic group and can slow the exchange of knowledge and experiences between people in the ethnic group and the wider society (Racine, 2002).

Ethnic Segregation in Sydney

The significance of studying segregation patterns in Sydney is widely accepted due to its profound impacts on the housing market, political interests and society as a whole (Johnston, Forrest, & Poulsen, 2001) (Burnley, 1999). Most previous studies have suggested that Sydney does not suffer from segregations as severe as the 'ghettos' in many US cities, but there is indeed some considerable level of segregation/congregation identified for some minority groups (Burnley, 1975) (Burnley, 1999) (Johnston, Forrest, & Poulsen, 2001).

As discussed above, processes of ethnic segregation/congregation is rather complex which involves factors relating to preferences of ethnic community members, external social exclusion, social-economic status of ethnic groups, labour market requirement, and political decisions. Therefore, studies that measure the level of segregation/congregation and research on the dynamics leading to segregation/congregation should be comprehensive. Massey and Denton (1988) have developed five dimensions that describe the spatial expression of ethnic segregation/congregation:

1. Evenness. This refers to the differential distribution of two social groups among areal units in a city. A minority group is considered to be segregated if it is unevenly distributed over areal units. It is always measured and scaled relative to some other groups. The Index of Dissimilarity (ID) and the Index of Segregation (IS) are the most commonly used methods to measure the level of evenness of a group. For these indices, calculations are conducted comparing the proportion of each minority group and the

proportion of the majority group (ID) or the proportion of the remaining population (IS) for a particular spatial scale.

2. Exposure. This refers to the degree of potential contact, or the possibility of interaction, between minority and majority group members within geographic areas of a city. Indices of exposure measure the extent to which minority and majority members physically confront one another by virtue of sharing a common residential area.
3. Concentration. This refers to the amount of physical space occupied by a minority groups in the city. Groups that occupy a small share of the total area in a city are considered to be residentially concentrated. Relatively few indices of spatial concentration have been proposed.
4. Centralisation. This is the degree to which an ethnic group is spatially concentrated near the centre of an urban area, with segregation processes confining minorities to declining, inner city areas. Groups that settle near centre city areas usually tend to be spatially concentrated.
5. Clustering. This refers to the degree of spatial clustering exhibited by minority groups that is the extent to which areal units inhabited by minority members adjoin one another, or cluster, in space. The critical conceptual point is contiguity, with the implication that, if all minority areas in one city are contiguous, but in another they are spatially separated, the former would be considered as more segregated (Johnston, Forrest, & Poulsen, 2001).

The existing studies on ethnic segregation/congregation of Sydney generally apply the measurement of ID or IS. These relative indices only evaluate the level of evenness between minority and majority groups. The method used in the previous studies cannot identify the differences between minorities in different spatial locations in the city if these minorities have the same ID or IS score. Burnley (1999), compared the ID and IS for each ethnic group based on data at Statistical Local Areas (SLAs) and Census Collector Districts (CCD) levels. He further studied the associations between residential concentration and the disadvantage conditions of low family income, unemployment and low home ownership. Johnston et al (1999) performed a similar study on the ethnic segregation in Sydney. However, the data were at the coarse local government areas (LGAs) level and only the measure of ID was used.

Due to such neglect in assessing the important factors, the index-based measure is not reliable to distinguish the differences in segregation between different ethnicities. Indeed, since the previous studies have tried to respond to the concerns that Sydney would experience the severe segregation problems faced in many US cities, the comparatively robust index-based measurements were sufficient. As the findings suggested the segregation in Sydney is much less evident, there is a need for more comprehensive measurements that are capable of considering the distinct features of each ethnicity.

Methodology

Centrographic methods for measuring ethnic segregation/ congregation

The centrographic method overcomes the coarseness that methods such as the index of dissimilarity face i.e. their inability to measure the spatial distribution of population. The method applies spatial analyses using geographic information systems (GIS) and statistical analyses to identify the spatial relationship of ethnic groups to the reference community. It measures segregation by taking into account the reference community, as well as the surrounding area, and determining the extent of concentration of dispersal around a core point. This method can answer questions about which racial groups in a city are more or less dispersed (Green & Pick, 2006). In this way, the method can make a good response to the issues of concentration, centralisation and clustering identified in Massey and Denton's (1988) work.

The *Mean Centre* is the centre of gravity of a particular ethnic community. It is identified using x,y coordinates representing longitude and latitude position of ethnic concentration. *Mean Centre* is a measure of spatial central tendency analogous to the classical statistics of mean and weighted mean. It is useful in summarising the overall location of an ethnic community. From the location of *Mean Centre*, the general trends and features of a particular social group or groups can be identified and compared (Wong, 1999).

The *Standard Deviation Ellipse* measures the amount of dispersion of the attributes across the area. It is an improved centrographic technique derived from *standard radius*. The distance of ellipse from *Mean Centre* shows how concentrated or dispersed a characteristic is spatially. For each ellipse, the method provides calculations of the weighted mean centre, and the dispersions for the long and short axes of the ellipse. The extent of integration or segregation can be approximated by the sizes of the two or more ellipses, each representing an ethnic group. The area of a *Standard Deviation Ellipse* covers about two-thirds of one ethnic population. In addition, the ellipse offers the added value of indicating the spatial direction of greatest dispersion. The ellipse can reflect the orientation of a set of locations around the *Mean Centre*.

The Mean Centre together with Standard Ellipse can reveal the spatial pattern of the segregation/congregation of a selected ethnic group (Wong, 1999).The formulation for the x and y coordinates of the weighted mean centre and x and y distances of the standard deviation ellipse are shown in Table 4.1:

Table 0.1: The Formulation for the Centrographic Method Source: (Wong, 1999)

Types	Statistics	Formulae
Spatial Central Tendency	Mean Centre	$(\bar{x}, \bar{y}) = \left(\frac{\sum f_i x_i}{\sum f_i}, \frac{\sum f_i y_i}{\sum f_i} \right)$
Spatial Dispersion	Standard Distance	$SD = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2 + \sum f_i (y_i - \bar{y})^2}{\sum f_i}}$
Spatial Dispersion and Orientation	Standard Deviation Ellipse: Angle of Rotation Deviation along x, Deviation along y	$\tan \theta = \frac{\left(\sum x'_i{}^2 - \sum y'_i{}^2 \right)}{\sqrt{\left(\sum x'_i{}^2 - \sum y'_i{}^2 \right)^2 + 4 \left(\sum x'_i y'_i \right)^2}} + \frac{2 \sum x'_i y'_i}{\sum x'_i{}^2 - \sum y'_i{}^2}$ $\delta_x = \sqrt{\frac{\sum (x'_i \cos \theta - y'_i \sin \theta)^2}{n}}$ $\delta_y = \sqrt{\frac{\sum (x'_i \sin \theta + y'_i \cos \theta)^2}{n}}$

The research procedure

The census information on birthplaces indicator is commonly utilized for measuring and studying ethnic segregation (Burnley, 1999, Johnston, Forrest, & Poulsen, 2001). It provides information about cultural backgrounds. The investigated birthplaces are based on the list of expanded community profiles provided via the Australian Bureau of Statistics (ABS) website.

Census information comprising the birthplace data was obtained in the larger group categories and the sub-group individual countries at the spatial scale of the State Suburbs in the Sydney metropolitan area. The data was derived from the customised tables requested directly from the ABS website.

The ASGS 2010 map of NSW State Suburbs in *shape file* format was downloaded from the ABS web site. The map of Sydney metro suburbs was then extracted from the download.

In ArcGIS 10.0, after the input of the base map and its attributes, centrographic method can be processed in two steps:

- Transforming the location to a centre at the spatial mean
- Calculating the standard X and Y distances of a Standard Deviation Ellipse (SDE)

To effectively compare and rank the level of congregation and the location of residential centres between different ethnic groups, the research simplifies the calculation process. The level of concentration is measured according to the size of standard ellipse for each population group. The ranking is conducted from the largest values to the smallest values, which indicates the least congregated group to the most congregated group.

The locations of residential centres are measured via the x coordinates of the spatial mean for each ethnic group. The ranking is conducted from the largest values to the smallest value, which indicates the locations from the East, the most desirable residential areas, to the West, the less desirable residential areas. It is from the perception that the locations to the East enjoy convenient access to the CBD and proximity to the coast, which are preferable for living. What should be noted here is that, the very Western Sydney suburbs in the mountains are also perceived to be desirable residential locations. Therefore, the research simplifies the process and assumes that the East is better than the West in terms of residential locations.

Other methods such as calculating the percentages of the population born overseas and the population that does not speak English at home have also been used via GIS, to provide a general idea of the spatial distribution situation of the ethnicities.

Ethnic segregation/ congregation in Sydney

Population demography of birthplaces in Sydney

The 2006 Census of Australia reveals considerable birthplace diversity in metropolitan Sydney (Table 5.1). There were 9 birthplace groups (Table 5.1). Six countries were represented with the population over 50,000: the UK, China (excluding Taiwan and Hong Kong), New Zealand, Viet Nam, Lebanon, India and The Philippines. Another eight numbered between 20,000 and 50,000: Italy, Hong Kong, South Korea, Greece, South Africa, Fiji, Malaysia and Indonesia. Also, there were 12 with population between 10,000 and 20,000: Iraq, Sri Lanka, Germany, Egypt, United States of America, Croatia, Ireland, Malta, Poland, Former Yugoslav Republic of Macedonia (FYROM), Turkey, and Thailand. Lastly there were seven with the population less than 10,000: Japan, South Eastern Europe, Netherlands, Singapore, Canada, Bosnia and Herzegovina, and Papua New Guinea.

Table 0.2: Birthplace Diversity in Sydney, 2006. Source: ABS Census 2006, expanded community profile tables, customised tables.

Large Groups	Nations	Population
Americas	United States of America	15 205
	Canada	6 850
North Africa and the Middle East	Egypt	15 790
	Turkey	11 217
	Lebanon	53 537
	Iraq	19 958
North-East Asia	Hong Kong	36 541
	Japan	9 794
	China (excl. Hon Kong and Taiwan Province)	107 746
	South Korea	31 777
North-West Europe	Netherlands	8 642
	United Kingdom	148 841
	Germany	17 232
	Ireland	12 748
Oceania and Antarctica	New Zealand	74 014
	Papua New Guinea	3 296
	Fiji	26 391
South-East Asia	Philippines	50 654
	Singapore	8 536
	Thailand	10 501
	Malaysia	20 655
	Indonesia	20 119
	Viet Nam	61 848
Southern and Central Asia	India	52 135
	Sri Lanka	17 625
Southern and Eastern Europe	Poland	12 034
	South Eastern Europe	8 945
	Croatia	14 712
	Malta	12 192
	Italy	41 148
	Bosnia and Herzegovina	6 232
	Greece	31 278
	Former Yugoslav Republic of Macedonia (FYROM)	11 472
Sub-Saharan Africa	South Africa	26 927

Figures 5-1 below show the spatial distribution of the proportion of population born overseas. From the figure, it can be argued that the suburbs that hold higher proportions of ethnic populations are located in the

West. Homebush, Burwood, Campsie and Hurstville are identified as suburbs with more than fifty percent population born overseas (2006 census).

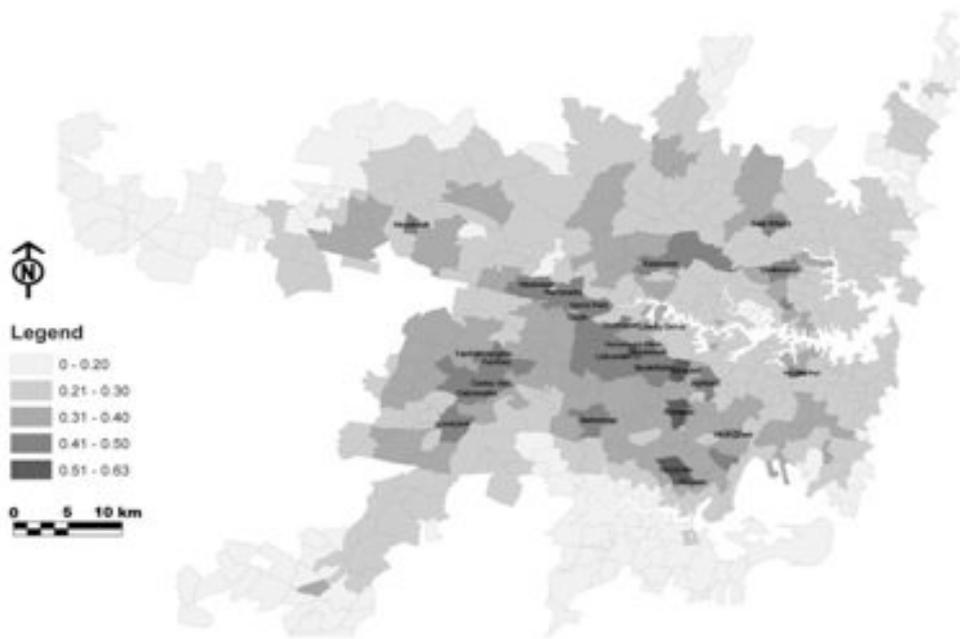


Figure 0-1: Spatial Distribution of the Proportion of Population Born Overseas

Birthplaces

The spatial distribution patterns of the USA and Canada born population is quite similar (Figure 5-2). Both of them reveal a very low level of segregation/congregation. Their population is dispersed throughout the Sydney's metropolitan. The centres for the two are located close to each other in Sydney's West Central areas.

Figure 0-2: Residential Distribution of people born in the USA and Canada

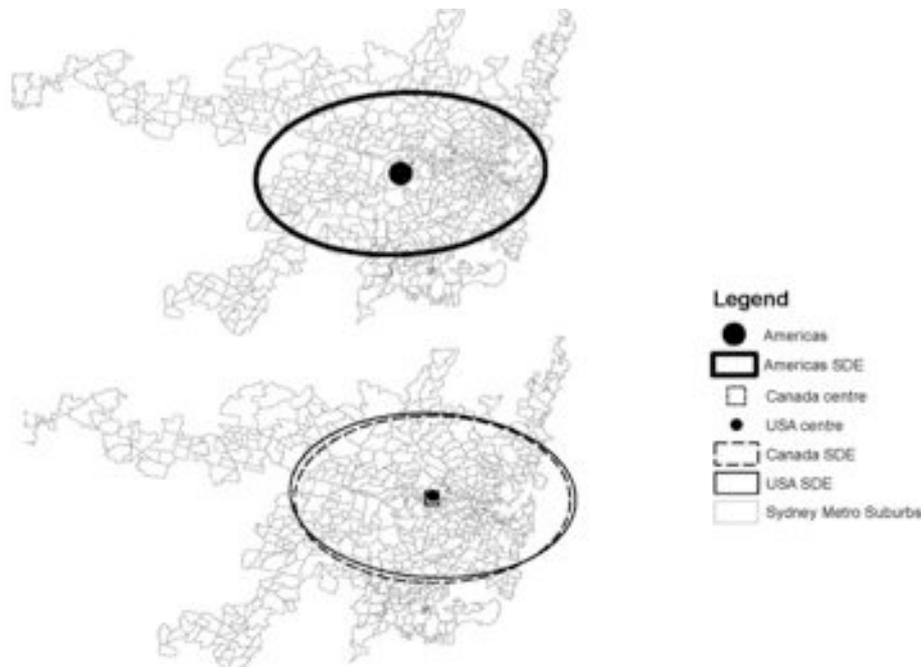


Figure 0-2: Residential Distribution of people born in the USA and Canada

Figure 0-3 below shows the spatial distribution of the people born in the Middle East. In general, people born in the Middle East have a comparatively congregated residential pattern.

It can be seen that the population born in Iraq is significantly more congregated and its concentration centre is located further in the West when compared with the population born in the other three the Middle East countries. The reason of such pattern for Iraq-born concentration may be their recent arrivals. The fast increase in house prices in the East might have led the latter arrivals to concentrate in Sydney's West. According to the ABS data, the number of arrivals from Iraq was relatively low in 1970s and 1980s. This number has markedly increased since 1991 due to the humanitarian programme (Australian Bureau of Statistics, 2006). Such trend is clearly indicated in Figure 0-4. Department of Immigration and Citizenship's (DIAC) Community Information Summary (2006) for Iraq attributes this to the Gulf Wars and the quelling of uprisings of the Shi'a and the Kurds in Iraq. Also, the Iraq born population suffer from higher unemployment rate (22.3%) which is much higher than other Middle East countries (10.5% on average) (Australian Bureau of Statistics, 2006).

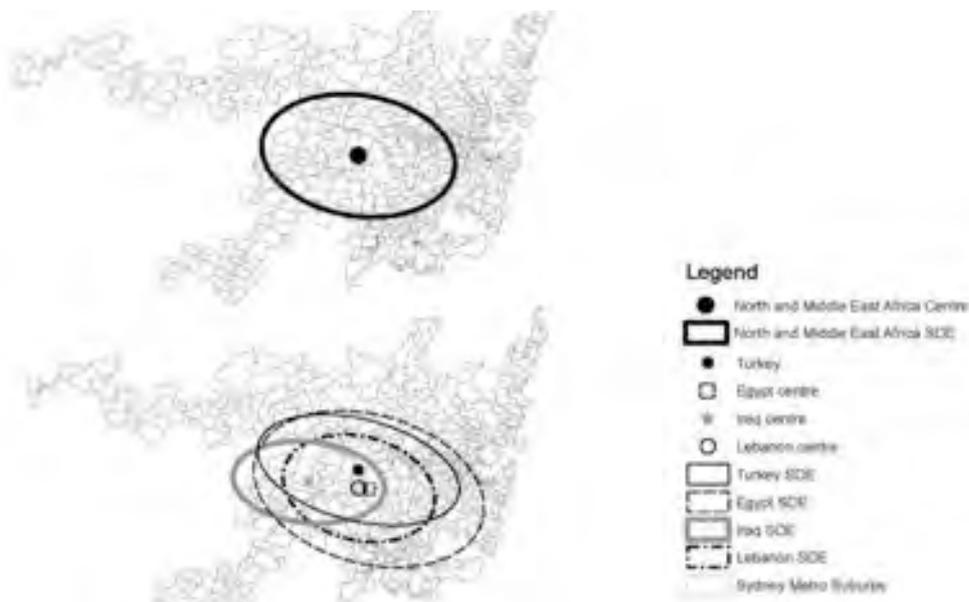


Figure 0-3: Residential Distribution of the people born in the Middle East

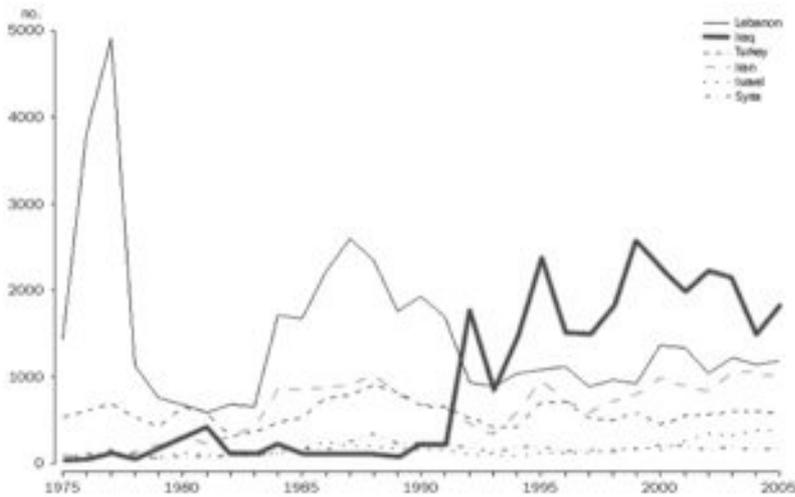


Figure 0-4: Year of Arrival, Selected Countries of Birth Source: ABS 2006 Census Data

The population born in sub-Saharan Africa does not show a distinguished residential concentration pattern (Figure 5-5). Numbering 26,927 out of 44,005 born in sub-Saharan Africa, the South Africans account for the most in this group. What should be noticed is that a large proportion of this population in this group is of European-related background that probably enjoys good social-economic status. Only 38% of the South African born population is of the South African ancestry (Department of Immigration and Citizenship, 2006). The comparatively high income and employment rate perhaps contribute to the desirable spatial distribution of South African born population. The median individual weekly income for the 15 years and over South Africa-born in Australia was \$708. This is very high when compared with \$431 for all overseas-born and \$488 for all Australian-born. The participation rate in the labour force for South Africa born population was 75.1 per cent and the unemployment rate was 4.1 per cent, much higher than the corresponding rates in the total Australian population at 64.6 and 5.2 per cent respectively (Department of Immigration and Citizenship, 2006).

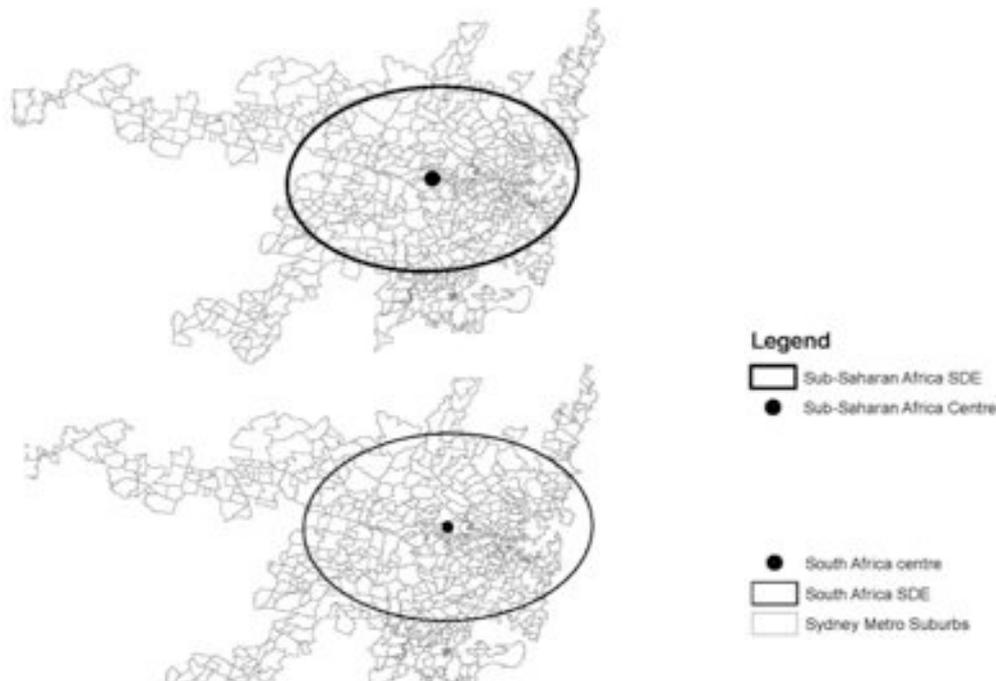


Figure 0-5: Residential Distribution of the People Born in Sub-Saharan Africa

The residential distribution shows a more centred pattern of the population born in North-East Asia when compared to the population born in other regions (see Figure 5.6). All of the four investigated countries, Japan, South Korea, Hong Kong and China are congregated in the central part of Sydney. In particular, the Japanese born people are located in the very East, which is considered to be much better than Sydney's

West. In addition, although, the number of Japanese-born population in Sydney is rather small (9,794), their level of concentration is less than its North-East Asian counterparts. The other three groups, Hong Kong, Korea, and China Mainland born populations have similar level of congregation and the location of population centre.

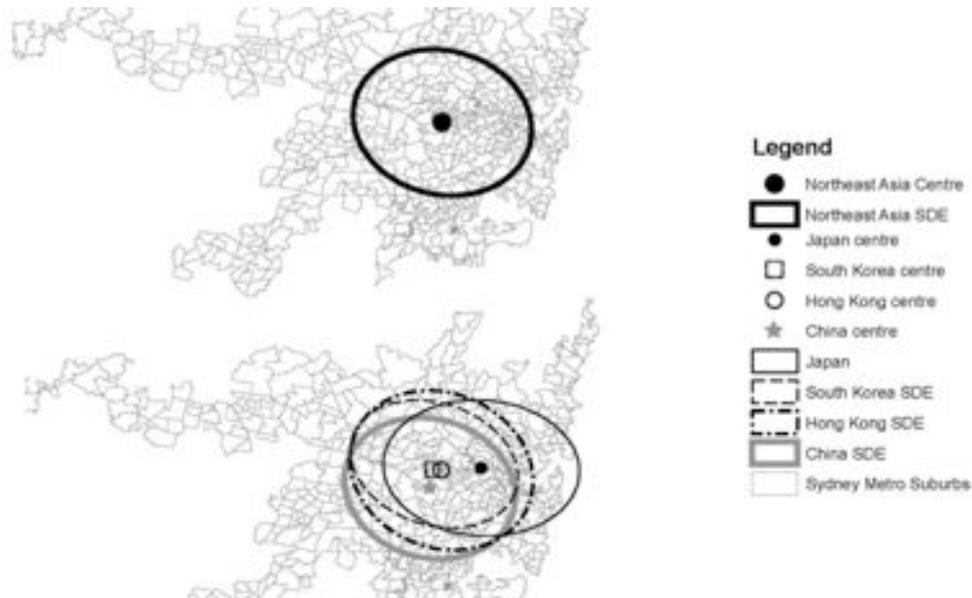


Figure 0-6: Residential Distribution of the People Born in North-East Asia

The spatial distribution patterns vary greatly for the South-East Asia group. Among the six populations shown in Figure 0-7, Viet Nam born population is the most congregated in rather undesirable residential areas. Such concentration of Vietnamese people was discussed as early as 1983 by Kelly (Kelly, 1983). According to Burnley (1989) the strong concentration of Vietnamese population was partly because of the recent arrival and partly resulted from the 'gravitation' of migration from outer Sydney area to the existing concentration area. He also identified some spatial association between residential concentration, low occupational status and incomes in the Western Sydney area (Burnley, 1989). The pattern of Vietnamese concentration remains strong nearly 30 years after its first detection.

Although the Philippines-born population has comparatively moderate level of concentration, their residential locations are in the very West of Sydney. This may partly be due to the comparatively recent arrival of this population. Most Filipino migration occurred during the 1980s, peaking in 1987-1988 (Department of Immigration and Citizenship, 2006).

The Singapore and Malaysia born population have the very similar distribution patterns both in the location and the level of congregation. This similarity might have resulted from the popularity of English in the two populations and hence less need of the communal supports from the communities that speak particular languages. The Thailand and Indonesia born groups hold similar population distribution patterns. Compared with those born in Singapore and Malaysia, which are more concentrated to the East, the patterns for Thailand and Indonesia are more dispersed covering broad range from the East to the West. These results lead to suspicion that the cultural traits of migrant communities, the level of success of the mother countries, and the time of arrival in Australia are significant explanatory variables.

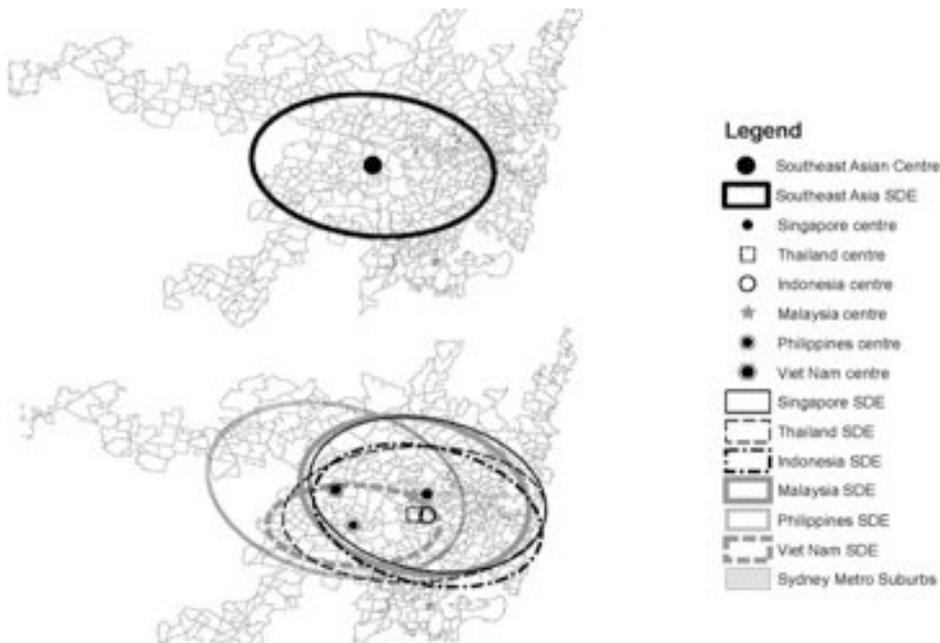


Figure 0-7: Residential Distribution of the people born in South-East Asia

Compared to other Asian regions, the residential distribution is more dispersed for the population born in the South and Central Asia (Figure 0-8). Both of the two investigated countries, Sri Lanka and India follow a similar concentration area size and congregation centres. The Sri Lanka born population has a rather long immigration history to Australia (Department of Immigration and Citizenship, 2006), which is probably one important reason contributing to the dispersed distribution pattern.

In terms of the spatial distribution for Indian-born population, Monk (1983) studied the behaviour of Indian immigrants in Sydney and concluded that this dispersed distribution pattern is derived from the residential behaviour and the fact that Indian immigrants were participating socially in the larger Australian society. The effect from the locations of employment such as the universities and medical and research facilities in Randwick and Ryde, played a more significant role compared to the ethnicity congregation factors (Monk, 1983). Burnley (1999) also indicated that the low segregation of the India-born population resulted from longer-resident Anglo-Indians having dispersed into many suburbs and more recent South Asian people in skilled professions settling in the middle-income area.

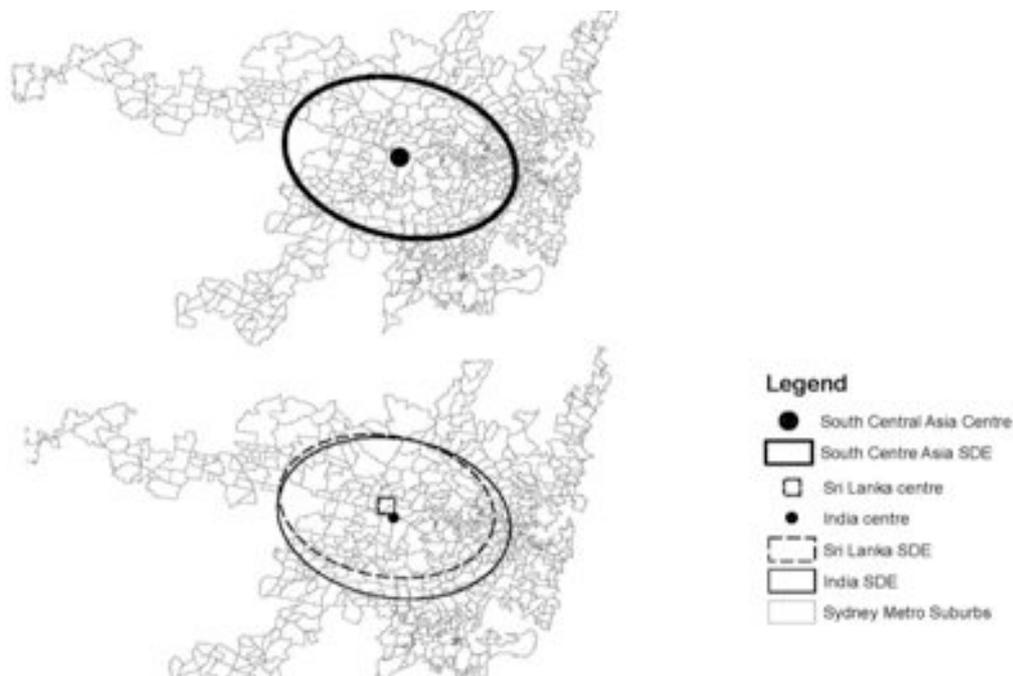


Figure 0-8: Residential Distribution of the People Born in Southern and Central Asia

The distribution patterns for Oceania are rather different for Fiji than ones for Papua New Guinea and New Zealand (Figure 0-9). The concentrated residential pattern for Fijians may be a result of retaining strong social and economic ties with their relatives in Fiji (Department of Immigration and Citizenship, 2006). Indeed, they do not suffer from poor socioeconomic status when compared with other overseas born groups (the median individual weekly income for the Fiji-born in Australia aged 15 years and over was \$562, compared with \$431 for all overseas-born), however, they tend to live closer to each other in Sydney's Western areas.

Most of the Papua New Guinea-born people living in Australia are the children of Australians who were working in Papua New Guinea when Australia was responsible for administering either the Australian territory of Papua or the Territory of Papua and New Guinea (Department of Immigration and Citizenship, 2006). This enables them to contact and communicate conveniently with Australian society and therefore leads to the dispersed residential pattern.

The New Zealand born population has a rather long immigration history to Australia. This population group also has high income and employment levels (the median individual weekly income for the New Zealand-born in Australia aged 15 years and over was \$616, compared with \$431 for all overseas-born and the participation rate in the labour force was 76.3 per cent compared with 64.6 to Australian-born population) (Department of Immigration and Citizenship, 2006).

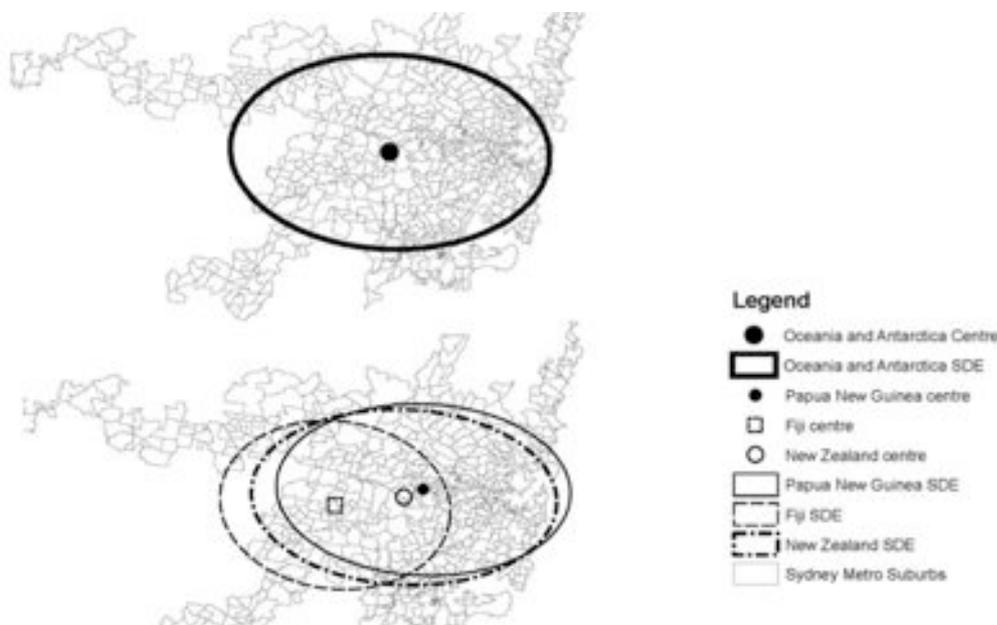


Figure 0-9: Residential Distribution of the People in Oceania

The residential distributions for the Northwest Europe born are rather dispersed (Figure 5-10). This is because all of these four investigated countries have a long history of immigration to Australia. In addition, these immigrants have rather high socioeconomic status, which enables them the flexibility in choosing wide range of residential locations.

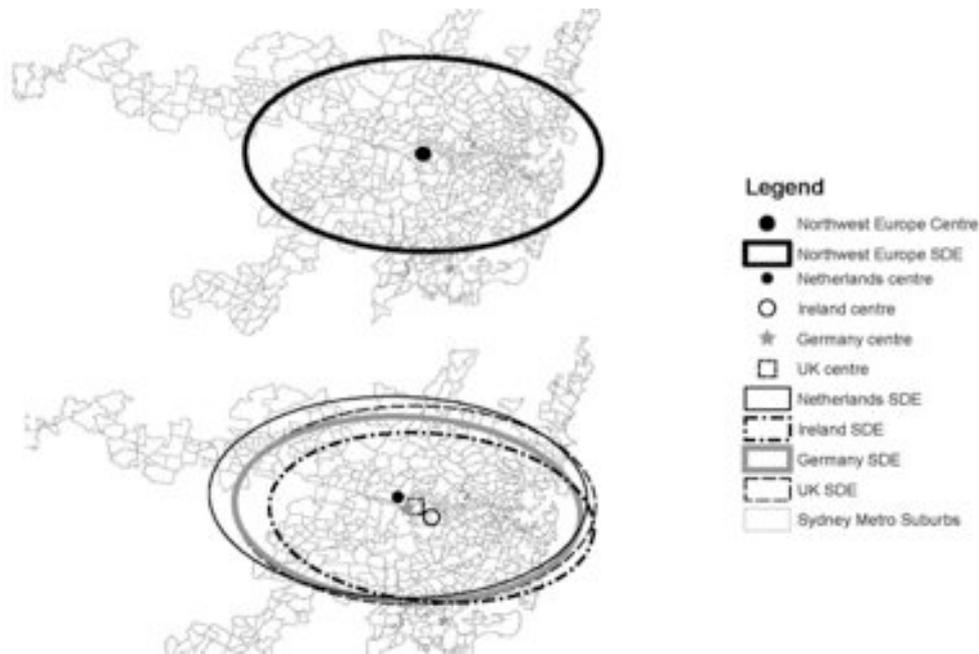


Figure 0-10: Residential Distribution of the People Born in North-West Europe

In comparison with North-West Europe, there are more differences in the residential distribution pattern of Southern and Eastern Europe (Figure 5-11). But such differences are not as evident as the ones for South-East Asia and none of the investigated countries has revealed a significant congregation pattern.

Three countries, Former Yugoslav Republic of Macedonia, Greece and Malta are identified to be more disadvantaged than others in this group. The Former Yugoslav Republic of Macedonia and Greece born populations live in the residential areas to the South of Sydney and they are more concentrated than others. The Malta born population resides more towards Western Sydney. Burnley's (1975) study on South European immigrants' occupational and residential stratification in both Sydney and Melbourne found that there were higher levels of residential segregation and unskilled labour participation from these three countries when compared with the others. The same trend is still evident 40 years later.

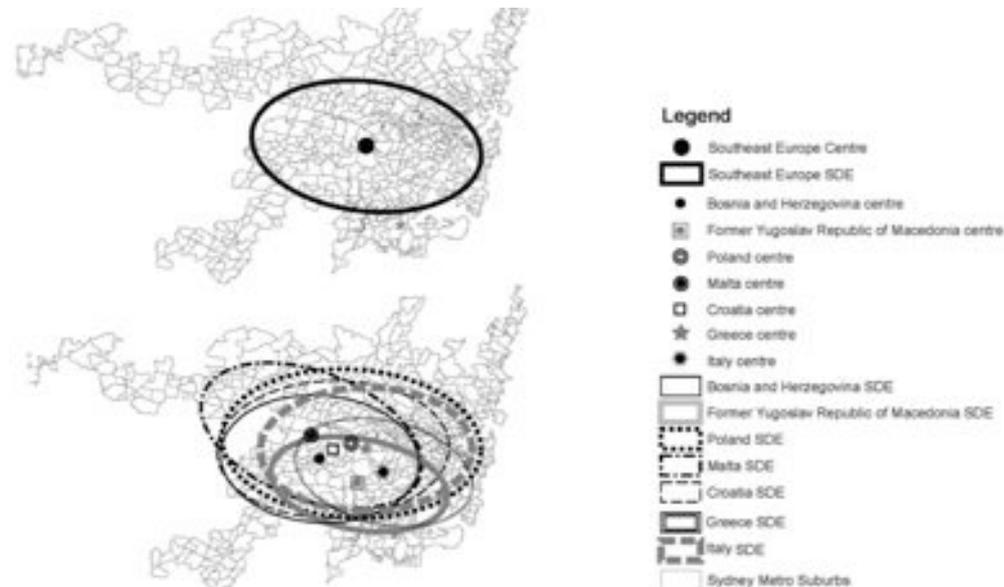


Figure 0-11: Residential Distribution of the People Born in Southern and Eastern Europe

Figure 0-12 shows consolidated residential distribution for the nine largest groups by birthplace. From this figure it can be seen that broader overseas born population groups are rather centrally located. Their centres are located in five centrally located suburbs that are close to each other.

The large birthplace groups from Northeast Asia, Southeast Asia, the Middle East, show a more concentrated pattern compared to others. This perhaps is a reflection of recent arrivals of these populations. The large scale immigration of these groups took place after 1974 and 1975 after the abandonment of the White Australia Policy.

The population born in Northeast Asia, Sub-Saharan Africa, and Northwest Europe gravitates towards Eastern side of Sydney, people from the USA and Canada, Southeast Europe, and Oceania gravitate towards Central Sydney, and the South Central Asian, Southeast Asian and the Middle East born population gravitate towards Western Sydney. This pattern is partly an outcome of the difference in socioeconomic status of different populations. The difference in housing price and living expenses in different areas is a differentiating factor for these broad population groups.

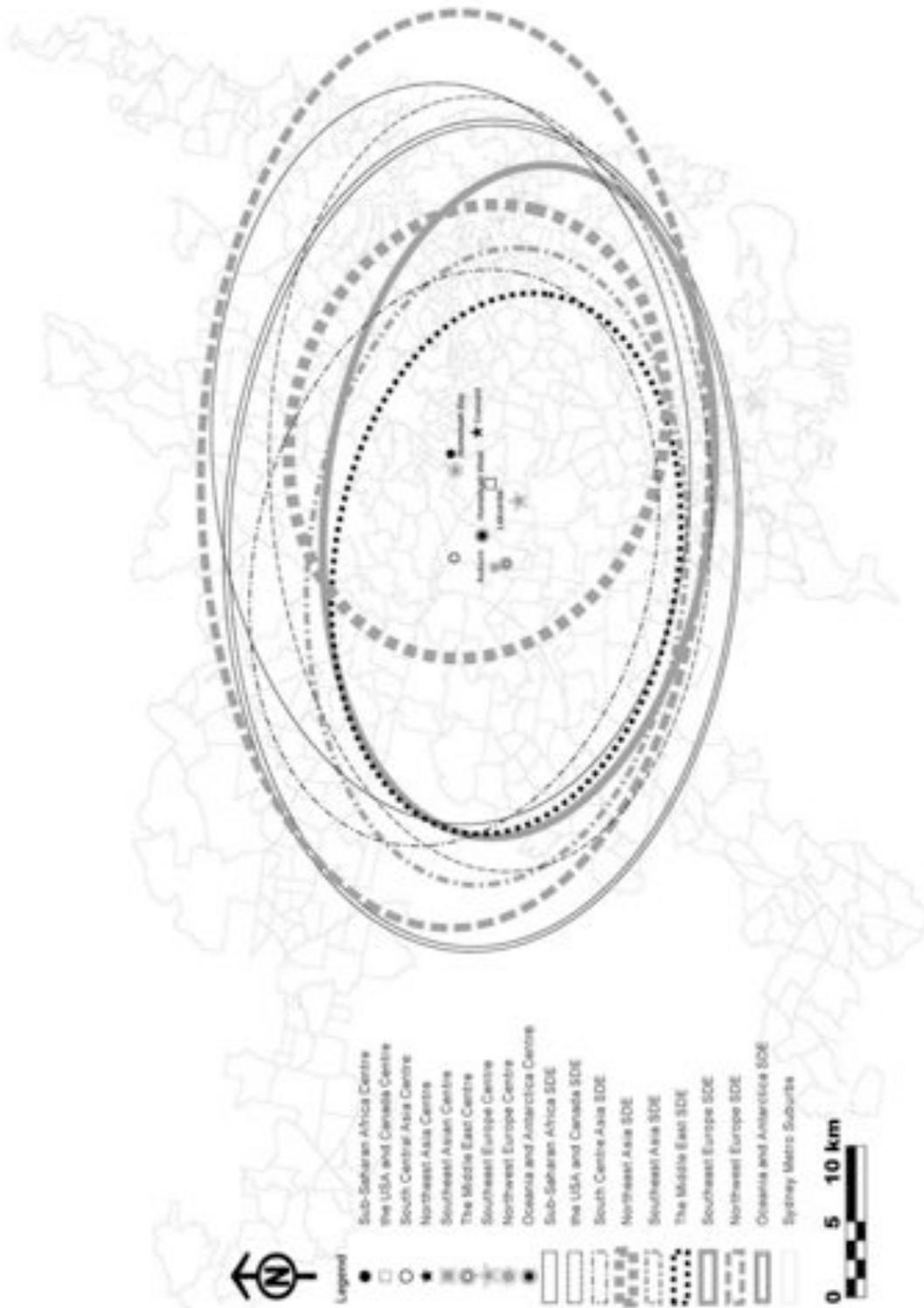


Figure 0-12: Residential Distribution of Large Birthplace Groups

Figure 0-13 shows the overall ranking for all the 34 investigated countries of birthplace in terms of their concentration level and the location of residential centres. The X coordinates for residential centres and concentration area for each country of birthplace are shown in Tables 5.2 and 5.3. From Figure 0-13, it can be seen that the populations born in Iraq and Viet Nam are most segregated and resides in most undesirable locations in Sydney. Also, the population born in Lebanon, Turkey, Sri Lanka, and Bosnia and Herzegovina reveal some extent of residential concentration in undesirable locations. What should be noticed is that these groups are generally from the Southern and Central Asia and the Middle East large groups.

The populations who born in South Africa, Ireland, Papua New Guinea, USA and Canada are of least concentration and they tend to reside in more desirable locations in Sydney. The successful populations that gravitate towards East and are least concentrated are in general from the large groups of the USA and Canada, Oceania, and Sub-Saharan Africa.

The European-born populations in general have lower level of congregation and they tend to be resident in the moderately desirable locations. The East Asian-born populations who have more congregated distribution patterns also live in rather desirable locations.

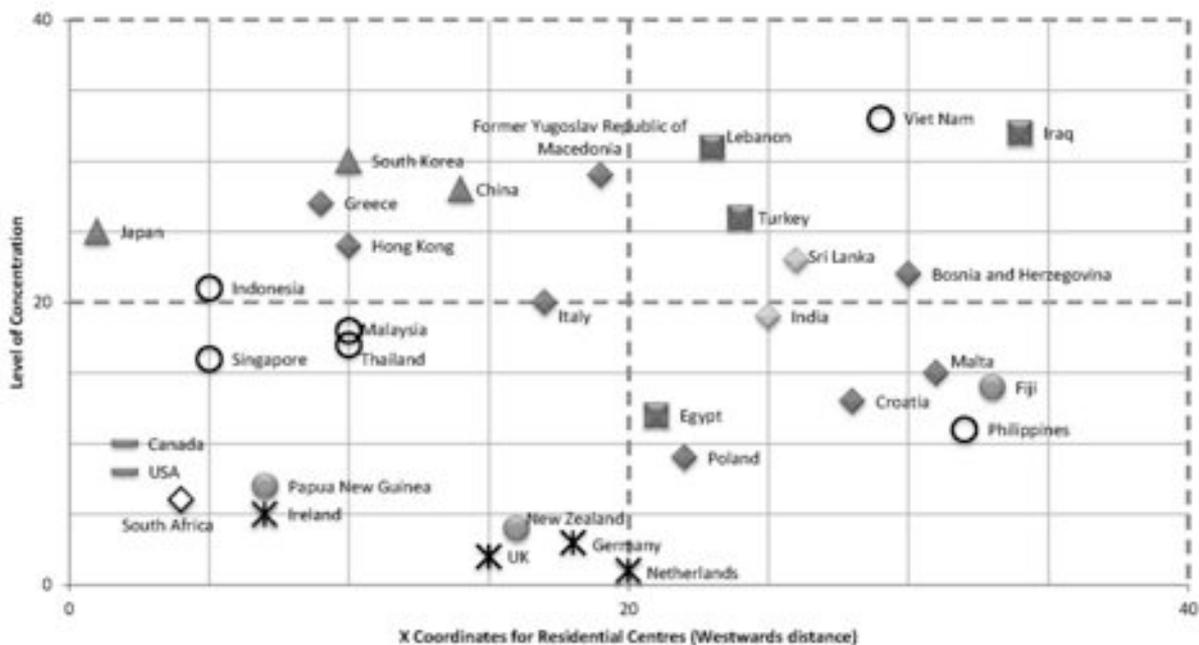


Figure 0-13: Concentration and Location of Overseas Born Population

Table 0.3: Congregation of Population Born Overseas

Large Groups	Nations	SDE (km ²)	Size	Rank	Population	SDx (km)	SDy (km)
North-West Europe	Netherlands	1457.887		1	8642	2.90	1.56
North-West Europe	United Kingdom	1372.54		2	148841	2.77	1.54
North-West Europe	Germany	1220.239		3	17232	2.66	1.42
Oceania and Antarctica	New Zealand	1058.142		4	74014	2.38	1.38
North-West Europe	Ireland	1046.273		5	12748	2.49	1.30
Sub-Saharan Africa	South Africa	1016.025		6	26927	1.44	2.19
Oceania and Antarctica	Papua New Guinea	994.377		7	3296	2.29	1.35
Americas	United States of America	973.047		8	15205	2.28	1.32
Southern and Eastern Europe	Poland	954.407		9	12034	2.27	1.31

Americas	Canada	952.348	10	6850	2.20	1.34
South-East Asia	Philippines	859.754	11	50654	2.03	1.31
North Africa and the Middle East	Egypt	793.452	13	15790	1.97	1.25
Southern and Eastern Europe	Croatia	790.045	14	14712	1.21	2.03
Oceania and Antarctica	Fiji	764.785	15	26391	1.80	1.32
Southern and Eastern Europe	Malta	733.979	16	12192	2.03	1.12
South-East Asia	Singapore	724.602	17	8536	1.88	1.20
South-East Asia	Thailand	714.609	18	10501	1.07	2.06
South-East Asia	Malaysia	711.741	19	20655	1.82	1.21
Southern and Central Asia	India	670.592	20	52135	1.74	1.19
Southern and Eastern Europe	Italy	650.145	21	41148	1.09	1.85
South-East Asia	Indonesia	634.307	22	20119	1.82	1.08
Southern and Eastern Europe	Bosnia and Herzegovina	627.533	23	6232	1.73	1.12
Southern and Central Asia	Sri Lanka	546.578	24	17625	1.61	1.05
North-East Asia	Hong Kong (SAR of China)	541.617	25	36541	1.42	1.18
North-East Asia	Japan	498.604	26	9794	1.49	1.04
North Africa and the Middle East	Turkey	475.116	27	11217	1.73	0.85
Southern and Eastern Europe	Greece	449.975	28	31278	1.56	0.90
North-East Asia	China (excl. SARs and Taiwan Province)	449.427	29	107746	1.32	1.06
Southern and Eastern Europe	Former Yugoslav Republic of Macedonia (FYROM)	403.238	30	11472	1.56	0.80
North-East Asia	Korea, Republic of (South)	391.316	31	31777	1.31	0.93
North Africa and the Middle East	Lebanon	363.471	32	53537	1.29	0.87
North Africa and the Middle East	Iraq	278.787	33	19958	1.27	0.68
South-East Asia	Viet Nam	227.271	35	61848	1.35	0.64

Table 0.4: Location of Residential Centres of Overseas Born Population

Large Groups	Nations	Residential Centres	Rank
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		X Coordinates	
North-East Asia	Japan	151.163	1
Americas	United States of America	151.124	2
Americas	Canada	151.124	3
Sub-Saharan Africa	South Africa	151.115	4
South-East Asia	Singapore	151.109	5
South-East Asia	Indonesia	151.109	5
North-West Europe	Ireland	151.094	7
Oceania and Antarctica	Papua New Guinea	151.094	7
Southern and Eastern Europe	Greece	151.093	9
South-East Asia	Thailand	151.089	10
South-East Asia	Malaysia	151.089	10
North-East Asia	Hong Kong (SAR of China)	151.089	10
North-East Asia	Korea, Republic of (South)	151.089	10
North-East Asia	China (excl. SARs and Taiwan Province)	151.085	14
North-West Europe	United Kingdom	151.069	15
Oceania and Antarctica	New Zealand	151.064	16
Southern and Eastern Europe	Italy	151.062	17
North-West Europe	Germany	151.057	18
Southern and Eastern Europe	Former Yugoslav Republic of Macedonia	151.050	19
North-West Europe	Netherlands	151.043	20
North Africa and the Middle East	Egypt	151.043	20
Southern and Eastern Europe	Poland	151.036	22
North Africa and the Middle East	Lebanon	151.027	23
North Africa and the Middle East	Turkey	151.025	24
Southern and Central Asia	India	151.020	25
Southern and Central Asia	Sri Lanka	151.009	26
Southern and Eastern Europe	South Eastern Europe	151.005	27
Southern and Eastern Europe	Croatia	151.005	28
South-East Asia	Viet Nam	150.993	29
Southern and Eastern Europe	Bosnia and Herzegovina	150.981	30
Southern and Eastern Europe	Malta	150.967	31
South-East Asia	Philippines	150.966	32
Oceania and Antarctica	Fiji	150.957	33
North Africa and the Middle East	Iraq	150.943	34

Main Findings and Conclusions

After investigating the spatial distribution pattern of each group from different countries of birthplace, this research has painted a general picture of ethnicity distribution and the level of congregation in Sydney. The major findings of the study are as following:

- The centographic method is capable of providing more information on the congregation situation for each ethnic community than the ID or IS methods. It is an appropriate method for describing the features of ethnicity concentration, since it shows the locations and the spatial scale of the absolute congregation occurrence. This information enables further exploration of the reasons to such patterns, such as the social-economical levels for the locations, the education levels, or the distance to city centres and other service facilities.
- In general, the non-Australian born populations gravitate to Western and Southern Sydney. However, there were no groups that could be regarded as very highly segregated in Sydney. Indeed, comparatively strong residential concentrations for some groups such as Iraq born population, Viet Nam born population occur in areas in Sydney western areas. However, these concentrations are still not comparable with the high level of concentration of African-Americans and Hispanic-American exhibit in many cities in the USA. Therefore, one can conclude ethnic 'ghettoes' are non-existent in Sydney.
- For the large ethnic groups, the Asian and the Middle Eastern tend to be more concentrated than European populations. In particular, Southern and Southeast Asians reside more congregated and

they live more in the Western Sydney areas. In contrast, the North European populations are the least congregated. Three variables may play roles here:

- There are rather strong distinctions in the level of concentration and their spatial distribution between different cultural backgrounds. The reasons of such tendencies need to be further explored. Closely associated with culture are other traits such as level of success of the mother countries and the attributes/type/strata/motivations of the population that migrates.
- Influence of being a large group: It is usually assumed that larger immigration populations tend to be more concentrated as the large consumption can support local services and in turn encourages concentration. This hypothesis is somewhat validated by evidence of high level of concentration of six out of seven largest language groups. The relative time of immigration in history?: This factor is a frequent topic of discussion when analysing the factors that influence the level of ethnic concentration. As Europeans have a longer history of immigration, they tend to be more confident and not likely to be restricted when choosing residential locations. In contrast, as the Asian and the Middle East populations are relatively recent migrants, they tend to prefer to live in places where they can easily get access to people with the same cultural background.

References

- Australian Bureau of Statistics. (2006). CENSUS 2006 - PEOPLE BORN IN THE MIDDLE EAST. Canberra: Australian Bureau of Statistics.
- Bashil.Vilna, & HughesAlanMark. (1997). Globalization and Residential Segregation by Race. *The ANNALS of the American Academy of Political and Social Science*, 105-120.
- BaumScott. (1997). Sydney, Australia: A global city? Testing the social polarisation thesis. *Urban Studies*, 1881-1901.
- Berry, J. W., & Laponce, L. A. (1994). Ethnicity and Culture in Canada. In *The Research Landscape*. Toronto: University of Toronto Press.
- Burnleylan. (1975). Ethnic Factors in Social Segregation and Residential Stratification in Australia's Large Cities. *the Australian and New Zealand Journal of Sociology*, 12-20.
- Burnleylan. (1999). Levels of Immigrant Residential Concentration in Sydney and their Relationship with Disadvantage. *Urban Studies*, 1295-1315.
- Burnleylan. (1989). Settlement Dimensions of the Vietnam-Born Population in Metropolitan Sydney. *Australian Geographical Studies*, 129-154.
- CastellM. (1989). *The Informational City: Information Technology, Economic Restructuring and the Urban-regional Process*. Oxford: Blackwell.
- Department of Immigration and Citizenship. (2006). Community Information Summary. Department of Immigration and Citizenship.
- Deurloo, M. C., & Musterd, M. (1998, Vol. 35, No. 3). Ethnic Clusters in Amsterdam, 1994- 96: Ethnic Clusters in Amsterdam, 1994± 96: *Urban Studies*, pp. 385- 396.
- DunnM.Kevin. (1998). Rethinking Ethnic Concentration: the Case of Cabramatta, Sydney. *Urban Studies*, 503-527.
- FaheyTony, & FanningBryan. (2010). Immigration and SOcio-spatial Segregation in Dublin, 1996-2006. *Urban Studies*, 1625-1642.
- Green, R. P., & Pick, J. B. (2006). Race, Ethnicity, Gender, and Poverty. In *Exploring the Urban Community a GIS Approach* (p. 204). Upper Saddle River: Pearson Education.
- HamnettChris. (1994). Social Polarisation in Global Cities: Theory and Evidence. *Urban Studies*, 401-424.
- HealyE. (1996). Welfare benefits and residential concentrations amongst recently-arrived migrant communities. *People and Place*, 20-32.
- JohnstonRon, ForrestJames, & PoulsenMichael. (2001). Sydney's Ethnic Geography: New Approaches to Analysing Pattern of Residential Concentration. *Australian Geographer*, 149-162.
- JohnstonRon, ForrestJames, & PoulsenMichael. (2001). The Geography of an EthniCity: Residential Segregation of Birthplace and Language Groups in Sydney, 1996. *Housing Studies*, 569-594.
- KellyP. (1983). Vietnamese settlement in Sydney. Sydney: Advisory Council for Inter-Government Relations.
- Knox, P., & Pinch, S. (2010). Segregation and Congregation. In *Urban Social Geography* (p. 167). Malaysia: Pearson Education Limited.
- MaseyS.Douglas, & DentonA.Nancy. (1988). The Dimension of Residential Segregation. *Social Forces*, 281-315.
- MasseyD.S., & DentonN.A. (1993). *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- MonkJanice. (1983). Asian Professionals as Immigrants: the Indians in Sydney. *Journal of Cultural Geography*, 1-16.
- MorrillL.R. (1991). On the measure of geographical segregation. *Geography Research Forum*, 25-36.
- PamukAyse. (2004). Geography of Immigrant Clusters in Global Cities: A Case Study of San Francisco, 2000. *International Journal of Urban and Regional Research*, 287-307.
- Peach, C. (1975). *Urban Socail Segregation*. London: Longman.

Racine, J.-B. (2002). Migration, Places and Intercultural Relations in Cities. In I. Schnell, & W. Ostendorf, *Studies in Segregation and Desegregation* (p. 67). Burlington: Ashgate Publishing Limited.

Rhein, C. (1998, Vol. 35, No. 3). Globalisation, Social Change and Minorities in Metropolitan Paris: The Emergence of New Class Patterns. *Urban Studies*, pp. 429- 447.

Sassen Saskia. (2003). Globalization or denationalization? *Review of International Political Econom*, 1-22.

Wong W.S. David. (1999). Several Fundamentals in Implementing Spatial Statistics in GIS: Using Centographic Measures as Examples. *Geographic Information Sciences*, 163-174.

Two or More Sides to the Debate on the use of Land Use Planning

David Fingland

Macquarie University

Abstract

Much has been written on the effects of neoliberal governance and its influence on the planning of cities and regions, often interpreted via the associated issues of globalisation, localism, competitiveness, growth fetishism, place-promotion and social exclusion. Relatively little has however been produced on the form and content of what might be loosely termed neoliberal planning. On the other hand, much ink has been spilled over the years in an attempt to justify traditional planning by focussing on such assumptions as the public interest at the centre of its considerations, morphing more recently into the all-pervading concept of the just city. Current planning practice appears to ignore such long standing values although they appear to persist, perhaps more so in theory than in practice.

The recent Productivity Commission's report however provides some insights into the Commonwealth and State Governments' perceptions of the planning systems currently practiced in Australia. It clearly sets out a neoliberal view of the scope and purpose of planning. No consideration is given to the values and ethical factors which provided the basis for the initial development of planning and its justification. This paper seeks to reflect on the current state of land use planning by examining some of the crucial influences that are providing the basis for the proposed new planning Act in New South Wales.

Keywords: Competition, certainty, profession, theory, ethics, planning reform.

INTRODUCTION

As night follows day, the irresistible urge to tinker with the planning system follows a change of government. This is being undertaken wholesale in Sydney in something of a rush. The venerable NSW Environmental Planning and Assessment Act 1979 is being overhauled within 18 months and the revised strategic plan for the city (announced in May) is to be completed following the consideration of a draft, by the end of this year.

At the same time planning seems perpetually to have to defend itself and what it can realistically achieve, against continuing statements that seek to categorise it as merely the handmaiden of the property industry. This is probably inevitable as planning has survived, it is argued, by attempting to mean all things to all men (Reade 1987) and as a result it has failed to develop a consistent body of theory (Batty 1979; Taylor 1988; Allmendinger 2009) which clearly defines and establishes its purpose; these have consequently shifted in response to the prevailing ideology of the time. It is also in a relatively weak position compared to other established professions in that it is the only one that is almost totally contained within government structures and its professional representatives are inevitably constrained in their promotion of it.

The preparation of a substantial number of submissions to the current NSW Planning Review together with a number of other, although not directly related reports, has provided an opportunity to look at a range of divergent views on the character of land use planning in a modern economy. The subsequent publication of the Green Paper will indicate what weight the government has placed on the varying perspectives advanced during the review process. This paper reviews the main submissions plus some relevant additional reports which can be expected to have some influence on the resulting legislation. The paper is also informed by the results of a number of interviews undertaken over the last year with a range of practising planners of varying experience and responsibility in both the public and private sectors. Inevitably these can only represent the perceptions and views of a few individuals and it would be unwise to place too much emphasis on them. However, their views are remarkably consistent about such issues as the role of planning, their educational experience and the values they seek to bring to their work.

While it is too early to judge at the time of writing, early indications derived from the Minister's initial briefings of various interest groups suggest that the changes proposed can be expected to fairly accurately reflect the issues raised in the initial report prepared by the Independent Panel set up to advise the Minister (Moore and Dyer 2011). There is by no means a consensus about what land use planning is or what it is for. However, contributors to this debate can provide both an interpretation of what these intentions are and what planning should be attempting to achieve in practice. The present circumstances in NSW are interesting as it is possible to discern how the various interest groups are characterising a contemporary view of what planning might be in the run up to the preparation of a new planning Act.

The review received some 300 individual submissions raising a huge number of detailed issues, many not appropriate for consideration as providing a basis for legislation. The main weight of the submissions judging by the responses outlined in the Issues Paper (Moore and Dyer 2011) has come from property lobby groups who have ready access to the Department of Planning and Infrastructure as key stakeholders and various powerful representative groups such as the Sydney Business Chamber and the Shopping Centre Council of Australia. Given a pre-disposition to assign particular weight to commercial interests following the direction indicated by the Productivity Commission and the NSW Treasury in determining planning as a key feature in the stimulation of economic growth, it can reasonably be expected that many of their arguments will be used to substantiate the proposals to be included in the forthcoming Green Paper.

THE VIEW OF THE PRODUCTIVITY COMMISSION

This seems to be a period of considerable turbulence in the consideration of the future of land use planning in Australia with governments under pressure from business interests at all levels to reduce what is termed unnecessary red tape in the approval processes for development and where this remains, to ensure that approvals are expedited as quickly as possible. On the other side of the equation, the practice of planning and its role seem to be under increasing attack from the State governments which define and empower its operation and whose support is crucial.

The terms of reference for the recent benchmarking study undertaken by the Productivity Commission (Australian Government Productivity Commission 2011) required an examination of the operations of the States and Territories' planning and zoning systems, particularly as they affect business compliance costs, competition and the overall efficiency and effectiveness of the functioning of cities. As a part of the study, the Commission was to report on planning and zoning laws and practices which unjustifiably restrict competition and best practice approaches that support competition. The scope of this undertaking is similar to the earlier Barker Review of Land Use Planning commissioned by the UK Treasury and published in 2006.

Although limited by its terms of reference, the Productivity Commission's report does provide some insights into the Commonwealth and State Governments' perceptions of the planning systems currently practiced in Australia, strongly influenced as they are by development industry lobby groups and the demands of a neoliberal agenda. The focus of the investigations is on the impact of these systems on business and only examines a limited range of factors of the many that affect urban development and the management of land use change, specifically those with an emphasis on efficiency as defined by the current political ideology. While the report does delve somewhat hesitatingly into a wider range of considerations, little interest is shown in the other, but now often ignored, ideas which provided the basis for the initial development of planning and its justification. Although these, particularly the notion of the public interest are still believed by some to remain at its core (Campbell 2010; Campbell and Fainstein 2011), purely from a business perspective there is probably no reason to do so.

The Productivity Commission's report includes a broad assessment of how well each capital city is functioning based on a questionnaire sent to each of the state and territory planning jurisdictions aimed at identifying those factors which were considered to be amenable to influence by planning. Those areas where planning was considered to have a major effect were:

- management of greenfield development;
- accommodation of population growth;
- transition to higher development densities;
- protection of biodiversity; and
- provision of diverse/appropriate housing.

Each of these could reasonably be considered to be an area of market failure – the residue of planning or planning-related activities where the interest of the market could not be aroused, either because it was too difficult or risky, requiring power only available to the public sector or where it would be unable to generate excess value from it. These areas might also be interpreted as the self-image of what planning authorities actually do by effectively providing support for the market.

There was wide agreement between the respondents on those areas where planning would have the most influence. The NSW response appears to suggest that unlike some other jurisdictions, there were no areas (23 in total) where planning has no effect. It was considered by the NSW Government (the Department of Planning in this case), that planning, defined as the current planning, zoning and DA system, was capable of having a moderate effect on:

- reduction of socio-economic disparities;
- improving services for an ageing population;
- maintaining social cohesion; and
- attracting new industries

While recognising the relative superficiality of this kind of survey and the inherent difficulty in providing an honest and reliable response, it is hard to identify a direct connection between the operation of the existing land use planning system and major social issues, especially in relation to their improvement as apparently believed by the respondents. It seems fairly clear that planning has contributed, although not entirely independently, to a substantial relative shift of wealth from the poor to the better-off. Planning had contributed to the effect of giving more to those that already had most, while taking away from the poor what little they had (Hall *et al* 1973). This distributional shift was identified during a period when the general belief in the contribution of planning to the overall public good was well established and was aimed at promoting social stability *even at the expense of national economic growth* (Hall *et al* 1973). While this conclusion is based on a very detailed assessment of the effects of planning in the UK at the time, it is unlikely that the impacts of an essentially similar process of land development where all the increase in the value of land as a result of rezoning accrues to the land owner would be any different in Australia. Unfortunately, no similar investigation has been undertaken here or in the UK over the succeeding 40 years.

Given the subsequent shift away from a focus on the public interest towards one of support for the capitalist market, an obvious contradiction exists between a current planning system with such a focus, as opposed to its previously espoused aims, and its claimed ability to promote social cohesion and the reduction of socio-economic disparities. This is a perception of current planning that is difficult to support but perhaps is an indication of the confusion that seems to persist in the planning community. At the same time, planners when questioned about the purpose of planning are sceptical about its ability to produce improvements in social and economic equity considering this to be mere social engineering well beyond its scope to deliver (Campbell and Marshall 1998; planner interviews 2012).

THE VIEW FROM THE TREASURY

The NSW Treasury, claiming to be considering the economic and social impacts of the current (land use) planning system asserts that available evidence indicates that its operation contributes to most of the failures of the market including low levels of housing supply, excessive house prices and rents, poor housing affordability, excessive commercial rent levels in the CBD and low productivity and high prices for food and other goods (NSW Treasury 2012).

The evidence produced to support these assertions is predominantly based on the assessment of trends over the past 5 to 10 years during a period of significant financial instability plus comparisons with circumstances in other cities with different economies and planning regimes including the USA. Stricter commercial planning regulations are blamed for higher rents in Sydney based on evidence relating to height limits in midtown Manhattan, which is certainly a model to be followed only if controls are to be applied merely to allow market requirements to dominate all other factors such as amenity and the environment. Simply ignoring any consideration apart from the maximum exploitation of a site is a recipe for the development of commercial centres with no redeeming characteristics apart from commerce. These responses are simply promoting the idea that commercial considerations should predominate at the expense of everything else or that place has no influence on practical or aesthetic considerations.

The use of data relating to the situation in the housing market between 1991 and 1996 in relation to times taken to undertake development assessment procedures in order to support a recommendation on current and future requirements must assume that no changes have taken place in the interim and demonstrates a very uncertain knowledge of the planning process and what has occurred since then.

Principle 4 in the submission asserts that *economic appraisal in the form of cost benefit analysis should be embedded into the planning system*. Cost benefit analysis used to be undertaken in relation to specific projects where it was considered that outcomes could be reasonably accurately predicted. It was seen at one time as a useful indicator which could inform decision-making. However, the process has serious limitations and has never been included in the assessment of planning proposals and has in fact even fallen out of favour for the assessment of projects with definable outcomes as it has proved impossible to place a monetary value on a wide range of benefits and disbenefits particularly those where these would potentially vary between the groups affected. This should be known to anyone in the Treasury and it is a sad reflection on a major and influential Department of State government that such erroneous ideas are still promoted.

On the whole the recommendations of the Treasury, not unexpectedly, closely follow those of the Productivity Commission providing a particular view of the planning system as one which should be firmly focussed on the pursuit of economic goals by providing support for the property industry. The means of achieving this is further regulation and a focus on ease of approval. The concept that planning could contribute anything to the reduction of socio-economic disparities as apparently believed by the NSW Department of Planning in its response to the Productivity Commission survey has apparently disappeared. Equally, there appears to be no place for the consideration of environmental values in this hard-nosed view of its purpose.

THE PROFESSION'S VIEW OF PLANNING?

Planning's professional bodies can be expected to project a positive image about its practice sufficient to tempt the initially uninitiated to seek membership. This is in order both to reinforce the size of these bodies and hopefully increase their influence at the same time as providing, in return, the aura of independent professional judgement that comes with membership of a profession. It is surprising therefore to note that a considerable proportion of the planning graduates interviewed do not appear to consider such membership to be beneficial to them and what they do (planner interviews 2012). The pattern appears to be that young graduates join as soon as they are able but allow their membership to lapse once they gain some experience of practice (planner interviews 2012). Their experience, at least in the early years seems to be at some distance from the descriptions of planning practice promoted by the professional bodies and some planning schools. Similar images of planning seem to be universal with examples from the UK, Australia and the United States providing a very different view of planning from that of the government bodies:

According to the UK Royal Town Planning Institute (RTPI);

Planning is about mapping a future vision. Planning decisions must be made on a rational basis in the public interest. This needs plans which establish what the public interest is for the community, of whatever size, covered by the plan. Policies and proposals should be driven by community aspirations and a robust assessment of the evidence of need for development and the need to safeguard important assets.

(The Royal Town Planning Institute 2012)

And the Planning Institute of Australia (PIA);

Planners are professionals who specialise in developing strategies and designing communities in which we live, work and play. Balancing the built and natural environment, community needs, cultural significance, and economic sustainability, planners aim to improve our quality of life and create vibrant communities.

(Planning Institute of Australia 2012)

And the Department of City and Regional Planning, Cornell University, USA;

Planning has an obligation to be visionary. It has to be practical and useful but it also has to be on the edge of imagining a future. We provide the tools, techniques and strategies you will need to design equitable, vibrant and sustainable places.

(Department of City and Regional Planning, Cornell University 2012)

These statements contain a number of key words which have become central to planning but which have battled to retain their influence on the central beliefs and principles which are considered to characterise it: *future vision; rational; public interest; aspirations; evidence; designing communities; balancing; community; cultural significance, sustainability; improve; quality of life; vibrant; visionary; practical; imagining a future*. It may be going too far to suggest that these ideas are unrecognisable to young recent planning graduates (planner interviews 2012), the majority of whom are working exclusively on development assessment in local government and don't expect to move into the potentially more interesting fields described for some time. However, when asked to characterise their values in relation to planning practice, the response generally takes the form of a description of the ethics necessary in planning practice when dealing with the public (planner interviews 2012).

However, planning activities of all kinds raise a wide range of issues about the values that are explicitly and implicitly at work. Any understanding of this has to start from the recognition that the idea of the value-free or value-neutral planner is neither an appropriate concept nor an accurate assessment of how planners actually think or behave in practice (Thomas 1994). This relates to both the ethics of operating in compliance with a definition of appropriate public behaviour and those values defined for an ethical framework for planning and planners. Clearly this is a very complex issue as it proved difficult in the interviews to elicit detailed responses when such considerations were directly addressed.

Professional codes of practice may go some way to establishing an ethical framework for individual planners although they inevitably have a concern with maintaining the reputation of the profession. In practice they tend to attempt to maintain myths about the powers of planning to improve the lives of the community in the face of entrenched cynicism based on the real-life outcomes of the activities they claim as theirs. Like all professions there is an ingrained tendency to maintain any mystique attached to specialised knowledge and the closed nature of access to that. However, in current practice, at least in NSW, many of those interviewed with planning degrees are not current members of the Planning Institute and some profess ignorance of its code of practice. At the same time, their overall view of the justification for what they do has diminished to one of achieving some kind of order where chaos would otherwise predominate (planner interviews 2012). This may well be a realistic conclusion to reach in relation to circumstances in the land market.

THE INDIVIDUAL AS PLANNER

It can reasonably be expected that the planners themselves as members of a recognised profession having fulfilled the requirements for entry will be susceptible to the stated and sometimes implied notions of what planning stands for; why it is considered to be beneficial and what its activities are aimed at achieving. This is part of the defining ethos of all professions and provides a justification for what they do in practice. However, recent interviews with planners, suggest that their training has prepared them, on the whole, fairly effectively but without much depth, for reliable employment in a job which can be considered to be broadly beneficial in an ill-defined way. They bring their newly acquired skills to bear on achieving a balance between conflicting views about development issues. It is of course, not clear how this is achieved in practice or on what basis, although having a clearly defined set of rules is of some assistance, even though there may be a wide degree of scepticism concerning their apparently arbitrary nature (planner interviews 2012).

The comment from a recent graduate that the best thing about the Bachelor of Planning course at a major Sydney university was the year of external professional practice, besides providing some implied criticism of the taught courses themselves, does indicate the belief that its main purpose is the instruction of students in the requirements of the job – how to assess development applications, for example (planner interviews 2012). In circumstances where the demand for qualified planners is high and the level of unemployment in the sector very low (Department of Education, Employment and Workplace Relations 2011), it is not unreasonable to suggest that a focus on the needs for employment is not perhaps a high priority especially as those requirements are constantly changing, even if this appears to contradict the apparent role of the university to train students for the world of work - a key neoliberal principle. Indeed, this is the image projected by the profession and in some cases by academia.

It can be assumed that the survival of planning within a market-defined and led system means that its activities are believed to have some benefits for continuing economic growth, the core principle of neoliberal governance. This emphasis has only limited resonance with much of the judgements and ethical questions which are claimed to influence the daily practice of planning (Campbell and Marshall 1998). It represents an obvious conflict with the role of the planner as a competent technician operating the system on the basis of previously established and clearly understood norms in the service of the customer rather than the public. Professional planners appear to find no difficulty in accommodating both these cultures in practice but this would seem to be more to do with the professional discipline within which they operate rather than a strongly felt belief in either approach. Most planners appear to cling to the belief in their values (but becoming increasingly cynical (or realistic) with experience) (Campbell and Marshall 1998), usually inculcated during training and they continue to maintain that what they do is of benefit to society.

OTHER RECENT CONTRIBUTIONS TO THE DEBATE

There seems to be a surprising, perhaps unexpected group of players providing their input, sometimes indirectly, to the review of the NSW planning system. There has been a plethora of reports concerning various aspects of the planning process produced recently, sometimes with widely divergent perspectives, some from State government entities, in addition to those directly related to the review. This is further complicated by the initiation of the apparently rapid process of updating the Metropolitan Plan for Sydney which is intended to be completed at the same time as the new Planning Act is promulgated.

Perusal of these documents creates a confusing and in some cases curiously contradictory notion of planning and its purpose. Only one, a submission not a commissioned report (NSW Division of the Planning Institute of Australia 2011), was prepared by planners and even this delivers a curious and perplexing view of what planning is and what the authors believe it should be when they discuss the culture of planning.. All the others were prepared mostly by groups with unnamed members bringing their own predilections and beliefs to bear on the issues relating to planning. Apart from the COAG Reform Council Review (COAG Reform Council 2012) and the Sydney Discussion Paper (NSW Government 2012), none of these appear to have benefited from the presence of experienced planners. What we get on the whole is a perspective on what might be termed a high level view of how these groups perceive the planning process and its purpose. Naturally this view does not include consideration of what is believed by planners to be intrinsic to what they do and why planning performs an important function within government. They have different views of planning's purpose sometimes expressed in these documents when they are tempted to stray beyond their original terms of reference. But these views, generally reflecting the prevailing political agenda, remain influential in presenting a concept of planning as continuing to require change to fulfil their perception of its role and improve its effectiveness in fulfilling the requirements of the development industry.

The issues which seem to energise the various authors from their varying perspectives relate to certainty; transparency; complexity (reduction of); competing public interests; reduction of discretion (flexibility); accountability and efficiency (speed of decision-making). Much attention is given to an improved focus on the importance of the strategic plan as a source of certainty with some claims that it should be legally enforceable; coupled with improved community consultation at this level seen as a means of improving the resulting efficiency of the system by removing subsequent sources of conflict; a very top-down approach.

In general, many of these studies follow the overall tenets of neoliberal governance, supporting a planning system which processes development applications effectively and rapidly while leaving all aspects of the kind of development control attributable to the requirements of the plan entirely to the market – *its role is to reduce the risk to business while not interfering with the risks associated with the market itself* (Australian Government Productivity Commission 2011). This is where competition comes into the picture even though unfettered competition has led to chaotic and inefficient situations in the past and may continue to do so. Indeed the extrapolation of the idea that competition between firms is inherently beneficial to that between cities is fraught with difficulty. Competition between places cannot operate in the same way as that within the market place. It is in any case moderated by the availability of resources and in simple terms, cities cannot go bankrupt unlike single enterprises (Turok 2005; Urwin 2006).

A good deal of the material in these reports appears to be divorced from the practice of planning, smacking of ideology rather than knowledge of planning and the planning system. This relates to both those in favour of a combination of a concentration of power and increased codification as achieving increased clarity and efficiency and those wishing to see a return to an emphasis on some of the older characteristics of planning. Both these positions are supported by exaggerated claims for and against. The Property Council for example, echoing the views of the Treasury claims that the planning system is one of the few micro-economic levers available to restore the State's (NSW) competitive position by fostering economic development, growth, innovation and productivity (Property Council 2011).

Inevitably, the Property Council believes that property interests are paramount – seeking a presumption in favour of approval within the development assessment process. Given the current approval rate of 96 percent (NSW Department of Planning and Infrastructure 2012) this would clearly only be symbolic. Claims are also made that strategic issues should be determined by the application of so-called market economics; presumably no place can be found for social and aesthetic considerations or the community for that matter; a particularly bleak prospect.

The other side of the coin is represented by the submission to the review by the planners' representatives (NSW Division of the Planning Institute of Australia 2011). This presents a rather gloomy view of the planning process focussing on two main claims. These are (1) that planning has lost its vision, meaning it seems, its ability to define and promote a splendid future for the community resulting from the forward thinking of the planning community and (2) that the planning process has become too politicised due to tensions between the elected representatives and the professional planning staff at the local level. Rules are considered to be no substitute for intuition and experience which will normally produce a better outcome, it is claimed. In the absence of vision and plan, the need for change is not appreciated by the community; there is a lack of political, government and professional support for making the case for change in the public interest resulting in planners finding it easier to reinforce the norm. Thus, while planners are seeking change they have little support from those who determine what they are doing and how (NSW Division of the Planning Institute of Australia 2011).

These planners' perceptions on decision-making in planning seem to have been overtaken by events. This is an inherently political activity, determining who gains and who loses, but it has been substantially removed from overt political consideration by the substantial delegation of powers of determination in NSW to professional planners and the widespread use of planning panels in the development control process. This change introduces a wholly different argument in relation to the accountability required of planning decisions within a democratic political structure as a greatly increased reliance on the role of experts – an important neoliberal principle – can be seen as diluting or even removing the exercise of this principle. This de-politicisation might perhaps be considered more of a cause for concern as part of the process in undermining the accountability of the decision-making process.

Lawyers in the form of the NSW Independent Commission Against Corruption (ICAC) have also produced another almost apocalyptic view of planning where flexibility in decision-making is equated with potential corruption and as flexibility is claimed to be so rife in NSW, it must be reined in by the further application of rules (ICAC 2012). Some of the views expressed in this document can only be considered arcane, reflecting a concept of planning only available in a view from the court. Concerns for example are expressed about the operation of State Environmental Planning Policy (SEPP) 1 which allows some degree of flexibility in interpretation of the requirements of planning instruments. The use of this SEPP has to be undertaken transparently and regularly reported to the Department of Planning and Infrastructure; hardly a problem but any flexibility is clearly of concern leading to inevitable corruption in the view of the Commission. The recommendations in the report inevitably seek further codification by the introduction of measures to further restrict flexibility and with it the continuing erosion of planning as an open and contested process undertaken within a democratic format.

The notion of certainty provided by the planning process is a repeated demand of the industry lobby groups and its provision, achieved via the reform of the process, also lies at the centre of government rhetoric. What this means in practice and how it is achieved is not made clear. In general, planning theory tends to struggle with the concept of certainty. On the one hand, it is seen as present in parts within the plan (Bunker and Searle 2007) and within the process, although plan-making is always undertaken in an environment of

uncertainty it can only create some notion of what is termed certainty. For others, the whole idea is bogus and deliberately constructed to give an appearance of legitimacy (Gunder and Hillier 2009). However, what the plan and its associated policies do and what planners believe about what they are doing and why, are two different questions.

Is there a discrepancy here between what planners believe about what they do and what they say they do? They still appear in interviews to have confidence that what they are doing is beneficial to the community and that they will undertake this by applying a set of ill-defined but implicit values. But the principal justification for what they do is based on the idea of some kind of independent professional judgement where they are best able to evaluate alternatives and make judgements based on the consideration of all aspects of the problem. This appears to represent the core of their beliefs and values (Campbell and Marshall 1998; planner interviews 2012).

SOME POSSIBLE CONCLUSIONS

Recent reviews of planning from various perspectives but generally within a neoliberal context have paralleled this contemporary flourish of activity, both strategic and legal, and these, in addition to the various submissions generated as inputs to the various processes, will inevitably have some influence on the NSW planning review. A number of positions are discernible. Unfortunately some of these appear to be curiously ill-informed while the recommendations of others are merely self-serving, perhaps not unexpectedly. It is inevitable that there will be differing perspectives and choices will have to be made by government in relation to the relative emphasis afforded to each. The problem does not lie with the submissions themselves which will always express the prejudices of their authors and demonstrate in some cases a disappointing ignorance of the subject on which they are pontificating. It lies with an uncritical acceptance and repetition as fact by other authors who should be able to understand the weakness and/or bias of such contentions.

The prevailing role of planning is that set out by government but while this appears to be the simplistic notion of support for the property market as promoted by property interests and their supporters there remain odd discrepancies between what planning actually does and what this characterisation supposes. Experience suggests that planning as practiced has at least three discernible outcomes:

- it provides some stability in the land market;
- externalities can be effectively dealt with providing some protection of the rights of residents; and
- it provides some certainty for developers and land owners particularly in relation to the provision of necessary infrastructure.

(Adapted from Reade 1987)

Planning does in fact produce significant benefits for the property industry in relation to the management of the land market which in its absence would be chaotic (Bramley *et al* 1995). If there was no planning system the externalities associated with urban development would have a severe effect on the market and on supply. This is because of the lack of certainty about future developments on adjacent land in an unplanned situation, individual investors would be less sure about their own investments. At the same time, much of the land in theory available for development would not be developable in practice due to a lack of services. These would be under-provided as their supply would be risky due to the level of uncertainty. If this an accurate description of the results of planning, it is not very far from the view of what its role should be as propounded by the government agencies. The practice of planning does however have other effects which move it somewhat from complete subjugation to this idea. Untrammelled market forces are kept in check by the control of land uses providing a degree of support for the individual and the community. As such, planning cannot be seen as exclusively a prop of the property market; these roles are incompatible.

This can also be seen as a justification of planning as curbing the excesses of that market in the public interest. But this, of course relies on the continuing health of the idea of the public interest which seems to be only just surviving and the retention of the means of controlling the market within a highly codified process.

The principle question however remains unanswered. Why do property interests find it so difficult to operate without encouragement of the whole planning system or why should they, rather than other interests in society, receive this kind of encouragement? If it is the economy that is to be stimulated, there would seem to be many more appropriate ways to achieve this than through land policy.

REFERENCES

The principal documents referred to:

Australian Government Productivity Commission (2011), *Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments*, Research Report, Two Volumes.

COAG Reform Council (2012), *Review of Capital City Strategic Planning Systems: Appendix A – Sydney*, COAG Reform Council

Independent Commission Against Corruption (ICAC) (2012), *Anti-Corruption Safeguards and the NSW Planning System*.

Moore T, Dyer R, (2011), *The Way Ahead for Planning in NSW? Issues Paper of the NSW Planning System Review*, NSW Government)

NSW Government (2011), *NSW 2021: A Plan to make NSW Number One*.

NSW Government (2012), *Sydney over the next 20 Years: A Discussion Document*.

NSW Treasury (2012), *NSW Planning System Review: Submission from NSW Treasury*.

Planning Institute of Australia (2011), *Cultural Shifts in Planning: Supplementary Submission to the NSW Planning Review, prepared by the NSW Division of the Planning Institute of Australia*.

Property Council of Australia (2011) *Submission to the Co-Chairs of the NSW Planning System Review*.

Other references:

Allmendinger P (2009), *Planning Theory*, Palgrave Macmillan.

Australian Department of Education, Employment and Workplace Relations (2011), *Urban and Regional Planners – Job Outlook*.

Barker K (2006), *Barker Review of Land Use Planning, Final Report – Recommendations, including summary of the Interim Report*, HMSO London.

Batty M (1979), *On Planning Processes* in Goodall B, Kirby A (eds), *Resources and Planning*, Pergamon.

Bramley G, Bartlett W, Lambert C (1995), *Planning, The Market and Private Housebuilding*, University College London Press.

Bunker R, Searle G (2007), *Seeking Certainty: Recent planning for Sydney and Melbourne*, *Town Planning Review* 78(5) pp 619-642.

Campbell H (ed) (2010), *Editorial, The Idea of Planning: Alive or Dead – Who Cares?* *Planning Theory and Practice* 11(4) pp 471-475.

Campbell H, Marshall R (1998), *Acting on Principle: Dilemmas in Planning Practice*. *Planning Practice and Research* 13 (2), pp 117-128.

Campbell S, Fainstein SS (eds) (2011), *Readings in Planning Theory*, Blackwell Publishing.

Department of City and Regional Planning, Cornell University (2012), www.aap.cornell.edu/crp/

Gunder M, Hillier J (2009), *Planning in Ten Words or Less: A Lacanian Entanglement with Spatial Planning*, Ashgate.

Hall P, Thomas R, Gracey H, Drewett R (1973), *The Containment of Urban England*, (2 volumes), Allen & Unwin.

NSW Department of Planning and Infrastructure (2012), *Local Development Performance Monitoring 2010-2011, Parts 1 and 2*.

Reade E (1987), *British Town and Country Planning*, Open University Press.

Royal Town Planning Institute (2012), www.rtpi.org.uk/what_planning_does/

Stein L (2008), *Principles of Planning Law*, Oxford University Press.

Taylor N (1998), *Urban Planning Theory since 1945*, SAGE Publications.

Thomas H (1994), *Values and Planning*, Avebury.

Turok I (2005), *Cities, Competition and Competitiveness: Identifying New Connections* in Buck N, Gordon I, Harding A, Turok I (eds), *Changing Cities: Rethinking Urban Competitiveness, Cohesion and Governance*, Palgrave Macmillan.

Urwin C (2006), *Why Cities don't Compete*, Discussion Paper 5, Centre for Cities, Institute of Public Policy Research, London.

Coastal Planning, Education and the Australian Context

Murray Herron, John Rollo and David Jones

Abstract: The Victorian Planning Minister's response to the *'Coastal Climate Change Advisor Report'*, initiated by the Baillieu government in 2010, identified the need to "initiate ... a skills audit with the view to developing a range of professional development courses to meet the shortfall of professionals with the capability to assess coastal climate change impacts" (Victoria 2012). The following paper addresses this deficiency by examining how Australia's higher education and further education sectors currently attend to the issue of coastal planning.

A detailed review of a large number of planning programs was undertaken to highlight the subject matter contained in each program with a specific listing of any coastal planning courses. Working from a theoretical perspective, the first part of the paper addresses why a dedicated subject on Coastal Planning is required in the present Australian planning school syllabus, and how such is positioned within the intent of PIA's Education Policy. The second part proposes a series of 12 lectures to underpin a unit titled "*Coastal Planning: The Australian Context*" which includes a draft lecture relating to the monitoring of Coastal Erosion in Adelaide.

1. Introduction

'... there are some things we're very clear about. We know the sea level is going up, we know temperatures are going up, we have a high degree of confidence in some regions that things are drying. So we can use that understanding of the climate system to be making decisions now' (Dr Andrew Ash, CSIRO).

While regulations relating to coastal protection and management has been legislated in both New South Wales (NSW) and South Australia (SA) as early as the 1970s, and policies focusing on erosion, flooding and sea level rise were being developed in SA in the early 1990s -with subsequent strategies referencing climate change as early as 2004 - one of the more pressing issues to be earmarked in the recent *'Coastal Climate Change Advisor Report'* was the "shortfall of professionals with the capability to assess coastal climate change impacts". The significance of this deficiency in both skill and knowledge base is made all the more relevant when considering that 85% Australians live within 50 kms of the coastline, and nearly two-thirds of humanity, or some 3.6 billion people live within a coastal buffer zone of 100kms.

Developed in five sections the two fundamental aims of this paper are to highlight the number of tertiary educational institutions currently providing courses in coastal planning and to articulate the learning objectives and draft syllabus for a prospective unit on coastal planning.

Questions relating to the educational options currently available for planners to improve their skills relating to climate change and coastal planning have been posed by organizations ranging from the American Planning Association (APA) to the Victorian State government. Barbara Norman in *'Planning for Coastal Climate Change – an Insight to International and National Approaches'* (Norman 2009) presents various directions for addressing climate change and coastal planning for: the Asia Pacific region, Europe, Canada, USA and South Africa.

The following five points were derived from both Norman (2009) and the recently published *Coastal Climate Change Advisory Report* (2012) for the Victorian State Government:

- The UK is already on its second series of coastal impact plans;
- New Zealand has the Auckland Regional Coastal Plan and the Waikato Regional Strategy;
- South Africa passed a comprehensive integrated coastal management act;
- Canada has a coastal area protection policy which is a national response to climate change and adaptation. This takes the form of the use of a land-use buffer zoning response to coastal inundation, with emphasis on community engagement at a local level and the application of risk management processes in developing strategies for adaptation (n.b. the Provinces of New Brunswick & Nova Scotia are highlighted as specific examples);
- The USA has provided a national framework for coastal planning at the state and local levels. The National Oceanic and Atmospheric Administration (NOAA) and the United States Environmental Protection Agency are the principal national bodies involved in examining the impacts of sea-level

The American Planning Association (APA) in 2011 conducted a survey of 700 members working in coastal communities. The research goal was to establish the coastal geospatial tools, data, and training needs of its members. The results from the survey were incorporated into the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Centre website entitled 'Digital Coast'.

These respondents included professional planners mainly from the public sector representing all of the coastal regions in the United States that had been grouped into 9 sectors: 1 Atlantic Northeast; 2 Mid-Atlantic; 3 Atlantic Southeast; 4 Gulf of Mexico; 5 Caribbean Sea; 6 Great Lakes; 7 West Coast; 8 Arctic and

9 Pacific Islands. The survey identified that the biggest challenge North American coastal planners were currently facing were training deficits on how to use available tools (APA 2011). Drawing on the research aims of the APA, and a selection of five countries reviewed by Norman (2009), the following presents the results of an internet survey of 205 undergraduate and post-graduate planning courses from Australia, the UK, the US, New Zealand, Canada and South Africa.

2. Survey - Coastal Planning and Higher Education, Identifying Course Availability - The methodology involved a series of internet searches of all planning schools recognized and accredited by the following professional bodies:

- The Planning Institute of Australia (PIA) (25 universities);
- The Canadian Institute of Planners (CIP)(17 universities);
- The New Zealand Planning Institute (NZPI) (4 universities);
- Royal Town Planning Institute (UK) (RTPI) (33 universities); and
- The Association of Collegiate Schools of Planning in the USA (ACSP), a consortium of university based programs offering degrees and credentials in urban and regional planning (126 universities).

Out of a total of 205 undergraduate and graduate programs reviewed, the survey (See Figure 5) indicates that only 11.2% or 23 out of 205 universities offered a specific unit in coastal planning.

The results from the internet search revealed that:

- 7 of 126 (6.35%) of Association of Collegiate Schools of Planning (ASCP) had a coastal planning unit (East Carolina University, Florida State, Stony Brook University, UCLA, University of Florida, University of North Carolina);
- 7 out of 33 (21.21%) of RTPI schools had a coastal planning unit (Cardiff University, University College London, University of Brighton, University of Liverpool, University of Manchester, University of Strathclyde and the University of Ulster);
- 9 out of the 25 (36%) of PIA schools had a coastal planning unit (Canberra, Sydney, Griffith, Sunshine Coast, South Australia, RMIT, Western Australia, Curtin and Edith Cowan);
- 0 out of the 4 NPZI schools had a coastal planning unit (Auckland, Massey, Otago, and Lincoln).
- 0 out of the 17 CIP schools has a coastal planning unit (UBC, Calgary, Dalhousie, Guelph, Manitoba, McGill, Montreal, Northern British Columbia, Université Du Quebec a Montréal, Ryerson, Saskatchewan, SFU, Toronto, Waterloo, and York).

Sources: (RTPI 2012), (NZPI 2012), (CIP 2012), (ACSP 2012), (PIA 2012).

3. What defines a unit in Coastal Planning?

A unit in Coastal Planning in the context of this paper is defined as having:

- the concepts of sustainable development for developing coastal areas;
- coast geomorphology; marine and coastal law; coastal planning principals and policy;
- climate change and its effects on the coast; and
- the role of remote sensing GIS and modelling on visualizing for predicting the future movement of Australia's coastline.

In the United Kingdom, the RTPI, in conjunction with seven of the 33 university courses it accredit, had to develop specific training units to assist in the development of coastal planning and management (RTPI 2012).

For this review a unit in Coastal Planning would have learning objectives similar to those identified by RTPI and would expand on some of the key components indicated by the UNESCO's Institute for Water Education. A composite of what is considered to be effective learning objective is listed below:

- Comparing and applying the concepts of sustainable development and carrying capacity to both developed and developing coastal areas;
- Describing the basic principles of coastal geomorphology and associated physical processes;
- Explaining how coastal geomorphologic processes are affected by sea level rise, various forms of development and human action;
- Applying basic ecological concepts in the design of coastal planning strategies;
- Comparing the impacts of sea level rise and different land uses on coastal ecosystems;
- The ability to demonstrate an understanding of Commonwealth / Federal, state, and local laws and regulations governing development and protection of coastal communities and evaluate their effectiveness;
- The ability to identify and describe specific coastal management problems and propose appropriate planning techniques and risk assessment/mitigation procedures for their resolution;
- The ability to work with the multidisciplinary facets of coastal management and to be effective in developing integrated planning approaches to coastal zone development; and,
- The ability to develop effective land-use response strategies to coastal inundation, through effective community engagement at a local level.

4. Proposed Unit Outline

The syllabuses of the 23 identified coastal planning units were examined for unit content in conjunction with their learning aims and objectives. The proposed unit we are submitting for discussion is a composite of the best or most relevant features from 23 programs studied. This approach asks what educational information will be the most useful and important for planners from a Victorian and Australian viewpoint in understanding coastal planning and climate change. The rationale for the selection and inclusion of the following topics was based on establishing a base-line understanding of coastal planning. The twelve week program would consist of:

Week 1

Introduction and Terminology including the basic concepts of Coastal Planning

Week 2

Victoria, Australian and International Coastal Policy

Students will have the opportunity to develop their overall and general knowledge of coastal policy issues, problems, the politics of coastal policy, and some of the proposed solutions to coastal issues.

Week 3

Significance of the coastal zone

Detailed overview of the historic, economic demographic importance of the coastal zone to Australia.

Week 4

Economics and Demography of the Australian Coastal Zone

Students will be given an overview of the economic and demographic activity in the coastal zone.

Week 5

Introduction of Marine and Coastal Processes

Introduction to coastal morphology, waves, tides, storm surges, tsunamis, currents wind activity and near shore circulation.

Week 6

Beaches, Cliffs, Rocky and Dunes

An introduction to the following:

- Concepts of cliff evolution, morphology, cliff dissection, coastal landslide and rates of cliff recession;
- Concepts of beach evolution, beach sediments, beach morphology, beach erosion, and beach nourishment; and,
- The types of dunes, i.e. fore dunes, parallel dunes, cliff dunes and old and new dune creation.

Week 7

Coastal zone interpretation and the role of Remote Sensing and GIS

Provides hands on training with the latest techniques in GIS and remote sensing

Week 8

Interactivity modelling of the Coastal Zone

This exercise deals with coastal erosion in Adelaide. The lecture and exercise used data from a local beach erosion assessment project in SA. The beach is located in the greater metropolitan area of Adelaide and is part of an extensively developed shoreline only 7 kilometres from the city centre. Due to its proximity to the city much of the beach's naturally protective dune system has been built over and replaced by sea walls, and sea-grasses that once slowed incoming waves have been dying due to pollution.

Week 9

Concepts of Climate Change and the Coast – Scientific Perspective

Introduce simple concepts and observations regarding weather and the marine and coastal environment and build into more complex enquiries and investigations regarding the physical, chemical, biological and geographical aspects. Students will better comprehend the science behind marine and coastal climate change and be able to make use of this knowledge in their decision making within their communities and work environments

Week 10

Ocean and Coastal Law

A hodge-podge of laws and approaches apply to the oceans and coasts. This component is about how law copes with emerging science and policy. It depicts examples of legal success and disappointment to highlight the mechanisms and principles of marine and coastal law.

Week 11

Integrated Coastal zone Management

Focusing on the international dimension of integrated coastal zone management, students will examine the big picture issues affecting the world's coastal areas and oceans. Case studies will be used to illustrate the grave problems of mismanaging coastal and economic resources

Week 12

Future of the Australian coast to 2100

This would be the capstone lecture of the program tying together the previous 11 weeks of learning.

5. Example Tutorial: *Week 6 Beaches, Cliffs, Rocky and Dunes*

The proposed tutorial for Week 6, *Monitoring Coastal Erosion in Adelaide*, relates to beach erosion. This is an abridged version of much larger tutorial exercise. The data was provided SA Department of Environment and Planning in Adelaide and Clarke University in the United States. Clarke University adapted the SA data in its user guide for the remote sensing and GIS package called IDRISI. Clarke University developed IDRISI as a teaching tool for environmental planning and resource management. In addition to IDRISI software Clarke University has developed a series of workbooks illustrating how IDRISI can be used in planning applications.

The workbook on Marine environment and resources was modified to produce the following coastal planning tutorial:

Learning Objective

To better understand coastal process along beaches

Tasks to be undertaken

- Examining beach profiles;
- Creating surface models; and
- Fly through of a beach

The exercise commences with the students examining four years' worth of digital elevation Figures for the same Adelaide location (Figure 1). The students are first asked to explore and query the data values in the respective Figures (the Figures were created with point data). They are then required to display a vector line illustrating the beach and the corresponding infrastructure (Figure 2). Students overlay the infrastructure file over the beach Figure and are then required to examine its digital signature (Figure 3). The digital signatures indicate the levels of sand removal from the beach. In part two of the tutorial, students are required to construct a surface or digital elevation model. An elevation model can be constructed from point data. Five separate processes are needed to produce the terrain model and beach fly through. The final product is a fly through of the beach area. Students can now visualise what the beach appearance is in 3D and compare the 3D image to the 2D Figure on the right (see Figure 4).

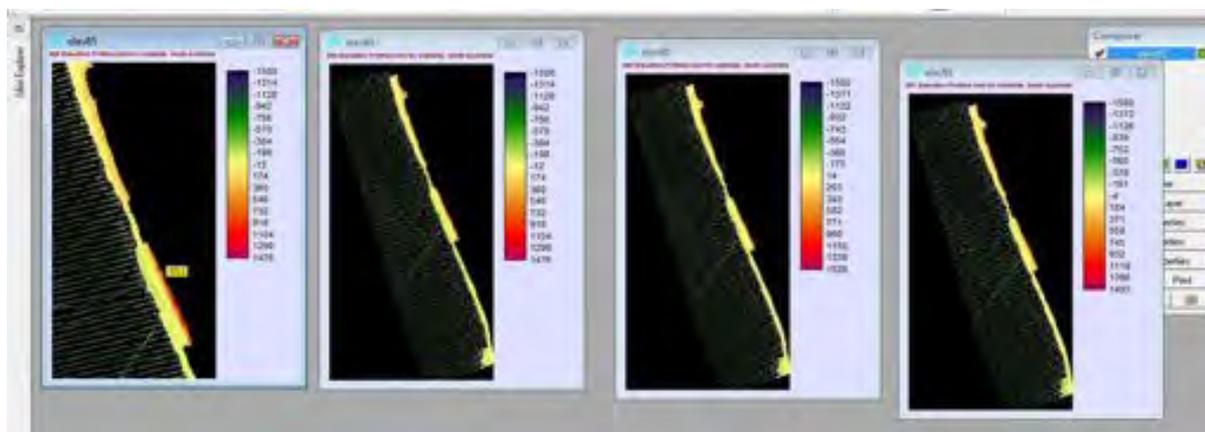


Figure 1 *Monitoring Coastal Erosion in Adelaide* 4 years of digital elevation Figures (Herron 2012).

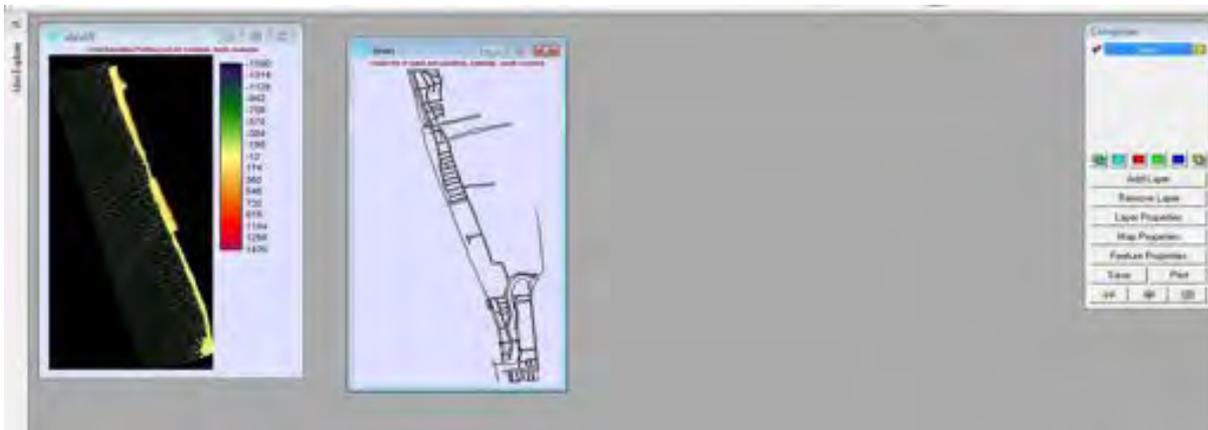


Figure 2. Vector line display illustrating the beach and corresponding infrastructure (Herron 2012).

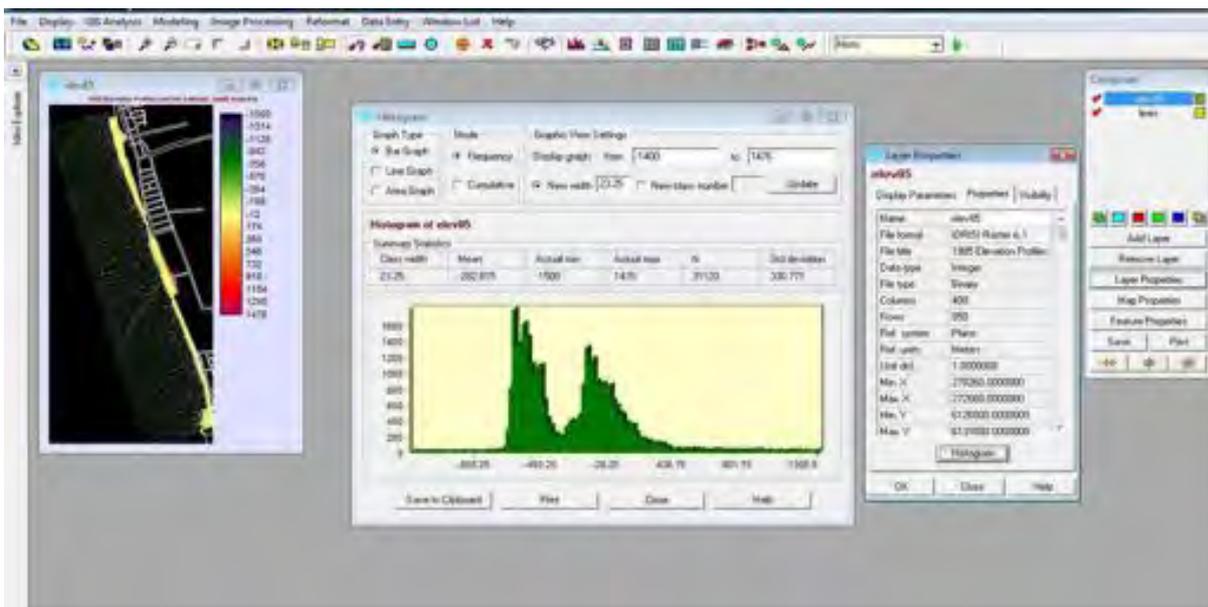


Figure 3. The digital signatures indicates the levels of sand removal from the beach (Herron 2012).

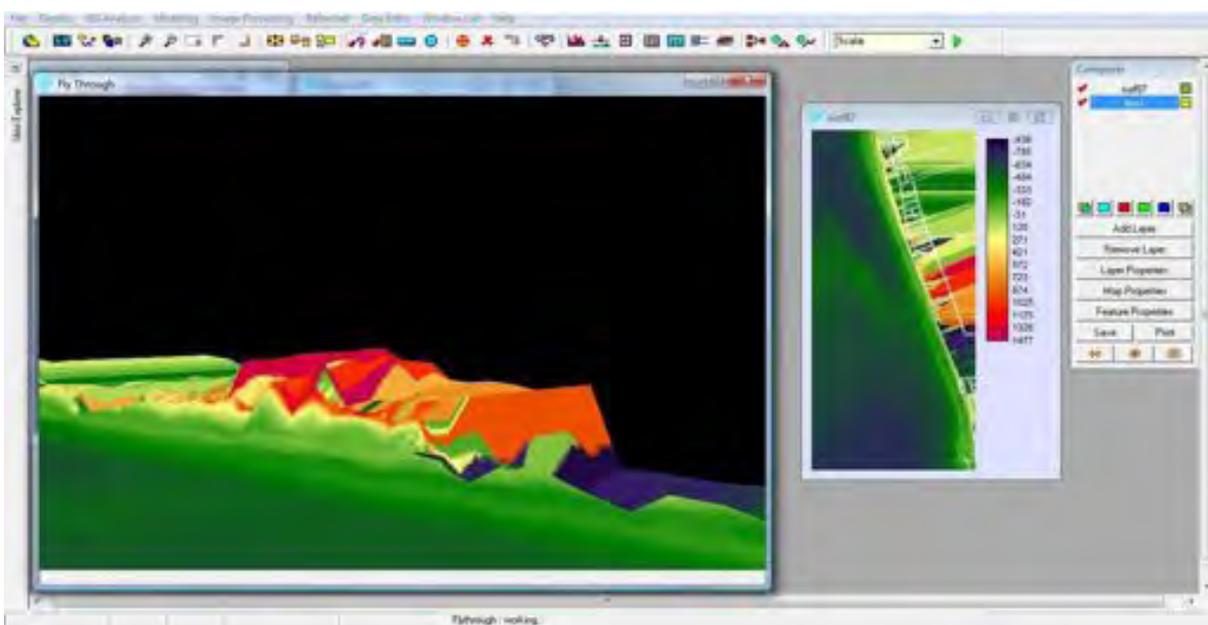


Figure 4. Digital signatures indicate the levels of sand removal from the beach (Herron 2012).

6. Conclusion

The two aims of this paper were to highlight the number of tertiary educational institutions providing units in coastal planning and to present the learning objectives and draft syllabus for a unit on coastal planning.

205 universities offering accredited planning degrees from Australia, the United States, New Zealand, Canada and the United Kingdom were examined via the internet to determine how many institutions offered a unit in coastal planning. The results indicated that only 23 programs or 11.2% were deemed to have offered such a unit. Australia had the largest number of universities offering a coastal planning unit with 9 followed by the USA and the UK with 7 respectively. No university in either Canada or New Zealand offer a distinct coastal planning unit in its respective planning university syllabus.

It is anticipated that before long Australian planners will have the knowledge that the higher education sector will be able to provide them with an effective suite of units to assist in meeting the challenges of preparing well in advance for the impact of climate change on the Australian coastline.

Region	Country	University	Year		
New Zealand Universities	New Zealand	The University of Auckland	198		
		Massey University	198		
		Otago University	198		
		Victoria University	198		
United Kingdom	United Kingdom	Anglia Ruskin University	198		
		Birmingham City University	198		
		Cardiff University	198		
		De Montfort University	198		
		Heriot Watt University	198		
		John Deane Learning Consortium	198		
		Kingston University	198		
		Leeds Metropolitan University	198		
		Liverpool John Moores University	198		
		London South Bank University	198		
		Nottingham University	198		
		Oxford Brookes University	198		
		Queen's University Belfast	198		
		Sheffield Hallam University	198		
		University of Cambridge	198		
		University College Cork	198		
		University College Dublin	198		
		University College London	198		
		University of Aberdeen	198		
		University of Birmingham	198		
		University of Bolton - Associated Accreditation	198		
		University of Brighton	198		
		University of Cumbria - Associated Accreditation	198		
		University of Dundee	198		
		University of Glasgow	198		
		University of Hong Kong	198		
		University of Liverpool	198		
University of Manchester	198				
University of Plymouth - Provisional Accreditation	198				
University of Reading	198				
University of Sheffield	198				
University of Strathclyde	198				
University of Ulster	198				
University of the West of England, Bristol	198				
University of Westminster	198				
Australia	Australia	UNSW	198		
		University of Queensland	198		
USA	USA	University of Idaho	198		
		Yale	198		
		Yale System	198		
		Marquette	198		
		New England	198		
		Charles Sumner	198		
		Western Illinois	198		
		Canada	Canada	Queen's University	198
				University of Alberta	198
				University of British Columbia	198
University of Guelph	198				
University of Regina	198				
University of Saskatchewan	198				
University of Toronto	198				
University of Waterloo	198				
University of Western Ontario	198				
University of Windsor	198				
Other	Other	University of the Pacific	198		
		University of the South Pacific	198		
		University of the West Indies	198		
		University of Zimbabwe	198		
		University of Botswana	198		
		University of Botswana	198		
		University of Botswana	198		
		University of Botswana	198		
		University of Botswana	198		
		University of Botswana	198		

Figure 5c. Coastal Planning and Higher Education, Identifying Course Availability (Herron 2012).

7. Bibliography

- American Planning Association 2011, *Coastal Membership Survey*, Washington.
- Association of Collegiate Schools of Planning 2012, *Main Page*, <<http://www.acsp.org/>>.
- Canadian Institute of Planners 2012, *Main Page*, <<http://www.cip-icu.ca/web/la/en/pa/6F0C1DF52BB24C6C98536E3DD44CC93B/template.asp>>.
- Herron, M 2012, *Beach Tutorial*, Deakin University, Geelong.
- New Zealand Planning Institute 2012, *NZPI Main Page*, <<http://www.planning.org.nz/MainMenu>>.
- Norman, B 2009, *Planning for Coastal Climate Change - An Insight International and National Approaches*, Department of Planning and Community Development, Melbourne
- Planning Institute of Australia 2012, *Main Page*, <<http://www.planning.org.au/>>.
- Royal Town Planning Institute 2012, *My Career*, Royal Town Planning Institute, <<http://www.rtpi.org.uk/education-and-careers/information-for-universities/accredited-qualifications>>.
- UNESCO-IHE Institute for Water Education - Integrated Coastal Zone Management
<http://www.unesco-ihe.org/Education/Non-degree-Programmes/Short-courses/Integrated-Coastal-Zone-Management>.
- Victorian Department of Planning and Community Development 2012, *Coastal Climate Change Advisory Committee Response from the Minister for Planning*, Melbourne.

Dancing with the Cows¹: theorising hot heritage in Newmarket saleyards and abattoirs, Melbourne

Jean Hillier

School of Global Studies, Social Science and Planning, RMIT University

Abstract

Regarding urban regeneration and cultural heritage as continually renegotiated actualisations of assemblages of power, of exclusions and inclusions, I walk fantastically with the cows along the stock-route through what has become Lynch's Bridge and Kensington Banks in Melbourne, Australia, to problematise practices of branding with cultural heritage artefacts and values. The heritage 'preserved' in these schemes represents a highly sanitised, commodified image of the former saleyards and abattoirs which freezes into 'truth' mythical cultural entities.

In contrast, Deleuzian thinking inspires an immanent conception of heritage; less traditional artefact and more relational spatial practice of past-present-future which stimulates visitors to think differently. 'Hot heritage' aims to challenge those who encounter heritage to question their values, attitudes and actions, to renegotiate cultural meaning through generative, sensational encounters which create an evental space for thinking otherwise. Cultural heritage, therefore, should not be regarded as a past-presence to be 'preserved', but as a calling-towards potentiality.

Keywords: Planning theory, Deleuze, hot heritage

Introduction

'There is no place that is not haunted by many different spirits, hidden there in silence'

(De Certeau, 1984, p.10).

My aim is to de-silence some of the spirits from the former Newmarket saleyards and abattoirs site in Melbourne, Australia, to include and de-sanitise them in their hauntings of the urban regeneration projects of Lynch's Bridge and Kensington Banks (LB/KB).

'The past is indeed a "cultural presence" in the present' (Philo and Kearns, 1993, p.4), incorporated - as in the LB/KB schemes, in the form of architectural references, timbers, bluestone cobbles and peppercorn trees - in the fabric of the new built environment. Such incorporation offers instant place branding, identity and familiarity, encouraging both the approval of existing local residents and inward investment by developers and incoming residents. As Philo and Kearns point out, through careful presentation place marketeers are able to gloss negative historical associations (the abattoirs) under powerful statements about heroic histories of community, male camaraderie, hard work and enterprise as represented by the conservation of the auction yards and administration buildings. This is a capital-determined representation of culture and history which freezes into truth mythical cultural entities whilst excluding others in the quest for marketability. As Foucault (1972) argues, however, things have complex conditions of existence and cannot simply be displaced. I advocate a new, poststructuralist approach to cultural heritage integration which involves rethinking history, not just as a 'before' or past, but as a generative encounter which creates an evental space for thinking otherwise.

I regard urban regeneration and cultural heritage as continually renegotiated actualisations of assemblages of power, of exclusions and inclusions, as the LB/KB urban regeneration projects attempt to capitalise on the cultural heritage of the site. The work of Gilles Deleuze and Félix Guattari inspires an immanent conception of heritage; a conception which is less traditional archive or artefact as container and more relational spatial practice of past-present-future which stimulates people to think differently or otherwise on social, political, economic issues. Cultural heritage, therefore, should not be regarded as a past-presence to be 'preserved', but as a calling-towards potentiality. Culture is never complete: it remains open to becoming. Its 'heritage', likewise, is the past-present-future.

Cultural heritage is inevitably a Deleuzian simulacrum, different from the 'original'. As such, I argue that heritage 'objects' could perform, rather than simply represent. 'Hot heritage' aims to challenge those who encounter heritage to question their values, attitudes and actions, to renegotiate cultural meaning through

generative, sensational encounters which create an evental space for thinking otherwise. This is a theory of cultural heritage planning which involves rethinking heritage empirically; aiming not to 'know' the past, but to find the conditions under which something new is created in a reflective and affective manner.

In what follows I briefly introduce my Deleuzian-inspired theoretical frame, highlighting how the present 'smudges' time, blurring distinctions between past, present and future. Referring to Deleuze's concept of assemblage, I problematise the machinic Authorised Heritage Discourse (AHD) of what heritage 'is'. I emphasise instead the generative potential of cultural heritage assemblages, the acceptability of simulacra and what they might 'do'. I suggest that while LB/KB may be regarded as an international benchmark for 'successful' urban regeneration, integration of cultural heritage could build on the notion that heritage significance lies in 'more than just the fabric of a place' (Australia ICOMOS, 2000, p.22). 'Hot interpretation' (Uzzell, 1989) offers the potential to generate sensation and affective links between the past, the present and the future, offering cultural heritage a stronger voice in regenerated areas.

Smudging Time Affectively

Gilles Deleuze urges us not to accept given forms at face value, but to ask 'how such a form emerged, what that emergence can tell us about the life from which [that] actuality has taken shape, and how such a life – beyond its already created possibilities – might yield other potentials' (Colebrook, 2009, p.9). The present thus 'smudges the past and the future' (Massumi, 2002, p.200) as I return to the pastness of the saleyards and abattoirs to draw out their bracketed threads of presence-potential.

I adopt the Deleuzian notion of assemblage as a composition of 'heterogeneous elements that may be human and non-human, organic and inorganic, technical and natural' (Anderson and McFarlane, 2011, p.124). The LB/KB regeneration sites are assemblages, as were the saleyards and abattoirs. Assemblages are always provisional as elements change, power relations change and so on. Assemblages signify spatialised practices, performance, or doing, of relations, discursivities and materialities. Urban regeneration and cultural heritage planning, therefore, are processes of assembling relations of history and potential. The analytics of process-oriented assemblage thinking offer a capacity to understand the groundings of spatially and temporally rhizomic meshworks of processes and meanings, including the ways in which various logics (such as the AHD) are enacted as systemic (McGuirk, 2011). Multiple economic, social, cultural, political and other force relations are assembled in particular ways, with some elements and relations claiming priority. Such actualisations are unstable and contingent, however, and they are always subject to being imagined and performed otherwise. That which is excluded, for instance, is never really absent, but a key component in how a thing functions. What is not said or visible is often as important as what is apparent.

Assemblage thinking offers an epistemology for comprehending the situated enactment of heritage and other practices. Yet Deleuzian empiricism goes beyond traditional explanations of lived experience: 'the aim is not to rediscover the eternal or the universal, but to find the conditions under which something new is produced (creativity)' (Deleuze, 2002, p.vii). Issues which involve personal values, beliefs, interests and memories may 'excite a degree of emotional arousal which needs to be recognised and addressed' (Uzzell and Ballantyne, 1998, in Fairclough et al, 2008, p.502). Encountering heritage is more than a cognitive experience, however. Affect is the pre-cognitive and pre-reflexive (Anderson and Harrison, 2006; McCormack, 2008, 2010; Pile, 2009; Thien, 2005) sensory and physical changes that occur when 'bodies' encounter each other. Affect is generative, occurring prior to translation into expressed emotions such as love, shame, anger and so on. Practices of 'hot interpretation' (Uzzell, 1989) attempt to make affective links between present, past and future, embracing the power of heritage as generative simulacra.

I seek to challenge the traditional notion of heritage protection or conservation as psychological ontological security and to theoretically open up the potential of the cultural heritage of Lynch's Bridge and Kensington Banks to become 'alive' and perform as affective triggers which provoke participants/visitors to think differently.

The Machine of Cultural Heritage Protection

Deleuze 'condemns history as an enterprise that stakes out origins and anticipates conclusions' (Flaxman, 2000, p.24). History defines heritage spaces like the Newmarket saleyards and abattoirs 'by an a priori scheme' (Deleuze, 2001, p.15) or apparatus of capture of an Authorised Heritage Discourse (AHD) (Smith, 2006, 2009; Waterton and Smith, 2010). As Smith (2009, p.1) claims, 'at the heart of the issue is a very limited and limiting definition of heritage'.

The World Heritage Convention, for instance, defines cultural heritage as monuments, groups of buildings and sites which are of 'outstanding universal value' from a historical, scientific, aesthetic, ethnological or anthropological point of view (UNESCO, 1972, Article T). Whilst the Australian Burra Charter (AICOMOS, 1999 revision) introduces a greater emphasis on significance of the social and intangible, and on 'places' rather than simply on buildings and sites, Australia has not yet ratified the 2006 World Heritage Convention for the Safeguarding of the Intangible Cultural Heritage.

Waterton and Smith (2010, p.12) argue that the AHD 'validates and defines what is or is not heritage and constrains heritage practices'. In the AHD, cultural heritage is typically conceptualised as represented by 'tangible', 'old' and 'aesthetically pleasing' sites, monuments and buildings. It is feel good and comfortable; value inherent; to be conserved as found for future generations. Smith (2009) claims that the AHD reflects a mentality which acts to legitimise and/or delegitimise various cultural and social values. Heritage designation or 'listing' is usually undertaken by assessment of the object against a ready-made, prescribed set of evaluative criteria or frame (the AHD), comprising age and rarity, creative or technical interest, historic interest, special historical associations (with important people or events, social, cultural or spiritual values), Indigenous, aesthetic and national interest (Australian Heritage Council, 2009).

In determining whether a place is of national heritage significance in Australia, three heritage concepts are key: the threshold or level of value, the integrity and the authenticity of a place (AHC, 2009). As such, 'authentic' heritage remains attractive to tourists and investors (Peterson, 2005), enabling 'reconnection with the authenticity of the urban landscape and its genius loci' (Morel Ednie-Brown, 2011, np). Yet what authenticity means is highly contested. Does something have to be *exactly* as it was, maintained in a state of 'arrested decay' (Garrett, 2011), to be authentic? It would appear that authenticity may be often more contrived for marketing purposes than real (Hobsbawm and Ranger, 1983), fabricated through specific practices. Philo and Kearns (1993, p.3) point out that '[c]entral to the activities subsumed under the heading of selling places is often a conscious and deliberate manipulation of culture' to fit certain interests. In this manner, cultural practices may be sanitised and commodified for palatable consumption. They become fixed in a mythology which eventually becomes passed to future generations as authentic. Authenticity, then becomes 'not so much a state of being, [but] the objectification of a process of representation' (Vannini and Williams, 2009, p.3).

I wish to problematise such an 'authentic' and its invocation in the LB/KB sites; to disrupt what has become 'a taken-for-granted order of things in both time and space' (Landzelius, 2003, p.215). Inspired by Gilles Deleuze, I seek to recognise heritage elements as 'living, breathing sites of memory' (Garrett, 2011, p.1062); of human and non-human experience. I therefore interrogate the ghosts of the cattle, sheep and pigs at Newmarket saleyards and abattoirs as critical presences in order to disrupt the solidities of LB/KB with the fluidity of 'otherwise unperceived temporalities and materialities' (Lepecki, nd, np). I regard the ghosts as material, historical and cultural forces in the assemblages of LB/KB (see Gordon, 2008). As Derrida (1994, p.xix) suggests, 'it is necessary to speak *of the ghost*, indeed *to the ghost* and *with it*' (emphasis in original).

'[T]he ghost is the name of any active threshold where a system of presence is transformed or becomes another by the means of a persistent movement whose origin must remain indeterminate, but that nevertheless be manifested' (Lepecki, op cit). Ghosts or spectres, then, are systems of difference or simulacra. Deleuzian simulacra are not copies. They attempt not to mirror but to recreate the world. Simulacra are themselves forces or forms of power, able to do things, not merely to represent, but systems of difference-in-itself. Deleuze rejects a distinction between authentic and inauthentic, good and bad copies, preferring to concentrate on the productive power of the simulacra (Roffe, 2010). Simulacra/ghosts are thereby vehicles for creativity which disrupt the flow of representation and stimulate reflection.

I argue that there is a need to move the emphasis of cultural heritage from the notion of the authentic or good copy as representation of the authentic, towards the idea of simulacra, the suppressed difference which lies at the core of the sensible, and the opportunities simulacra offer to problematise the physical continuity of representation. Encounters with ghost-simulacra may disrupt the senses; to make people think differently about the taken-for-granted of LB/KB.

From Newmarket Saleyards and Abattoirs to Lynch's Bridge/Kensington Banks

Developments at the Newmarket site since the inception of the complex in 1859-60 have continually reflected and been driven by changing economic and social conditions in Melbourne, nationally and internationally. In 1944 a world record of some 6,500,000 sheep and lambs (and hundreds of thousands of cattle) passed through the saleyards. The abattoirs had undercover space for 140,000 sheep and 1400 cattle, and employed around 1000 men. Newmarket/Kensington had become a complex infrastructural, social and economic assemblage, attracting related industries including meatworks, soapworks, tanneries, fellmongers, blood and bone manufacturers (Vincent, 1992, p.54).

As the Statement of Heritage Significance points out: 'The former abattoirs are of historical importance as they were the largest public abattoirs in Victoria and played a key role in developing and maintaining the local meat industry in the State. The Saleyards and Abattoirs are the most tangible link between the pastoral industry and the meat industry, which gave such impetus to Victoria's economic development from its first settlement. They are significant for their contribution to the industrial history of Melbourne, as they were the lifeblood for the area and a major stimulus to development' (Victorian Heritage Register, nd).

However, Newmarket's role as the focal point of an increasingly inter/national industry changed as the small family stock-trading companies were bought by larger agricultural conglomerations. At the same time the logic of increasingly industrialised meat production led to the introduction in 1975 of 'liveweight' selling, in which 'meat' (rather than 'animals') was sold in measurements of cents per kilogram rather than dollars per

head. More industrialised, more efficient and 'fit-for-purpose' processes developed, for which the Newmarket site was increasingly out-dated and processes relocated in proximity to feedlots rather than to population. The final sales at Newmarket took place on April 1st 1987.

The regeneration of the saleyards and abattoirs between 1991-2008, under the regeneration projects of Lynch's Bridge and Kensington Banks, at c50ha with a population of c2600, is widely regarded as a success.² The residential areas have been described as 'some of the loveliest in Melbourne' (Marshall, 1992, p.35). The old saleyards and abattoirs site is now 'a burgeoning bright face in an area once despised by most except those who lived there once and loved it' (ibid). Yet, this 'face' excludes the faces of cows, sheep and pigs other than those depicted 'brightly' on information boards and public artworks and the 'loveliness' eerily overlays 'a site of death, fear, hardship and toil' (ibid). The regeneration projects may mask their grim legacy, but ghosts lurk beyond the cobbles.

Newmarket saleyards and abattoirs as cultural heritage in the urban regeneration projects

In 2001 the Lord Mayor of Melbourne stood among the townhouses of LB/KB and listened for the ghosts of old drovers (Doyle, 2001, np). Noticeably he did not listen for the ghosts of 'millions of cattle, sheep and pigs, slaughtered on these few acres to satisfy our craving to eat other species' (Twentyman, 2000, p.2). Such exclusive listening loses sound, as well as sight – and site – of the everyday experiences of humans and non-humans in Newmarket saleyards and abattoirs which have selectively been transformed into a set of heritage buildings and sites sanitised for palatable consumption. Heritage materialities, such as peppercorn trees, have been superimposed on the skyline of Melbourne's CBD as the identifying logo of Kensington Banks. The 1939 saleyards clock still stands proud above what is now the community school and Lynch's Bridge housing, its territorial identity blurred by the tagging (August 2011) which claims a new ownership.

The use of historic motifs by real estate developers in Lynch's Bridge and Kensington Banks takes on the form of advertising and marketing:

'Many aged railings and quaint cobble stones have been retained from when the old Saleyards were converted some years ago, to ensure that this residential housing estate is something special' (The Crescent, Kensington Banks, For Sale For Lease Pty Ltd, August 2011).

'tree top views over peppercorn walk providing the perfect ingredients for quiet and relaxed inner city living' (Mawbey Street, Kensington Banks).

'the appeal of a Kensington Banks address overlooking charming village green expanses' (The Crescent, Kensington Banks).

'Imagine the noise and bustle of the old saleyards...' (Epsom Road, Lynch's Bridge).

The terraced housing which stands on the site of the former slaughterhouses reflects the same building form and footprint as the slaughterhouses, but this is not mentioned in any available information. The names of streets, paths and laneways in the new development either retain their original names, are named after areas in, or personages associated with the saleyards and abattoirs complex or occasionally types of livestock.

The 'archetypal' bluestone paving stones, though, have been removed from the context which gave them purpose. While one third of the paving stones from the stockyards were retained on site, only some of them are within their original position. Others were used for kerbing or to resurface the main stock route. Given that this was originally laid in deliberately uneven patterns to both increase traction for the stock and impede their progress (preventing bunching) (Vincent, 1992), to what extent can this smoother, more pedestrian- or bicycle-friendly, laneway still be seen to be 'the Stock Route' in any sense other than a nostalgic myth? At the same time much of the other physical 'history' of the place (fenceposts, railings etc) was either turned into exclusive 'period' furniture and sold to raise money for the Council. Bluestone cobbles fetched \$2.50 each.

The representation of 'historic' processes is highly sterilized. The 'cultural heritage' of the area is depicted, for instance, on public information displays near the administration buildings, in a set of mosaics under Abattoirs Bridge (the Back Gate) and on old fence posts transformed into totem poles with carved heads at The Crescent.

The public information boards present a sanitised celebration of the noise, bustle and life of the yards in print form: 'The Saleyards resounded to the distinctive clatter of hooves on bluestone cobbles; the bellowing of cattle; the bleating of sheep; the chatter of raised voices; auctioneers' cries; drovers' calls and whistles. Every sale day brought the auctioneers' calls for bids and responding buyers' shouts. The slam of timber gates resonated throughout the yards; while the yapping and barking of drovers' dogs intermingled with the cracking of stockwhips' (Museum Victoria, nd, p.1).

The real animal screams, yells, barks, smells and so on are not exposed, contrary to the wishes of the workers and their families who saw no need to embroider or dilute what for them was daily reality. They aimed to depict our cow's path through the entire site on the series of information boards, including '*On the*

Hoof (Before the Auction)', *Going, Going, Gone* (The Auction)', and *For the Chop* (After the Auction)', which outline the route 'to your dinner plate'. While there are information panels at most key entry points to the stock route, there are noticeably none at the main exit; the abattoir gatehouse.

Changing discursive and material representations have functioned to disconnect animals from meat in Western urban areas. Slaughterhouses have been renamed abattoirs, relocated away from urban areas; meat is presented in cuts or pre-prepared for cooking without reference to the whole animal from which it came (Evans and Miele, 2012). Most people have little or no idea how familiar items such as glue, toothpaste or chewing gum are produced, where rennet originates or what many E numbers signify. Is it better not to know about the processes at Newmarket involving bludgeoning of animals, hacking and sawing of carcasses, the blood spurting over workers and their clothes which were left to go hard overnight before being worn again the next day (Vine, 1998; Vincent, 1992)? The mosaics and other totemic images in LB/KB depict the valorisation of 'pastoral giants, mythic stockmen and faithful dogs' (Marshall, 1992, p.35) rather than the slaughtermen.

The 'inhumane' slaughter of Australian cattle in Indonesian abattoirs, brought via prime-time tv into Australian lounges at dinner-time (Ferguson, 2011) justifiably led to public outcry in 2011. A prime example of 'Pity the Meat!' (Deleuze, 2004b, p.23). Yet the everyday practices at Newmarket during its operating life were probably just as horrific. We seem incapable of thinking that we could be or could have been responsible for such brutality. As the recently-aired ABC tv series, *Kill it, Cook It, Eat It* demonstrated, we seem to be able to cope with the 'what' of legs of lamb and vacuum-packed rashers of bacon, but not the 'who' of the living, sentient animal away from the farm in the process of slaughter. Reconciling the notion of responsibility for an animal whilst profiting from its death (financially, nutritionally and so on) becomes too difficult. Such emotional values may be acceptably represented in museums, but not in residential areas.

The mosaics, like the information boards, thus freeze one aestheticized version of history into authenticity or truth. No sounds, no smells. The reality is ossified into stone – mosaic stone, bluestone kerbs and paths. But, can we get the stones to speak? I now turn to consider a different way of thinking which may forge connections and give voice to the otherwise voiceless.

Wiping away the clichés: towards a different way of working

Whilst the cultural heritage of the saleyards and abattoirs integrated into the urban regeneration projects may be regarded at one level as a pastiche, at another level, it has the potential to become Deleuzian simulacra or systems of difference: false, but powerful vehicles for creativity. We need to make our ghost cows and bluestone cobbles challenge force relations and question the role and processes of cultural heritage 'preservation'. Like the new wave of urban explorers (Garrett, 2010, 2011), I seek 'interaction with the ghosts of lives lived' (Maddern, 2008, in Garrett, 2011, p.1049) to generate alternative histories and perspectives to those of the AHD.

Instead of the heritage manager's chronological, linear time-line at the saleyards and abattoirs site, Deleuze offers us a temporality which is 'eternally splitting into the past and the indefinite future' (Herzog, 2010, p.263). Encountering heritage with Deleuze would become a means of rethinking history on a virtual plane of rhizomic becoming, generating new affects and thoughts.

Not for Deleuzeans an immobile, sanitised heritage of traditional framings, but an encounter with dissonance and potential discomfort. Deleuzian assemblages of cultural heritage would feature 'an expansion of possibilities, an invention of new methods and new perspectives' (Shaviro, 2009, pp.148-149). Rather than 'lumping together' (Philo and Kearns, 1993, p.22) cultural heritage and urban regeneration to produce a marketable pastiche, I suggest engaging with the Deleuzian contingency of an encounter, or folded temporality, such that people are provoked to think more deeply about the place.

I encourage planners to transform cultural heritage beyond its being a historical landmark, fossilized through expert interpretation (van Assche and Duineveld, 2011) and to afford opportunities for new virtualities and potentials to emerge. If heritage 'objects' were regarded as Deleuzian simulacra, able to perform rather than simply represent, we could begin to overcome the 'sight-nexus' (Watson and Waterton, 2010) of heritage, dominated by architectural materiality, where interpretive descriptions (such as on-site pictorial display-boards) obliterate tensions between a place's material persistence and its experiential fluidity (Cresswell and Hoskins, 2008, p.395). Such descriptions, photographs and buildings become immobile mythical entities from which the real people, the real animals and acoustic, olfactory and haptic qualities are missing.

I suggest that a Deleuzian-inspired assemblage approach could be useful in generating 'horizontal' connections between elements in the past-present and challenging the idea of stable meanings achieved through historical representation. If we regard cultural heritage not as a 'fixed, singular narrative, but a series of socially constructed interpretations of the past' (Atkinson, 2007, p.522), it becomes a provocative series of questions which can generate thinking differently; thinking LB/KB anew.

Deleuze and Guattari would like actors to experience texts in all their senses (including documents, photographs, recordings, virtual reality, structures and so on) as they unfold and speak for themselves in 'a

creative rapport with the situation in question' (Guattari, 2009, p.67). Inspired by Michel Foucault (2000), Deleuze argued that we should 'Experiment [or experience], never interpret' (Deleuze and Parnet, 2002, p.48).³

In this, Deleuze and Guattari develop Foucault's generative genealogical methodology, which 'makes use of "true" documents, but in such a way that through them it is possible not only to arrive at an establishment of truth but also to [experiment with and experience]⁴ something that permits a change, a transformation of the relationship we have with ourselves and with the world ... in short, a transformation of the relationship we have with our knowledge' (Foucault, 2000, p.244, translation amended).

Such ideas are not new to the heritage discipline. Back in 1957, Tilden argued that the 'chief aim of interpretation is not instruction but provocation' (p. 9) and that heritage managers should give 'visitors' 'at least one disturbing idea that may grow into a fruitful interest' (1997, p.91). What has become known as 'hot interpretation' or 'hot heritage' deliberately aims to make people feel uncomfortable through affective and thought provoking encounters. Although hot heritage appeared not to have gained widespread acceptance when Tilden (1957) and Uzzell (1988) originally advocated the idea, perhaps exponentially increasing demand for the experience economy (Sundbo and Darmer, 2008), urban exploration (Garrett, 2010, 2011) and thanatourism (Seaton, 1996; Logan and Reeves, 2009; Knudsen, 2011) could suggest that its times have come.

These encounter experiences all engage bodies and place. 'Flashes of confrontation with unexpected material traces ... lead to emotionally charged discoveries' (Garrett, 2011, p.1050) as experiment meets experience, imagination and memory. The key elements are sensory experience/sensation and affect (Edensor, 2006) as actors inscribe places with their own stories. Consumption is simultaneously production as texts are decoded and recoded in different ways.

New museum theory examines 'unsettling histories with sensitivity' (Marstine, 2006, p.5). To do so, museums and heritage sites move beyond 'the aura of the authentic object as a window onto the past', employing multi-modal technologies and live performance 'to facilitate experiential learning, to invite emotional responses from visitors and to make them empathize and identify with people (*sic*) from the past or with their living contemporaries inhabiting alternative modernities in distant places, as if "reliving" their experience, in order to thus develop more personal and immediate forms of affective engagement and imaginative investment' (both quotes Andermann and Arnold-de Simone, 2012, pp.7-8).

At sites such as the Tuol Sleng Museum of the Crimes of Genocide in Phnom Penh, Cambodia, and The Ustica Memorial Museum in Bologna, Italy, visitors engage with poly-sensorial testimonies of traumatic events which took place there (Violi, 2012). Work is also being undertaken using virtual reality as a form of interactive 'heritage' where users' avatars 'recover the everyday practices of the inhabitants' (Michon and El Antably, 2012, p.4). In so doing, 'the person does not simply apprehend a historical narrative but takes on a more personal, deeply felt memory of a past event through which he or she did not live' (Landsberg, 2004, p.2): a 'prosthetic memory', stimulating affect and emotional response. There is some affective 'trigger' for emotions, including soundscapes, VR game, video recordings, photographs or artefacts - perhaps the branding irons, dog muzzles and books of authorised ear marks in the 'Newmarket Collection' - which 'render the former context inseparable from the present sensation' (Deleuze, 2000, p.60).

Thinking the new for Deleuze and Guattari is thus produced by a fundamental experimentation with often antagonistic concepts and elements, where the space for thinking eventuates in what Deleuze terms an event. The Deleuzian event 'creates a new existence, it produces a new subjectivity (new relations with the body, with time, sexuality, the immediate surroundings, with culture, work ...)' (Deleuze, 2006, p.234). This could be new relations with one's own body, with the bodies of cattle or sheep, with the working class Anglo-Irish cultures of the saleyards and abattoirs. Eventualisation ruptures accepted ideas of the universal and necessary - perhaps of how meat actualises on supermarket shelves, the contents of sausages, gelatine, rennet, glue, toothpaste, leather and so on - in a transformative experience.

The Victorian Heritage Register Statement of Significance for the Former Newmarket Saleyards and Abattoirs provides a good point of departure. The Statement (above) provides a conceptual link between the cow and sheep emblazoned on the Melbourne coat-of-arms and on the slaughterhouse gates and the everyday lives of LB/KB residents. It emphasises the process of movement through the site and the various aspects of the 'handling process'. It recognises the importance of meat as 'lifeblood': 'the common zone of man and the beast' (Deleuze, 2004b, p.23). In so doing, it inserts a story - our cow's story - into the ordered landscapes of cultural heritage and urban regeneration.

Heritage becomes more than a cognitive experience. The cows, sheep and pigs refuse to go away. They return⁵ to the cobblestones of Siberia (now expensive detached homes), Back Abattoir Lane (now Stockmans Way) and Abattoirs Bridge (the Back Gate) as ghosts or simulacra, spectrally unsettling actors' understandings of presence, present and past. Absence becomes presence as the animals return to haunt. 'Established certainties vacillate' (Davis, 2005, p.376), AHDs are threatened in a 'disadjustment of the contemporary' (Derrida, 1994, p.99) in experiments in which 'individuals build history through experiences where "memory and myth intermingle, and the imaginary rubs shoulders with the real"' (Samuel, 2004, p.6).

Derrida insists that mourners are necessary. They are the inheritors of all that ensues from the past, who, in their mourning, iterate a promise of responsibility for the future (Derrida, 1994, p.114). Perhaps, as Deleuze and Guattari suggest, 'the slaughter of a calf remains present in thought not through pity but as the zone of exchange between man and animal in which something of one person passes into the other' (1994, p.109) as the past becomes inseparable from the present. Residents might begin to think about the relational assemblages of their barbecue sausages or their Sunday roast, bō or take-away kebab – relationalities of expressive and material, of near and far in both place and time – provoking political and ethical questions.

A Deleuzian-inspired approach to the rethinking of cultural heritage would recognise the complexity of relationalities and assemblages; a complexity in which 'all material life is involved, all theory, writing, dancing, engineering ...' (Plant, 1996, p.212). The engineering of Lynch's Bridge, the saleyards, abattoirs, The Crescent in Kensington Banks are related to Deleuzian theory, my writing this paper and to cows dancing along bluestone cobbles. The present becomes inseparable from a presence of the past and a presence of a future incorporated with it. Lynch's Bridge and Kensington Banks thus become not end forms but are located in the middle of new processes. The role of heritage, then, could be to generate new sensations, drawing the humans and non-humans which encounter it into its material vitality.

Conclusions: passings that haunt

I regard the sites of Lynch's Bridge and Kensington Banks in Melbourne as a meshwork of assemblages, 'structured by a range of forms of power, capital, discourse, and groups but always exceeding those structures and always with differential capacities to become otherwise' (McFarlane, 2011, p.667). Relational forces of the State, development finance, urban designers, construction companies, spatial and heritage planners; economic, social and symbolic capital; regeneration and cultural heritage discourses; groups of planners, developers, designers, builders, animals, drovers, auctioneers, slaughtermen, meatworkers, academic theorists, authors and readers form meshworks of assemblages of past-present-future.

Deleuze's philosophy is not concerned with a time as such, but about the conditions for many actual times and many new actual times. What might this imply for heritage planning? Can we regain the 'lost time' of the past in heritage plans by incorporating an active future relation? Heritage could be conceptualised as both virtual and actual at the same time; a new history passing in-between the media of images, texts and architectures - becoming rather than being. Becoming is 'born in History, and falls back into it, but it is not of it' (Deleuze and Guattari, 1994, p.110). Becoming turns to forgotten or repressed memory in order to 'fecundate the present with a past from which open other possible futures' (Baross, 2006, pp.114-115).

As Thrift (1999, p.310) suggests, places – such as Newmarket - are "passings" that "haunt" "us". He advises us to seek the 'ghostly signals' of what constitutes place, 'flashing half-signs ordinarily overlooked until that one day when they become animated by the immense forces of atmosphere' (Gordon, 1997, pp.204-205).

Place is always a spectral gathering (Thrift, 1999), where the spectre remains always to return; as simulacra, vehicles for creativity, emerging the 'who' from the 'what' and the 'what can cultural heritage do' from the 'what it is'. Can heritage act as a methodology through which we can seize the creative power of materiality to generate the new: a new form of 'historical sense' or 'effective history' (Foucault, 1977, p.154)? A hot heritage which could tap into a virtual plane in which the past survives in itself, not merely as a picture postcard of an 'old present' (Moulard-Leonard, 2008)? This would allow heritage to become sensational, 'to tremble, or scream' (Deleuze and Guattari, 1994, p.176) even. Deleuzian thinking inspires an emergent conception of heritage; a conception which is less traditional archive as container and more archive as generative element or diagram of time as series. Heritage elements should be recognised as monumental⁶, not in the Nietzschean sense because they conserve or preserve their time, but because they generate a creative, affective rethinking of time and the nature of life itself. We need to tap into the virtual force of heritage, to 'tear it from its constituted time and open its constitutive time, its power to create time, not exist within time' (Colebrook, 2006, p.82-83). Heritage is both an actuality and a potential to become; what it may have been and what it might still be. The aim of heritage planning, then, would be no longer to (re)collect or (re)capture the past in some individual or collective consciousness or identity, but to prevent closure.

Educationally, students could work with a heritage site⁷, investigating its story – the told and the untold, the relationships and assemblages – critically thinking of ways to work with the place as a vehicle for creativity in an experiential manner, so that visitors become participants rethinking time and the nature of human and non-human life as appropriate.

We need to take care, however. Uzzell and Ballantyne (1998) remind us that hot heritage planning should be undertaken 'responsibly'. Mindful of offering perspectives and encounters which both stimulate actors to question and explore different understandings and values, encouraging them to become active agents in their readings of the site, and which also affords agency to the sites and their human and non-human assemblages, we need to avoid manipulations in which meaning is replaced by theme-park spectacle in the search for evermore sensational imagery and special effects. 'Emotional evocation is something quite different from deep understanding' (Violi, 2012, p.71).

As Thrift (2004) warns us, knowledge of the workings of affect is an important technique in the arsenal of urban capitalism (as in the experience economy). Engineered affect is potentially as restrictive and universalising of 'norms' as the AHD, another weapon of the powerful (see Barnett, 2008). The aim of hot heritage is to stimulate deep understanding and reflexion, not manipulation.

The economic and political drivers of the regenerated sites of LB/KB have been such that the projects' award-winning physical fabric has tended to sanitise the cultural heritage of the saleyards and abattoirs to become new 'authentic'. Deleuze (2004a, p.303) reminds us of the 'vast difference' between conserving and perpetuating the established order of representations and 'making the simulacra function and raising a phantom'. Hot cultural heritage can potentially raise such phantoms and perform as a gate to reflexion through which something new arrives. In doing so, we need to learn not only to live with the ghosts of cows, to feel them peering over our shoulders (Derrida, 1994: xviii) but to dance with them as well.

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References

- Andermann J. and Arnold-de Simone S. (2012) 'Introduction: memory, community and the new museum', *Theory, Culture and Society*, 29(1), p.3-13.
- Anderson B. and Harrison P. (2006) 'Questioning affect and emotion', *Area*, 38, p.333-335.
- Anderson B. and McFarlane C. (2011) 'Assemblage and geography', *Area*, 43(2), p.124-127.
- Australia International Council on Museums and Sites (AICOMOS) (1999) *The Burra Charter: the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (revised)*, ICOMOS, Deakin University, Burwood, Australia.
- Australian Heritage Council (AHC) (2009) Guidelines for the Assessment of Places for the National Heritage List, www.environment.gov.au/heritage/ahc/publications/pubs/nhl-guidelines.pdf [accessed 22/12/2011].
- Barnett C. (2008) 'Political affects in public space: normative blind-spots in non-representational ontologies', *Trans. Inst. Br. Geogr. NS* 33, p.186-200.
- Baross Z. (2006) 'A fourth repetition', in Boundas C. (ed) *Deleuze and Philosophy*, Edinburgh University Press, Edinburgh, p.98-117.
- Colebrook C. (2006) *Deleuze: A Guide for the Perplexed*, Continuum, London.
- Colebrook C. (2009) 'Introduction: Deleuze and History', in Bell J. and Colebrook C. (eds) *Deleuze and History*, Edinburgh University Press, Edinburgh, p.1-32.
- Davis C. (2005) État présent: hauntology, spectres and phantoms, *French Studies*, LIX(3), p.373-379.
- De Certeau M. (1984) [1980] *The Practice of Everyday Life*, (trans. Randall S.), University of California Press, Berkeley, CA.
- Deleuze G. (2000) [1964] *Proust and Signs*, (trans. Howard R.), University of Minnesota Press, Minneapolis, MN.
- Deleuze G. (2001) [1995] *Pure Immanence*, (trans. A. Boyman) Zone Books, New York.
- Deleuze G. (2002) [1987] Preface to the English language edition, Deleuze G. and Parnet C., *Dialogues II*, Continuum, London, p.vii-x.
- Deleuze G. (2004a) [1969] *The Logic of Sense*, (trans. Lester M.), Continuum, London.
- Deleuze G. (2004b) [1984] *Francis Bacon: the logic of sensation*, (trans. Smith DW.), Continuum, New York.
- Deleuze G. (2006) *Two Regimes of Madness, texts and interviews 1975-1995*, (trans. Hodges A. and Taormina M.), Semiotext(e), New York.
- Deleuze G. and Guattari F. (1994) [1991] *What is Philosophy?* (trans. Tomlinson H. and Burchill G.), Verso, London.
- Derrida J. (1994) [1994] *Specters of Marx*, (trans. Kamuf P.), Routledge, New York.
- Edensor T. (2006) 'Sensing tourist places', in Minca C. and Oaks T. (eds) *Travels in Paradox: remapping tourism*, Rowman and Littlefield, Lanham, MD, p.23-46.

- Evans A. and Miele M. (2012) 'Between food and flesh: how animals are made to matter (and not matter) within food consumption practices', *Environment and Planning D, Society and Space*, online first.
- Fairclough G., Harrison R., Jameson Jnr J. and Schofield J. (eds) (2008) *The Heritage Reader*, Routledge, London.
- Ferguson S. (2011) 'A Bloody Business', *Four Corners*, ABC, broadcast 30/05/2011.
- Flaxman G. (2000) 'Introduction', in Flaxman G. (ed) *The Brain is the Screen: Deleuze and the philosophy of cinema*, University of Minnesota Press, Minneapolis, MN, p.1-57.
- Foucault M. (1972) [1969] *The Archaeology of Knowledge*, (trans. Sheridan Smith A.), Tavistock, London.
- Foucault M. (1977) *Language, Counter-memory, Practice* (trans Bouchard D. and Simons S.), Cornell University Press, Ithaca, NY.
- Foucault M. (2000) [1978] 'Interview with Michel Foucault', in Faubion, J (ed) *Michel Foucault: power, Essential Works of Foucault 1954-1984, Vol. 3*, New Press, New York, p.239-297.
- Garrett B. (2010) 'Urban Explorers: quests for myth, mystery and meaning', *Geography Compass*, 4(10), p.1448-1461.
- Garrett B. (2011) 'Assaying history: creating temporal junctions through urban exploration', *Environment and Planning D, Society and Space*, 29, p.1048-1067.
- Gordon A. (2008) *Ghostly Matters: haunting and the sociological imagination*, University of Minnesota Press, Minneapolis, MN.
- Guattari F. (2009) 'So what', in *Soft Subversions: texts and interviews 1977-1985*, (ed. Lotringer S.), (trans. Wiener C. & Wittman E.), Semiotext(e), Los Angeles, CA, p.64-80.
- Herzog A. (2010) 'Becoming-fluid: history, corporeality, and the musical spectacle', in Rodowick D.N. (ed) *Afterimages of Gilles Deleuze's Film Philosophy*, University of Minnesota Press, Minneapolis, MN, p.259-279.
- Hobsbawm E. and Ranger T. (1983) *The Invention of Tradition*, Cambridge University Press, Cambridge.
- Knudsen B. (2011) 'Thanatourism: witnessing difficult pasts', *Tourist Studies*, 11(1), p.55-72.
- Landsberg A. (2004) *Prosthetic Memory: the transformation of American remembrance in the age of mass culture*, Columbia University Press, New York.
- Landzelius M. (2003) 'Commemorative dis(re)membering: erasing heritage, spatializing disinheritance', *Environment and Planning D, Society and Space*, 21, p.195-221.
- Lepecki A. (nd) *Ghostly*, www.nbprojects.nl/?s=texts-nl&c=ghostly.nl [accessed 05/08/2011].
- Logan W. and Reeves K. (eds) (2009) *Places of Pain and Shame: dealing with 'difficult heritage'*, Routledge, Abingdon.
- Maddern J. (2008) 'Spectres of migration and the ghosts of Ellis Island', *Cultural Geographies*, 15, p.359-381.
- Marshall B. (1992) 'The Cobblestone Village', *Community News*, Melbourne, 29/09/1992, p.35.
- Marstine J. (2006) 'Introduction', in Marstine J. (ed.) *New Museum Theory and Practice: an introduction*, Blackwell, Malden, MA.
- McCormack D. (2008) 'Engineering affective atmospheres on the moving geographies of the 1897 Andrée Expedition', *Cultural Geographies*, 15, p.413-430.
- McCormack D. (2010) 'Remotely sensing affective after/lives: the spectral geographies of material remains', *Annals of the American Association of Geographers*, 100(3), p.640-654.
- McFarlane C. (2011) 'The city as assemblage: dwelling and urban space', *Environment and Planning D, Society and Space*, 29, p.649-671.
- McGuirk P. (2011) 'Assembling geographical knowledges of changing worlds', *Dialogues in Human Geography*, 1(3), p.336-341.
- Michon D. and El Antably A. (2012) 'It's hard to be down when you're up: interpreting cultural heritage through alternative media', *International Journal of Heritage Studies*, iFirstarticle, p.1-25.
- Morel Ednie-Brown F. (2011) 'Cultural heritage in an urban setting', paper presented at WPSC, Perth, July.
- Moulard-Leonard V. (2008) *Bergson-Deleuze Encounters: transcendental experience and the thought of the virtual*, SUNY Press, Albany, NY.

- Peterson R. (2005) 'In search of authenticity', *Journal of Management Studies*, 42(5), p.1083-1098.
- Philo C. and Kearns G. (1993) 'Culture, history, capital: a critical introduction to the selling of places', in Kearns G. and Philo C. (eds) *Selling Places: the city as cultural capital, past and present*, Pergamon Press, Oxford, p.1-32.
- Pile S. (2009) 'Emotions and affect in recent geography', *Trans. Inst. Br. Geogr. NS*, 35, p.5-20.
- Plant S. (1996) 'The virtual complexity of culture', in Robertson G., Mash M., Tickner L., Bird J., Curtis B. and Putnam T. (eds) *FutureNatural: nature, science, culture*, Routledge, London, p.203-217.
- Samuel R. (1994) *Theatres of Memory*, Verso, London.
- Seaton A.V. (1996) 'Guided by the dark: from thanatopsis to thanatourism', *International Journal of Heritage Studies*, 2(4), p.234-244.
- Shaviro S. (2009) *Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics*, MIT Press, Cambridge, MA.
- Smith L. (2006) *Uses of Heritage*, Routledge, London.
- Smith L. (2009) 'Class heritage and the negotiation of place', http://www.english-heritage.org.uk/upload/pdf/Smith_missing_out_conference.pdf?1245950348. [accessed April 2010].
- Sundbo, J. and Darmer, P. (eds) (2008) *Creating Experience in the Experience Economy*, Edward Elgar, Cheltenham.
- Thien D. (2005) 'Affect or beyond feeling? A consideration of affect and emotion in geography', *Area*, 37, p.450-456.
- Thrift N. (1999) 'Steps to an ecology of place', in Massey D., Allen J. and Sarre P. (eds) *Human Geography Today*, Polity Press, Cambridge, p.295-322.
- Thrift N. (2004) 'Transurbanism', *Urban Geography*, 25, p.724-734.
- Tilden F. (1957) [3rd edition 1997] *Interpreting our Heritage*, University of Carolina Press, Chapel Hill, NC.
- Twentyman L. (2000) *The Les Twentyman Story*, Hardie Grant Books, Prahran.
- UNESCO (1972) *Convention Concerning the Protection of Cultural and Natural Heritage*, UNESCO, Paris.
- Uzzell D. (1988) 'The interpretive experience', in Canter D., Krampen M. and Stea D. (eds) *Ethnoscapas, Volume II: environmental policy, assessment and communication*, Gower, Aldershot.
- Uzzell D. (1989) 'The hot interpretation of war and conflict', in Uzzell D. (ed) *Heritage Interpretation*, Volume 1, Belhaven, London, p.33-47.
- Uzzell D. and Ballantyne R. (1998) 'Heritage that hurts: interpretation in a postmodern world', in Uzzell D. and Ballantyne R. (eds) *Contemporary Issues in Heritage and Environmental Interpretation: problems and prospects*, The Stationery Office, London, p.152-171.
- Van Assche K. and Duineveld M. (2011) 'The good, the bad and the self-referential: heritage planning and the productivity of difference', *International Journal of Heritage Studies*, i-first, <http://www.tandfonline.com> [accessed 20/12/2011].
- Vannini P. and Williams JP. (eds) (2009) *Authenticity in Culture, Self and Society*, Ashgate, Burlington, VT.
- Victorian Heritage Register (VHR) (nd) *Former Newmarket Saleyards and Abattoirs*, VHR No. H1430. [accessed 16/07/2011].
- Vincent, K. (1992) *On the fall of the hammer: a personal history of Newmarket saleyards*, State Library of Victoria, Melbourne.
- Vine, G (1998) *Lynch's Bridge Progress: Number 3*, Lynch's Bridge General Advisory Committee, Melbourne.
- Violi P. (2012) 'Trauma site museums and politics of memory', *Theory, Culture and Society*, 29(1), p.36-75.
- Waterton E. and Smith L. (2010) 'The recognition and misrecognition of community heritage', *International Journal of Heritage Studies*, 16(1-2), p.4-15.
- Watson S. and Waterton E. (2010) 'Introduction: a visual heritage', in Watson S. and Waterton E. (eds) *Culture, Heritage and Representation*, Ashgate, Farnham, p.1-16.

¹ The title is taken from Groucho Marx's comment to Raquel Torres in Duck Soup (1933) 'I could dance with you 'til the cows come home. On second thought, I'd rather dance with the cows and you come home'.

² Kensington Banks has received a number of awards including a Royal Australian Planning Institute award for residential planning excellence in 1995, a UDIA (Urban Development Institute of Australia) Award of Excellence in 1997 and, in 2006, Urban Pacific was awarded 1st Prize in The International Real Estate Federation's (FAIBC) prestigious, worldwide *Prix d'Excellence* for internationally accredited masterplanned development.

³ The French verb *expérimenter* signifies *both* to know from experience *and* to experiment in a broadening or enrichment of knowledge.

⁴ I translate *expérimenter* in this instance as both experiment and experience.

⁵ For Derridean (1994) hauntology, the notion of return is vital. In French, the term for ghost, *revenant*, literally means coming back, happening again, being restored.

⁶ A Deleuzean monument 'confides to the ear of the future' an embodiment of affects that are at once past, present and eternally immanent (Deleuze and Guattari, 1994, p.176).

⁷ In Melbourne, for instance, Pentridge Prison or Kew Lunatic Asylum, both converted into luxury apartments.

Fighting the Good Fight: What Glaswegian and Torontonians Say about their Work

John T. Jackson,

Environment and Planning Programme, RMIT University, Melbourne.

Abstract

Set within the social learning tradition, this paper relates what seasoned planning practitioners working in Glasgow and Toronto say about planning in their cities, their profession and themselves. It is argued that what they say challenges what planners in Australasian cities, in particular Melbourne, would consider to be normal practice. It is concluded that professional planners in countries with similar governance and planning systems should be open to listening and learning from one another, reconsidering if necessary their current practices and the beliefs underlying them.

Keywords: Glasgow, Toronto, planning practice, social learning

Introduction

This paper provides an initial analysis of interviews conducted in December 2011 with fourteen planners in Toronto and fifteen in Glasgow. It is argued that what they said challenges what planners in Melbourne, and possibly other Australasian cities, would consider to be normal practice. By listening to and reflecting on what they say, local planners may reconsider their own current practices and the beliefs underlying them, so possibly revising them. The intention is to interview a similar number of planners in Melbourne in late 2012.

It is thought there are sufficient commonalities between the three cities to warrant the possible transfer of what might be deemed 'superior' planning practices. Scotland and Canada, like Australia and New Zealand, were part of the British Empire. They have common cultural bases. All operate within the Westminster system of government. All have similarly constituted planning profession associations.

They have similar recent politico-economic histories. In the 1970s and 1980s with the widespread disillusionment with the Keynesian-based public policy settings and the rise of neo-liberal or open market policies, each country and its cities adjusted to the freer movement of money, goods and people in and out of their economies. In turn, by the 1990s, there was a reaction against the negative environmental and social impacts of this more open market economy, a political turn associated with the rise of third-way thinking (Giddens 2000) and the call for some re-regulation of the economy. Urban and regional planning found political favour again resulting, for example, in the publication of more substantive and specific metropolitan plans for Glasgow, Melbourne and Toronto. These plans were based on triple bottom line planning principles meaning equal consideration should be given to economic, environmental and social matters.

While Glasgow, Melbourne and Toronto have shared characteristics, reflected in their populations' origins, their government and institutional arrangements and their professions, there are important differences. Glasgow since the collapse of its ship building industry after World War II has lost population. In 1951 Glasgow, Melbourne and Toronto had populations just over one million each; in 2031 it is estimated Glasgow will have 1.2 million people; Melbourne, 5 million; Toronto 7.5 million. Glasgow is a city of post-war emigration while Melbourne and Toronto are hubs of post-war immigration. In 2006 46% of metropolitan Toronto population was overseas born, the second largest in the world after Miami.

The interviews reported on here were follow-ups to interviews conducted in 2005/6. Since the Global Financial Crisis (GFC) of 2008 most Western governments continue to seek to reduce their debt levels. Public servants including planners are being redeployed or made redundant. The optimism felt in 2005/6 that planning was being taken seriously again after the neo-liberal years of the 1990s – the Thatcher government in the United Kingdom, the Kennett years in Victoria - has gone. The basic questions this research therefore seeks to answer are: how are the Glaswegian and Torontonians responding to today's more straightened times; and, are there lessons for their counterparts in Melbourne and more generally, the Antipodes?

Regarding methodology, the first round of interviews in 2005 focused on the relative importance of social matters in planning practice in light of third-way planning's triple-bottom-line credentials. The 2011 interviews were more open ended. The majority were repeat interviews and the focus was on allowing interviewees to

speak about what they had been doing since 2005, their professional high and low lights, their reflections on their careers to date, their hopes for the future. Interviewees were aware of the interviewer's interest in the social dimensions of planning practice, but the interviewer sought not to set an explicit agenda nor impose his views, rather as both a researcher and teacher, he wanted to listen and learn from highly experienced practitioners. By sometimes taking the devil's advocate position, that is, expressing views that were not his own nor the interviewee's, he sought to have interviewees expanded on or defended their initial responses.

The 2011 interviews in the City of Glasgow in particular were conducted at a time of redundancy and redeployment, affecting some directly. Some of the interviews in the City of Toronto were conducted with retired or soon-to-be retired planners. There is a bias towards older planners whose formative professional years were in the 1970s and 1980s, a period when Keynesian public policies were being challenged by resurgent neo-liberal thinking, particularly in the United Kingdom. There is a bias too towards public sector planners. In Glasgow planning remains very much a public sector profession. In Toronto as in Melbourne, planning consultants are more common, so were actively sought out.

From Knowledge to Action

Urban and regional planning is a discipline that is concerned with the application of knowledge. Knowledge can be either acquired through direct experience or by learning from others. Most university programmes are concerned primarily with students learning from academics via lectures, readings and tutorials. Students have less exposure to experienced practitioners, their knowledge and skills. As planning is a professional degree, one concerned with promoting best practice, it behoves university teachers to bring appropriate practitioners into the classroom, have student take up a work placement as part of their studies and/or impart practice-based knowledge themselves either through their own experiences or by learning from others' practices.

Peter Hall has made a related but broader point. In *Cities of Tomorrow* (1988) he bemoans 'the continuing divorce of theory from practice' (p. 372) resulting in practitioners lapsing into increasingly under-theorised, unreflective, pragmatic styles of planning while academics write papers, often esteemed amongst their peers but irrelevant, sometimes incomprehensible to the average practitioner. A positive way of addressing this divide is - on the basis that academics generally are more concerned with how things should be (a normative view) while practitioners deal with things as they actually are (a positivist view) - for academics to engage with practitioners who are not satisfied with the way things are, in order to find common ground and purpose.

John Friedmann was educated at the University of Chicago in the afterglow of President Roosevelt's New Deal (1933-38), a national public policy grounded in a belief in rational comprehensive regional planning. His experience in planning a proposed industrial city on the Orinoco delta of Venezuela and his subsequent work in the slums of Chile transformed his views of what planning should and could be. These he set out in *Planning in the Public Domain* (1987) and later texts. In *Planning in the Public Domain* he traces the histories of the various schools of thought that underlay the discipline's formation in the nineteenth and twentieth century in the West. In the belief that planning is essentially concerned with putting knowledge into action and based on his academic and practice experiences, Friedmann posits a two-by-two typology of current planning practices (p. 76): a social guidance as opposed to a social transformation approach on one axis, a conservative as opposed to a radical approach on the other (Table 1). He argues planning can be more than the dominant conservative social guidance approach - policy analysis - and asks his readers to consider the less developed 'social learning' (conservative) and 'social mobilisation' (radical) traditions in planning practice, ones reflecting his Latin American experiences. This paper sits within the social learning tradition, that is, it sets out to learn from practitioners, but is limited to practitioners working in the Anglo-Celtic realm of the developed world.

Table 1: Political Ideology

KNOWLEDGE TO ACTION	<i>Conservative</i>	<i>Radical</i>
<i>In Societal Guidance</i>	Policy Analysis	Social Reform
<i>In Social Transformation</i>	Social Learning	Social Mobilisation

In the USA, Forester (1999) and Hoch (1994) bridge the divide between planning academics and practitioners by considering the idea of reflective practice. Forester argues that the deliberative practitioner, aware of power imbalances in society and through their communication skills, can foster enquiry and encourage community engagement and so realise more inclusive planning outcomes. Hoch speaks of planners being in a precarious professional position, stemming from the tension between individual purpose and the common good and between professional judgement and citizen preference, and how planners respond to these conflicts determines how they do their work. Both draw on ongoing conversations with practicing planners to laud those practices that 'expand democratic deliberations rather than restrict them ... encourage diverse citizen's voices rather than to stifle them ... direct resources to basic needs rather than to narrow private gain.' (p.5) In effect, they bring the experiences and voices of seasoned practitioners to the classroom, voices that practically-minded planning students, often the majority of students, are more prepared to listen to.

In the UK Healey in the first edition of *Collaborative Planning* (1997) gave weight to the importance of the planner as a voice of reasoned argument, someone able to facilitate agreements between different interest groups or able to advocate for those outside organised interest groups. But in response to critics pointing out planning is essentially a political activity in which reason and reasonableness usually give way to the self-interest of the powerful, Healey acknowledges in the second edition (2006) the limits of communicative planning. She persists, however, with the idea that a planner aware of power imbalances and if working in a supportive institutional setting can reduce, in admittedly limited ways, through listening to and working with other open-minded stakeholders, the negative social and environmental impacts of development projects.

Hillier (2002) and Watson (2002) similarly have highlighted the limits to the communicative turn in planning. Hillier in her interviews with practising planners in Perth provides an even simpler typology of planning styles than Friedmann: missionaries or chameleons. Missionaries fit with what Forester and Hoch would consider to be good practice planners: those with a sense of democratic purpose and social justice, who see planning as being much more than following the rules, the view of chameleons. Watson's primary interest is how students and practitioners can learn to become not only reflective but reflexive planners, that is, act on their reflections. She speaks of the importance of planners learning from their experiences as opposed to just following the rules: learning to make professional judgements. So what kinds of studies of practice, she asks, best help planners learn? She thinks it can be achieved through a combination of direct experience and 'mediated experience' (something not directly experienced), in effect, generating 'new meaning in old experience' (p. 152). Mediated experience, she states, can be gained through studying case studies, histories, narratives, contextual detail and planning texts. It can also be gained, it is argued here, by listening to experienced practitioners.

The Case Studies in Context

Glasgow, Melbourne and Toronto, outposts of the British Empire, were beneficiaries of post-war boom economies but since the 1950s, they have taken very different economic and demographic trajectories with Melbourne sitting between the population trajectories of the other two (Table 2).

Table 2: Metropolitan Population Growth and Projections

	Glasgow	Melbourne	Toronto
1901	761,712	510,580	208,040
1951	1,089,555	1,330,800	1,117,470
2001	1,200,000	3,162,000	5,221,000
2031	c. 1,200,000	4,900,000	7,450,000

Sources: various

All three metropolises are in jurisdictions - Scotland, Victoria and Ontario - that elected governments at the turn of the century reacting against the free market or neo-liberal policies of their predecessors, ones that involved severe cut backs in public services and the promotion of simplistic plans and fast-

track planning processes. The incoming governments held to third-way thinking. While appreciating the energy and entrepreneurship released under neo-liberalism, they expressed concerns about the increase in social polarisation caused, in part, by market deregulation. These governments brought back selective intervention or re-regulation including a revival of sub-national and metropolitan planning, resulting in plans with greater specificity.

Glasgow City Plan 1 (GCP1) (2001) and *Glasgow City Plan 2* (GCP2) (2009) were complemented by the *Glasgow and Clyde Valley Structure Plan* (GCVSP) (2000, 2005) that cover the wider conurbation. All were approved by the new Scottish Parliament established in 1999. *The City of Toronto's Official Plan* (TOP) (2002, finally approved 2007) sits within the Province of Ontario's plan for the metropolitan region, *Places to Grow* (2006). This is constricted by a secure and tight Green Belt and completed by a regional transport plan: *The Big Move* (2008). Metropolitan Melbourne was covered by one plan, *Melbourne 2030* (M2030) (2002) that was reworked in 2008 in *Melbourne@5Million* a response to unexpectedly high population growth. While ostensibly promoting triple-bottom-line planning – equal weight being given to economic, environment and social considerations – these plans were in fact designed primarily to attract inward investment and the professional classes associated with 'new economy' jobs - financial and producer services, information technology, bio-technology and medical services (Jackson 2009). This was most noticeable in the case of Glasgow, the metropolis that had lost significantly more of its old industrial base and has been the least successful in attracting new sources of investment.

The author's initial interest in 2005/6 was focused on those parts of the cities least likely to benefit from the inflows of new investment and high-end service jobs - former working-class areas adjacent to the cities' now semi-derelict docks avoided to date by the incoming professional households, post-World War II industrial suburbs now replete with empty factories, and new fringe suburbs of low-cost housing, home to many people in casual employment or trades whose incomes are particularly vulnerable to economic downturns. - and on the planners implementing the metropolitan plans in these areas, In Melbourne, for example, planners with responsibilities in Port Melbourne, Doveton and Cranbourne were interviewed (Map 1). This was duplicated in 2011 but more planners working in new suburban areas were sought out.

Map 1: The Three Metropolises





The three metropolises' common cultural, demographic and industrial histories have been briefly reviewed above. The institutional commonalities and differences within which the interviewed practitioners work are summarized in Table 3.

Table 3: Institutional Frameworks within which the Interviewed Planners Work

Commonalities	Differences
<ul style="list-style-type: none"> • Cities in countries heirs to the Westminster system of government • Planning power sits primarily at the sub-national level, local governments dealing with planning applications 	<ul style="list-style-type: none"> • Toronto and Glasgow plans are set within metropolitan regional frameworks; Melbourne's is not • The central city councils vary significantly in size: Toronto: 2.5 million and increasing;

<ul style="list-style-type: none"> • In 2005 all three cities' governments appreciated the need to re-invest in metropolitan planning to better attract inward investment <u>and</u> plan for social inclusion • Scotland, Victoria and Ontario all have land-use planning departments, distinct from Transport, Housing and Environment • Major local government reform and amalgamation occurred in the 1990s when neo-liberal governments were in power • Planning is divided into strategic and development control at local government level • Dissatisfied applicants can appeal to independent tribunals • All three metropolises have social regeneration projects but with different emphases: see Differences • The 1970s, a decade of political, social and environmental change across the Western world, were formative years for many of the planners interviewed 	<p>Glasgow: 581,000 and steady; Melbourne 67,000 and increasing</p> <ul style="list-style-type: none"> • Outside the City of Toronto there are upper and lower tier councils, social and housing policy being an upper tier responsibility, physical planning a lower tier responsibility • Glasgow councils owns large areas of derelict but centrally located, so desirable land so giving its planners bargaining power with developers, power lacking in Melbourne and Toronto • Privatisation of government functions is most advanced in Victoria: much strategic planning work and 'overspill' statutory planning work is contracted out. • The City of Toronto has a long tradition of neighbourhood-level planning practice tied to significant, ongoing community engagement. Glasgow's forward planners' role is to ensure strategic plan intentions are reflected in developer-led master plans. Melbourne has neither.
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Local government strategic planners, as they are known in Victoria, were the ideal interviewees for this paper as they have the experience of writing and implementing plans; they have a sense of both the bigger picture and the daily, routine practice of dealing with planning applications. The City of Glasgow and surrounding councils employ 'forward planners' whose function is to ensure the intent of the GCVSP and individual councils' strategic plans are recognised in the master plans prepared by developers. In Toronto several planners interviewed had started their careers as 'neighbourhood planners' for the City of Toronto progressing on to more senior managerial roles either at the City or at a neighbouring council. Importantly for this paper, such intermediate-level planners constantly work with related professionals and have to deal with local political pressures from local government councilors and others.

The Interview Process

The fifteen Glaswegian planners were partly drawn from Glasgow City, North and South Lanarkshire, East Dumbartonshire and East Renfrewshire councils, all members of the Glasgow and the Clyde Valley Strategic Development Planning Authority. Others included an architect-planner now in tertiary education, a community planner and a manager of an urban regeneration agency. Fourteen were interviewed in Toronto: three at provincial government level, two consultants, two who had retired but now taught at tertiary level, the rest in local governments spread across the metropolis.

It is fair to say most were 'seasoned' planners, several beginning their careers in the 1970s prior to the rise of neo-liberalism. This has the advantage of many of them taking the long view, not being caught up with immediate crisis of the day or year but, as will be discussed later, there is also a sense they are a generation of planners at odds with current political circumstances.

As noted, interview schedules were essentially open ended. This allowed the interviewee scope to raise issues they wished to discuss, issues the interviewer either was not aware of or did not fully understand, so encouraging mutual learning. The fact that for many these were second interviews meant a rapport between interviewer and interviewee had already been established and allowed one to more easily range across changes in the global economy since 2005/6, to quickly get to grips with local political and institutional responses, and to be able to freely talk about changes in working arrangements, specifically redundancies and higher work loads. There was interest in comparing work practices in the three jurisdictions.

Interviews took between one and two hours. For some it was a therapeutic exercise: the opportunity to talk to someone outside their organisation about their concerns and misgivings, and then to have that person leave.

Transcripts were scanned by the author for emergent themes. Given the relatively open nature of the questioning, these varied between interviews. Some interviewees, according to 'their area' and interests, were keen to talk about the impacts of gentrification; others about economic restructuring and resultant job losses, or housing tenure mix, or their involvement or otherwise in urban regeneration projects, or why the pressure of work meant social considerations in planning were a low priority. Like comments were grouped to create themes.

From Action to Knowledge

The transcripts are a rich source of information about the experiences, beliefs, misgivings and hopes of a number of people who have given long and great service to their profession and 'their area'. This analysis is just a first cut. Themes raised by the Glasgow planners are considered separately from those of the Toronto planners partly because of the very different economic and demographic circumstances of the two metropolises, post-GFC¹.

Glasgow

Themes mentioned by three or more interviewees include, in no particular order:

- Formation of an Arms-length Executive Organisation by Glasgow City Council to sell off council-owned land
- Can and should we plan for urban decline?
- The need to critically reflect on day-to-day practice
- The current lack of deep-seated strategic thinking leading, long-term, to less effective planning
- Responding to house developer pressure for the release of more greenfield sites while well-located brownfields lie untouched
- Frustration in not making any dent into deep-seated worklessness in parts of Glasgow
- The Scots' belief in public service
- Planning consultants necessarily cannot serve the people faithfully
- The physical success of some regeneration areas not translating to social and health benefits
- A commitment to following proper planning process whatever one's personal beliefs
- The coming loss of many highly-experienced and respected planners to the detriment of Glasgow
- The loss of forward planners linking the wider strategic plan to more specific master plans
- The overbearing power of Reporters (reviewers of councils' strategic plans appointed by the Scottish Government) resulting in a democratic deficit

Four themes are selected here for comment, each challenging the author's sense of 'normality' based on his knowledge of Victorian planners' experiences and values. It is believed this challenge to one's sense of 'normality' provides the spark for social learning, for reflecting on one's own current practices and so, an impetus to change one's behaviours.

The need to critically reflect on day-to-day practice

Many of the interviewees positioned their practice in a broader politico-economic context. Most were cognizant of the writings of fellow Scots like Adam Smith; two referred to the famed Welsh socialist, Aneurin Bevan's 'In Place of Fear'; another referred to the French theorist Foucault in how one's consciousness and so professional values are shaped by one's environment. In his case, he grew up in a poor housing estate on Glasgow's fringe, meaning he was now in the sometimes uneasy, sometimes creative position of being partly inside, partly outside the middle-class sensibilities of most of his professional colleagues. After some

¹ Current political circumstances, though, complicate matters. Since the re-establishment of a Scottish parliament in 1999 planning legislation and action is shaped at Holyrood not Westminster and although the Scottish Nationalists defeated the Labour Party in the 2011 elections to form for the first time a majority government in their own right, they maintain an equal if not stronger commitment to regional and metropolitan planning, a commitment not mirrored south of the border. In Canada while a small 'l' Liberal government is in power in Ontario, local politics in the City of Toronto saw the unexpected election as mayor in 2010 of Rob Ford, a small business man with no truck for public servants and planning. Thus while the construction industry is in over-drive, planners who resign their job at the City sometimes from overwork, are not replaced. In summary, Scotland and Glasgow are committed to planning but there is no money to do it properly while Toronto's regional economy is more than buoyant, but because of severe restrictions on public spending there are insufficient planners to manage the resultant urban growth, at least in the City of Toronto.

confusion his 'outsider' experiences, he said, facilitated mutual beneficial learning with more senior planners. The example given was over a community group's desire for more social housing and the senior planner's and council's call for private housing. By speaking on behalf of the community and through subsequent conversations, he helped shape how his colleague now approaches housing proposals.

You sit up when, unsolicited, a development control (statutory) planner starts the conversation with:

The neoliberal ideology is now sweeping the globe and now is the time to stand up and find a radical voice. I think there is always an alternative.

Much of this interview was spent delving into how, as a development control planner, one can do this: there is not much wriggle space, but it is there: he gave as his example the rebuilding of the Glasgow City Mission at minimum cost to the City and close to its original site at the edge of the docklands in Broomielaw.

When invited to run an impromptu seminar for all the planning staff at North Lanarkshire in Cumbernauld that starts with a planner defining planning as 'tomorrow's problems today', one knows one is talking to people who reflect on what they do.

Planning consultants necessarily cannot serve the people faithfully

This is closely linked with the Scots' belief in public service: 'The Faith' as one planner put it². Several spoke of their parents or grandparents, many of socialist conviction, and how they had shaped their values. A Cumbernauld planner spoke of his great grandfather being one of Scotland's first providers of philanthropic housing; another of her father, a farmer, never being able to understand what public servants contributed and now through her work in establishing community resource centres on the north bank of the Clyde, he began to understand their purpose.

One interviewee said:

It is not uncommon for those working in planning at local government to see themselves as more than public servants – it is a vocation. They chose not to work in the private sector.

The antagonism to planning consultants, a smaller proportion of planners than in Victoria and most employed by house builders or retail developers, was notable. It cropped up so regularly the interviewer sometimes took up the defence of consultants arguing their specialist skills added to the more generalist capabilities of public sector planners. This is a typical response:

Here consultancies are about finding your way around the plan, thwarting the plan. There is a different mindset. It is not looking to the public good.

With the downturn in the economy, former public sector planners were seeking re-employment at councils. Several interviewees expressed reservations about taking them back.

The physical success of some regeneration areas not translating into social and health success

One interviewee spoke of Glasgow as being the most unequal city in Europe. Walking around Glasgow – past the overweening football stadiums at Ibrox and Parkhead, for example – reinforces this: acre after acre of desolation, all within three miles of Buchanan Street, one of the best shopping streets in the UK.

Urban regeneration in Glasgow started in the 1975 with the Glasgow East Area Renewal (GEAR) programme. Thirty-six years on, in December 2011, the interviewees bemoaned the minimum improvements to the residents' health and life expectancy: male life expectancy in Calton, immediately east of the CBD, is 57 years, less than many developing countries. Social Inclusion Partnerships of the 1990s and early 2000s, the continuing work of locality-based Housing Associations and the recent demolition of all primary schools and their rebuilding on neighbouring sites show determined public policy and planning efforts have and are being made to go beyond purely physical regeneration.

With the Commonwealth Games venue being in the East End, the Scottish Government has committed to a 20-year funded programme to turn the area, now named Clyde Gate, around: a new motorway runs all the way to England, local railway stations have been refurbished, attractive public spaces are a pleasure to linger in. The Clyde Gate Regeneration Company's central purpose, however, is to create jobs so tackling the area's endemic worklessness. Talking to its Director a variety of jobs, from low skill to professional, have been created but are being taken by people from other parts of Glasgow. Local school leavers are not taking them. He is now appreciating the depth of his challenge and is working through extended family networks and street work to engage with local unemployed people. He says:

² Keir Hardie, I was reminded, was a local man. Patrick Geddes, Patrick Abercrombie and Colin Buchanan, famous planners, were all Scots.

So long as you have an agency dedicated to Clyde Gate we will never give up.

Funding from the Scottish Executive will continue for at least fourteen years after the Commonwealth Games have come and gone.

The loss of forward planners linking the wider strategic plan to the more specific master plan

In 2005/6 there were twelve forward planners employed by the City of Glasgow, each with responsibility for a particular part of the City. Their job was to liaise with all interested stakeholders to ensure the intent and specificity of public plans were realised in proposed master plans put up by developers. In 2011 there were two left, most forward planning being taken over by development control planners with no experience in this work. In 2005/6 forward planners had a high degree of autonomy working in the field building relationships with diverse stakeholders – school children, overseas investors looking at the potential to buy a football team and rebuild the area surrounding the stadium, housing associations – with the intention of bringing often complex or innovative proposals to fruition. Some are long-term propositions such as the Princes Dock, home of the 1988 Garden Festival, and a possible site for floating houses and a marina; others are concerned with the more efficient movement of freight such as getting stock to riverside supermarkets in novel ways, namely by barge and pontoon.

In reconnecting with one of the forward planners to organise an interview I was invited to meet her at a newly-opened Community Resource Centre for Christmas drinks, there to hear a senior politician speak about her behind-the scene work that facilitated a more speedy and therefore more economical completion of the project, the likely basis for future community-building and environmental work in the area. Her efforts she thought were not particularly worthy of commendation:

We are doing planning as you are meant to do it.

This was said in a very pointed manner.

When asked about his successes, the other surviving forward planner said:

In terms of what I have always tried to make count is the smaller things – things that apparently have nothing to do with planning ... like planting daffodils at the local primary school with the children

His redeployment means his stakeholder networks and area-based trust relationships built up over the years will likely wither.

Interviewer: *They are trying to fit you into the new model of working and you are resisting as best you can?*

Interviewee: *That would be a fair description of what may well happen.*

Toronto

Themes mentioned by three or more interviewees include, in no particular order:

- The value of respectful, long-term community engagement
- Better planning of the public realm needed
- The pleasures derived from planning work
- Without central government funding little can be achieved
- Importance of regional planning frameworks
- Success of Intensification
- Lack of affordable housing
- Social planning is not on the agenda
- Toronto's planning culture

Here just two themes are singled out to give more space for the voices of the planners.

The value of respectful, long-term community engagement

This theme ties into Toronto's planning culture, specifically the City's, not the surrounding suburban municipalities'.

The least expected example of respectful community engagement proved to be the planners at Waterfront Toronto, a Federal-Provincial-City-funded authority responsible for the redevelopment of a large part of Toronto's semi-derelict docklands. Superficially it appears to be like the former Melbourne Dockland Authority in its formation and purpose: to attract overseas developer interest to help bolster Toronto's world city status. This indeed is part of its purpose but:

we have strong community support... we do our plans with the community, we have lots of community buy in by the time our plans go to City Council for approval. We have more people coming to support rather than oppose which is utterly unheard of in public planning processes anywhere else in the world. They end up leading the charge in the public arena when a politician attacks a project. We take a back seat...

Interviewer: ...*(but surely) Waterfrontoronto serves inner-city-based professional class interests.*

The old left loves us. We make a distinction between redevelopment and revitalisation. Redevelopment would be selling off land to the highest bidder and so more condos blocking off the City from the waterfront. We work with public policy objectives: increasing public transit, increasing the supply of affordable housing....

Twelve hundred or so units of affordable housing are now being built in West Don Lands. Social housing units are protected by controlled rents for 20 years.

The interviewer persisted with his doubts, contrasting the depth of community engagement across the City in the 1970s and 1980s, the era of neighbourhood planners, with the perhaps now isolated example of Waterfrontoronto's practices. The interviewee bristled, saying he was asked a similar question recently by the Mayor responsible for setting up and funding the City's neighbourhood planners back in the 1970s, David Crombie:

We are more accountable and transparent than the three levels of government we work with: pecuniary, the way we report our dollars, our public consultation processes, the fact we are audited by all three levels of government...

The point about the possible exaggeration of community engagement in Torontonion planning practice was again raised with a City of Toronto planner, an ex-neighbourhood planner, someone in 2005 who had organised over a 100 public meetings prior to writing TOP:

The bottom line is we are shrinking and fewer people deal with the work. As this happens the focus narrows to core work: the applications coming in, the statutory requirements like the five-year review of the Official Plan. The ability to deal with social issues is receding even more so now.

Meaningful community consultation is deep within the City planners' psychic but the resources and time needed are lacking.

More broadly the big issue in Metro Toronto at the edge of many interviews was freeway congestion and the increasing failure of the public transit system to cope with rising patronage. Metrolinx, modelled on a similar regional body to that in Vancouver, has been established to address this and is currently seeking out non-government funding sources. This work is complemented by public debate. A senior, now retired planner believes that in public debate planners do not necessarily have to be respectful:

Congestion is getting worse and people know it... at public meetings when people get hot and heavy, I say "these are the choices we have to make and if you say no, you have to live with the consequences and here are the consequences for you, your children and region. Suck that up and if that is what you want to do, you live with it".

It is this planner's personal agenda for 2012 to run a number of public meetings to engage commuters on the issue of increasing public transit funding. As he says: "taxes mean civilisation".

Success of Intensification

For a Melbourne planner 'Success of Intensification' would be the theme most would wish to learn about.

For the first time ever, since you were here last, there are more multi-family houses being built in the suburbs than single-family housing. A turning point has been reached: condos, mid-rise, town houses.

Some suburban councils like Markham were active in promoting higher-density development even before the province's 'Places to Grow' legislation was in place. New urbanism principles had been followed at the model residential development of Cornell, one designed by Duany Plater-Zyberk with ripple affects to other developments. More recently Markham has lifted the bar above Provincial benchmarks:

There is political will here ... most municipalities said they would take so much intensification ... whereas the Province define requires 55% of new population and employment growth to be within the existing built-up area, our councillors said: "why not 100% and not grow at all and protect our agricultural land as a food belt?"... including asking the Province to take more land in the greenbelt.... The staff position was we should take a more balanced approach... it will be Cornell and greater density.

The planner referred the interviewer to the Markham Growth Alternative: <http://www.markham.ca/markham/ccbs/indexfile/Agendas/2011/Development%20Services/pl110208/Official%20Plan.pdf>

Across the metropolis, in Mississauga, another planner of 25 years experience spoke of her renewed interest in planning: all the greenfield sites were now filled out so she had the opportunity to taking on more challenging infill sites, mainly old malls, as mixed-used higher density developments.

Most interesting of all was the planner at Milton, the fastest growing municipality in Canada, if not North America. It is 42 kilometres from the CBD between the Lake and the Niagara Escarpment. He had worked for various new town/fringe councils throughout his professional career, had qualifications in financial management, forestry and landscape architecture and had built up a strong rapport with the five big developers building in Milton:

We have here one of the last pro-development councils. The main point is if we allow development we enter into financial agreements with developers who pay us what we consider to be 100% of the costs of accommodation development – from parkland, facilities, etc.

Interviewer: *the developers surely seek to minimise their contributions!*

No, the developers are so desperate to develop here...

Interviewer: *What happens when the greenfields run out?*

The smart ones realise they have to develop different products...

Housing densities are three times those of Mississauga and well above the Provincial benchmarks. This raised the question of planning for public open space:

Milton allows density transfers.

Interviewer: *are these common in Ontario?*

No, not in the greenfield situation. It is part of our financial agreements. So for example we say to developers: "all our woodlots are going to be preserved and are going to be given for free but we are going to allow you the number of units to be built on that woodlot to be transferred..."

One hoped these higher density developments would be interesting to walk through. Hawthorne Village in Milton does offer a range of walking trails and so alternative routes to choose between. But one is struck when walking Mississauga at the stark differences between the neighbouring 1970s and 2000s greenfield developments in Churchill Meadows one of the case study areas. The former was composed of spacious houses on lots smaller than Victoria's, understandably given the long winters and the frozen ground, set along winding avenues and cul de sacs, and cut across by linear parks complete with woodlots and schools: following the linear parks was a pleasure to walk through. The latter were set out on grids, long rows of three-storey town houses with basements being the norm broken by the occasional mid-rise apartments: a much less interesting townscape to walk through. Despite achieving suburban residential densities unheard of in Australia, several planners remarked public realm planning is a weak part of Canadian practice.

Reflections

Attention here is given to some reflections on what these overseas practitioners might contribute to local professional practice in Victoria rather than on possible lessons for teaching academics. Those from Toronto are self-evident: work within a regional framework, set and then hold to an urban growth boundary, integrate land use and public transit planning ensuring secure funding for the latter, do not get bullied by developers. As the Milton planner said, the smart ones develop new products and thrive in situations of high in-migration and low unemployment and interest rates. This all rests on community and political support for urban and regional planning, currently demonstrated by Ontario's Liberal Government. The dilemma across metropolitan Toronto relates to the Federal, Provincial and City governments holding to the doctrine of balanced budgets and triple AAA credit ratings, understandable post-GFC. This means funding to upgrade and extended public transit, built into the metropolitan and local governments' plans, is not guaranteed beyond 2014. Most planners were doubtful about funding guarantees being extended. The medium and long-term consequences could be dire.

Regional planning at the metropolitan or conurbation-level in Glasgow has proved its worth and has been extended to Scotland's three other major city regions: it has resulted in a high degree of co-operation between the constituent councils regarding the strategic siting of new house estates. The problem is few new houses post-GFC are being built, with virtually none on well-located brownfield sites close to existing shops, schools and work. The framework for co-operative planning practices between councils however is in place.

In terms of individual values and practices, the most striking feature of the Glaswegian planners was their genuine passion for their profession and work, despite the fact some were enduring uncertainty as to their future working arrangements. They all had a strong sense of vocation and public service. They were tough and resilient. While they acknowledged it was their duty to adhere at all times to proper process and they understood public services were being financially squeezed, there was resistance to what they considered to

be the dumbing down of their work: strategic plans that were under-researched and not thought through, development control planners taking on forward planners' work, increased surveillance from management. Despite these irritations and pressures, they continued to keep the Faith and fight the good fight:

We are doing planning as you are meant to do it.

The most striking feature of Toronto's planners was a sense of a passing of a generation, one that came into planning in the 1970s and 1980s when neighbourhood planning was new and fun; when there was strong political support for grassroots planning, with new professional opportunities opening up. These early formative years still fuelled their work ethic. Several spoke of the high quality of some of the leading practitioners of the time; many had moved on but some remained and continued to set the tone for others. There was a reunion of 50 or so planners to celebrate the 65 year birthday of one of these leaders in early December: a genuine sense of camaraderie prevailed.

Like the Glaswegian planners they had a broad view of what planners covered exemplified by their view that the protection of affordable housing was part of their brief, not only downtown rental housing but housing in the new suburbs. The five year review of the City of Toronto's Official Plan is due and besides the protection of affordable housing, protection of the Employment Lands was high on the agenda: that is, stopping retail chains and warehousing companies taking up centrally located but currently underutilised old factory sites. Such land, the planners said, should be held over for future, higher-order economic and social use.

Some of the planners interviewed were those suggested by academics at universities in the two cities, others by those initially contacted for interviews. The sample is made up of mainly older, public service planners, planners who Hillier would describe as missionaries. Those interviewed are not fully representative of their contemporaries. Several of them did speak of under-performing colleagues. As a generation of older planners they had misgivings about their profession's emerging leadership. In Toronto:

Planning as a culture was strongest before amalgamation... but since then the profession has been reduced in its stature and influence – budget cuts, political attitudes towards planners – and its ironic as this has gone on when we have had this boom and growth in the region... out in the 'burbs trying to make a difference generally I would have to say 60% of the planners are chair warmers – they go in there, they have their rules, they do their shit... I do not expect junior planners to take a big stand but I do expect the chief planners to stand for what they believe in.

The concern is this is very much the situation in Melbourne. It may be a theme to be consciously explored in interviews there.³

References:

Friedmann, J. 1987 *Planning in the Public Domain: from knowledge to action*, Princeton University Press

Forester, J. 1999 *The Deliberative Practitioner: encouraging participatory processes*, MIT Press

Hall, P. 2002 *Cities of Tomorrow*, 3rd edition, Blackwell

Giddens, A. 2000 *The Third Way and Its Critics*, Polity Press.

Healey, P. 2006 *Collaborative Planning: shaping places in fragmented societies*, 2nd edition, MacMillan.

Hillier, J. 2002 *Shadows of Power; an allegory of prudence in land-use planning*, Routledge.

Hoch, C. 1994 *What Planners Do: power, politics and persuasion*, Planners Press, American Planning Association.

Watson, v. 2002 'Learning from Planning Practice?' in A. Thornley and Y. Rydin (eds.) *Planning in a Global Era*, Ashgate.

³ Unfortunately a block by the Victorian Department of Planning and Community Services has been put on the author re-interviewing its staff. Hopefully this will be lifted once the new metropolitan strategy is ready to be released.

Meet the Moot: Teaching Environment and Natural Resources Law To Non-Law Students Through Moot Trials

Rebecca Leshinsky

School of Business, Australian Catholic University

Abstract

Moot court is a common law school activity and competition during which students participate in the preparation and arguing of cases in front of judges. The case and plaintiff and defendant sides are selected beforehand, and students are provided with a set amount of time to prepare for the eventual trial. Drawing on the author's previous experiences in teaching at law school where the author assisted in moot trials, the author canvasses the use of moot trials as a teaching and learning tool for Environment and Natural Resources Law, as taught to non-law students. The use of expert witnesses role play is also encouraged to reflect real world practice in land use planning and environment trials which further provides students with the opportunity to consider future potential professional areas of interest. Also discussed in the paper, is the issue of whether shallow or deep approaches to teaching and learning are the better approaches to teaching land use planning and environmental law to non-law students via moot trials. The author concludes that moot trials, overall, are an exciting and real teaching and learning experience, which enhances innovative active learning.

Keywords: Innovative teaching and learning. Moot courts. Non-law students. Environment and Natural Resources law.

Introduction

Moot trials are an innovative and exciting way to teach law topics to students. It is an alternative to straight lecturing and actively engages students in a simulated court-room environment. Such a learning process has the potential to stimulate greater student interest in both the topic and the discipline (Carlson & Skaggs, 2000). In this paper, I describe a recent moot exercise, and make the proposition that moots are an active learning tool well suited to teaching topics within environmental, natural resources and land use planning law. Moots as simulated court cases, are important learning experiences for those students who may wish to pursue careers as court (planning) advocates or expert court witnesses. This paper is a teacher's reflection on how the moot trials were run. Some limited oral student feedback was sought after the exercise, with the intention to survey students more comprehensively in next year's cohort of students. Accordingly, the paper discusses in a broad context, the teacher's experiences of the use of the moot trials as an assessment task for Environment and Natural Resources Law.

Background – Mooting

Subjects and courses concerned with regulatory issues lend themselves well to the use of moot courts (Carlson & Skaggs, 2000). These include environmental and natural resources law, workplace regulation and insurance law. Regulatory issues frequently involve the application of administrative law, which consists of decisions or regulations developed by various administrative agencies at the local, state, and federal levels. Environment and natural resources law, a subject that also canvasses land use planning law, all cover important aspects of administrative law.

Mooting makes use of fictitious factual scenarios (often based on facts from previous court judgments) and requires students to argue for their client's cause, aiming to obtain the best possible outcome. The exercise requires students to be well prepared on the knowledge of the facts, the relevant law (both statute and case law), and strategies for outcomes and mitigation. These reflect real life skills that students will use in the workforce.

Objectives for teaching in higher education

Teaching in a higher learning environment may pursue a number of different objectives (Biggs, 1999). More particularly, Biggs & Tang (2007) explore teaching objectives and note that these objectives are often intertwined and through the promotion of one objective, it will often assist to promote another. In teaching

Environment and Natural Resources Law, there are various interrelated objectives and these include the following:

1. Problem-Based Learning as a teaching approach

Problem-based learning and experiential learning are related approaches to learning in a higher education setting in that they both rely on the student's personal experiences for learning to be effective. Biggs & Tang (2007:151) describe problem-based learning as 'the way people learn in real life'. Students are faced with a problem and, armed with no or little specific knowledge of the material necessary for resolving the problem, they attempt to construct a solution. Winsor (1989) points out that problem-based learning is learning (as distinct from teaching) based on tackling a problem, or series of problems, without prior instruction. The idea is to get students to indulge in what is described as 'discovery learning' by using their own initiative, but guided and assisted (rather than lectured or taught) by their instructor. This is very similar to Wolski's (2009) definition of experiential learning, adopted from Grimes (1995:149), which is summarised as 'doing, reflecting, applying and evaluating'. Wolski (2009) then goes on to expand on this brief definition using Kolb's (1984) four-stage loop of experiential learning, in which the student engages in a concrete experience; reflects on that experience; positions the newly acquired knowledge within their abstract understanding of the discipline; and then actively experiments with this understanding in novel situations, leading back to concrete experience. The experience that the student derives from being confronted with unfamiliar problems and being required to form solutions with minimal guidance allows students to develop both skills and understanding of the subject matter. This understanding is the hallmark of deep learning which is the primary goal of teaching in a higher education environment (Biggs & Tang, 2007). Further, the responsibility placed on the student for their own learning and making connections (leading to the deep learning just mentioned) is consistent with Biggs & Tang's (2007) 'Theory Y' approach to student learning (discussed below).

2. Deep versus Surface Learning

A good outcome for students is positioning students to engage in deep learning, rather than the more superficial surface learning approach (Biggs & Tang, 2007). The latter is the situation in which the student merely memorises sufficient information to regurgitate in an assessment environment and achieve a desired grade. Rote learning is a typical technique adopted by students pursuing a surface learning approach.

Deep learning, by contrast, describes the situation where the student engages wholeheartedly with the material, identifying connections and recognising implications that may not have been made explicit in class or in the assigned reading materials. Students are genuinely able to understand complex concepts and this understanding is demonstrable through the application of the knowledge obtained.

3. Formative versus Summative Assessment

One of the areas which tend to receive a significant amount of attention in the pedagogical literature, is the distinction between formative and summative assessment. The basic distinction is the purpose for which the assessment is undertaken. Summative assessment is final in nature and is used to determine the student's performance in the subject: '[i]ts purpose is to see how well students have learned what they were supposed to have learned' (Biggs & Tang, 2007:164). Formative assessment, on the other hand, has feedback as its primary purpose (Biggs & Tang, 2007:163). Biggs and Tang identify this feedback element as one of the most powerful aspects of effective teaching (Biggs & Tang, 2007:97).

A critical element for assessment to qualify as formative is the opportunity for students to be able to act upon the feedback to improve their final grade. As such, an assessment task does not qualify as formative merely because feedback is provided with the grade. The student needs to have the opportunity to act on that feedback to improve their overall grade. An important aspect of formative assessment is that students feel comfortable in exploring novel ideas (Biggs & Tang, 2007:97). This could be well achieved where students are not faced with a penalty for failing or making mistakes and, especially so, where students can admit to mistakes (Biggs & Tang, 2007:97). It is through this exploration and learning from mistakes that the abstract understanding associated with deep learning may be achieved. Consequently, typical means of formative assessment are tasks which either are not directly assessed, but are undertaken for feedback purposes only, or carry only a nominal weight towards the final grade (for example, 5 per cent). Of course, providing effective feedback is necessary for this approach to learning to work, but can be difficult to implement in practice, not only due to resource constraints, but also because of the significant chance of misinterpretation (Taylor & McCormack, 2007).

4. Theory Y Learning

Drawing on organisational management theory, Biggs and Tang draw a contrast between what they term 'Theory X' and 'Theory Y' approaches to teaching (Biggs and Tang, 2007: 37–9). Theory X teaching is perhaps the more traditional style of university instruction, in which the lecturer provides learning opportunities in a strictly controlled environment, where the student's learning experience is directed by the

instructor. This is typical of the usual problem and answer style of assessment in most university law subjects. Theory Y teaching, by contrast, places much more control over the learning experience in the students' hands. Removing the strict parameters characteristic of Theory X approaches places the responsibility for learning on the student. This may take the form of choosing the particular question to be addressed in assessment. A full Theory Y approach would allow the student to choose the area without restriction, in contrast with the approach sometimes adopted where students choose from a range of preset questions. Placing such responsibility on students for their own learning fosters the deep learning objective, as students are more likely to engage with the material where they have selected their own direction. Student engagement strengthens the prospect of achieving the understanding that is the desired outcome of higher learning instruction. The use of formative assessment, particularly in a group environment, can be linked to a Theory Y approach where students provide each other with feedback. Where students are given responsibility for providing feedback to their peers, the students engage in higher cognitive processes, engendering the level of understanding sought to achieve the deeper learning outcomes.

Teaching law to non-law students and the benefits of mooting

There are certainly curriculum design challenges in teaching law to non-law students (Morris, 2010). Firstly, non-law students do not have the advantage of the foundation rigor of legal analysis of case law and statute as law students receive from day one in law school. Secondly, the traditional method has been to "lighten" the load of a subject for non-law students and this is always a challenge for lecturers who want to ensure that students leave the subject with all of the requisite legal knowledge. Moot court is an excellent exercise in providing students with the opportunity to explore the law in the subject as whole and more specifically in as much detail as they desire to do so for the moot exercise in a more practical fashion. Moots address collaborative problem based learning strategies in that students need to navigate through a legal practical problem and in order to address the key issues and to come to persuasive and concluding arguments, there is a need to work progressively drawing on the texts and group discussion. In depth knowledge of the legal texts (statute and case law) is required to apply the law to answering the problems posed in the moot topic. This provides students with an excellent opportunity to apply their skills and to gain deep, rather than mere surface, learnings from moot exercises.

Use of moot trials in Environment and Natural Resources Law

In teaching Environment and Natural Resources Law, a subject which touches on environment and land use planning law and regulation, a decision was made to experiment with a moot trial. The objective was to use an innovative and active learning tool to teach students the practical application of pollution law as it relates to both environment and land use planning law. The moots were fashioned in a manner where students would moot against each other in front of a moot judge and then a week later, submit a 1000 word written submission outlining their legal arguments and resolution/mitigation strategies. The group moot active exercise carried a 10% assessment and the follow up group written piece was worth 15% of a student's final grade.

Pre-moot preparation

The class consisted of 45 students and they were asked to form themselves into clusters of four students, including one team leader, who was to contact the Lecturer and then they would be provided with a facts scenario and be allocated as either a Plaintiff/Prosecutor or Defendant team.

Students acted very quickly to form into teams and to contact me with their group details. After all of the teams were formed and the team leaders had been in touch with me, I allocated the moot facts which covered scenarios in the areas of planning permission, pollution and environmental negligence (see appendix 1 for examples of the moot court facts). Teams were allocated Plaintiff/Prosecutor or Defendant teams and were told to proceed with moot trial preparation. In advance, it was decided that there would be no pre-trial exchange of paperwork or pleadings.

Teams were encouraged to allocate the following roles to their members:

- Plaintiff (or Prosecutor)/Defendant which included a natural person or corporate person
- Advocates (including lawyers and planning/environmental advocates)
- Expert witnesses (including scientists, planners, environmental experts etc)

Student learning objectives and expectations

At the commencement of the semester, in the subject outline, students were informed that the moot trials carried the following learning objectives:

- Team work
- Innovative work
- Argument construction

- Critical thinking
- Development of technical written skills
- Develop oral presentation skills
- Use of legislation and case law to argue a point
- Deep learning strategies

Students were provided with a set of instructions including objectives for the moots and a timetable. They were also provided, in advance, with the written submission marking criteria template. They were encouraged to be innovative in their approach which meant that whilst they had a clear idea of the general expectations for the task, there was also room for them to be creative. This, I believe, is a more conducive approach towards deeper learning.

Running moot trials

Moots were run over two weeks during the allocated lecture and tutorial sessions. Five moots in total were held (five plaintiff and five defendant teams).

To add interest to the moots, a colleague, being a County Court judge (mid-tier court), agreed to participate as the “moot judge”. I played the role of tipstaff being the courtroom helper.

Students were encouraged to listen to fellow student moot trials.

The room was set up like that of a courtroom. The Judge sat at “the bench” and advocates at the “bar table”. Expert witnesses sat in the gallery behind the advocates and were called to give evidence to the court.

Plaintiffs/Prosecutors were asked to commence the proceedings and were to commence with an outline of their arguments. The total time allowed for the prosecution/plaintiff was 15 minutes. An extra 5 minutes was granted if groups choose to have an expert witness present evidence. Advocates presented as did “self-represented” persons. The defendant had 15 minutes to defend their case and 5 minutes to cross-examine any witness to test their evidence. If the defendant presented a witness, they were granted an additional 5 minutes to examine the witness and the other side then had an additional 5 minutes for cross-examination. At the end of the hearing, the Plaintiff/Prosecutor had 5 minutes allocated for a right to reply being, any further submissions to present to the moot judge as a result of hearing the Defendant’s submission (arguments). No new material was to be submitted.

Reflecting on the moot exercise

When an innovative, experimental or novel teaching method is used, it is important to reflect on the activity from both learning and teaching perspectives (Biggs, 1997). In terms of the moot as a problem-based learning and experiential learning exercise, I am of the view that it provided a wonderful opportunity for students to be confronted with a real life scenario which allowed them to stretch their existing knowledge to work towards a practical and realistic outcome for their “client”. The exercise also provided them with an opportunity to be creative and this was demonstrated particularly from the evidence put to the courtroom (maps, photos, sketches) as well as how “expert witnesses” presented both in terms of their evidence and physical presentation.

Collaborative and consensus planning may be an important part of planning practice (Forester, 1999), but one should not forget that there are still matters which end up in planning tribunals/land and environment courts, to be adjudicated. Accordingly, notwithstanding that moots promote an adversarial approach as planning matters in Australia can end up in Land and Environment Courts or Planning Tribunals, moots are reflective of how a planning and environment dispute can be dealt with. Active learning techniques in the classroom offer a way to make law more interesting to a broader segment of the student population than could be expected with reliance on traditional “chalk-and-talk” methods. In addition, by requiring students to actually “do” law, it is reasonable to expect that they are more likely to learn and to understand the concept in question. As they require students to engage in critical thinking, technical writing, and oral presentation, moot courts and similar types of exercises are especially attractive and in the context of planning and environment matters in the Australian context, very relevant.

One criticism may lie in whether the moot exercise, based on Victorian pollution law, is inclusive enough for international students (Haigh, 2002). Further, it could be queried whether there was too much law for non-law students (Morris, 2010). As future practitioners - or even expert witnesses - it will be imperative for students to gain a comprehensive understanding of the law and I made use of the moot court to introduce a more user-friendly method to teach a law topic. The written submission provided by the student groups at the end of the exercise indicated to me that students certainly were able to apply the law in a highly sophisticated manner.

A further shortcoming of the exercise was that students were not given an opportunity to provide critical peer feedback to other students and this is in itself an important learning tool. This will be implemented in future moot trials.

Teaching the role of expert witnesses

There is little formal training in Australia on how to become an expert witness with this being left largely to on the job work experience. The moot trial exercise provided students with an opportunity to be introduced into the life of the expert as well as more practicably how to make use of the Practice Note on presenting expert witness evidence at the Victorian Civil and Administrative Tribunal (the "Planning Tribunal" - See further Practice Note – PNVCAT2 Expert Evidence located at www.vcat.vic.gov.au/resources/document/pnvcat2-expert-evidence).

Improvement strategies

Reflecting again on what was undertaken, I would like to see more student feedback on fellow students as well as the implementation of some of the following strategies:

- Wiki to allow students to share ideas as well as any difficulties they may be facing in a general sense during their moot preparation;
- Students to be mandated to listen to other moots and to provide anonymous critical feedback;
- Overall, colleague peer review and feedback to suggest improvement to the lecturer.

Conclusion

Moot court is a common law school activity and competition during which students participate in the preparation and arguing of cases in front of judges. Drawing on the author's previous experiences in teaching at law school, where the author assisted in moot trials, a moot was used as a teaching and learning tool for Environment and Natural Resources Law, as taught to non-law students. Teaching non-law students is different to law students in that the former come to classes, and the moot, with less legal knowledge. This should not be taken to be only a surface level of legal knowledge because the moot exercise, as a problem based learning tool, requires students to work collaboratively and they collectively gain a deep level of learning from the activity. The use of expert witness role-plays was also encouraged to show students what such a role entails and this in itself is an example of the practical opportunity that such moots present in so far as they can introduce non-law students (as well as law students) to a new career option as well as show them how the adversarial system operates. It should not be forgotten that the planning and environment industry is not always a happy and collaborative environment. Litigation is as much a part of planning and environment praxis as is striving for greater community harmony. Overall, I feel that the moot exercise was a positive experience for students which not only encouraged deeper learning but also independent and creative thought and practice from the student cohort. More could be done to ensure that the exercise has greater relevance for international students and for students to provide more meaningful feedback both to peers as well as to the lecturer. The exercise will be repeated next year and learnings from the current experience will be fed into the next session to ensure a more robust student experience.

References

- Biggs, J. (1999) What the Student Does: teaching for enhanced learning, *Higher Education Research & Development*, 18(1): 57-75.
- Biggs, J. & Tang, C. (2007) *Teaching for Quality Learning at University*, (Maidenhead: McGraw-Hill Education).
- Cannon, R., & Newble, D. (2000). A Handbook for Teachers in Universities and Colleges: A guide to improving teaching methods (4th ed.) Chapter 8 *Curriculum Planning* (London: Kogan Page).
- Carlson, J.L. & Skaggs, N.T. (2000) Learning by Trial and Error: A Case for Moot Courts. *Journal of Economic Education*, 31(2): 145–55.
- Coppolan, B. P. (2002) Teaching Philosophy. *Journal of College Science Teaching*, XXX1(7).
- Kendall, K. (2011) Mooting in an Undergraduate Tax Program, *Journal of the Australasian Law Teachers Association* 4(1): 109-119.
- Fitzmaurice, M. & Coughlan, J. (2007) Teaching Philosophy Statements: A guide, In O'Farrell, C, *Teaching Portfolio Practice in Ireland, A Handbook*, pp.39-47.
- Forester, J. (1999), "Dealing with deep value difference: how can consensus building make a difference?" in Susskind, L., McKearnon, S. and Thomas-Larmer, J. (eds), *Consensus-Building Handbook* (Sage, Thousand Oaks).
- Grimes, R. (1995) The Theory and Practice of Clinical Legal Education in Julian Webb and Caroline Maughan (eds), *Teaching Lawyers' Skills* (Butterworths, 1995).
- Haigh, M.J. (2002) Internationalisation of the Curriculum: Designing inclusive education for a small world, *Journal of Geography in Higher Education*, 26:1, 49-66.
- Loughran J. (2010) What expert teachers do: Enhancing professional knowledge for classroom practice, Chapter 10: *Growing professional knowledge through reflection*; (Sydney, Allen & Unwin).
- Morris, R.J. (2010) The teaching of law to non-lawyers: An exploration of some curriculum design challenges, *International Journal of Law in the Built Environment*, 2(3): 232-245.
- Oberst, M. (1996) Teaching Tax Law: Developing Analytical Skills, *Journal of Legal Education* 46(1): 79-93.
- Shuell, T.J. (1986) Cognitive conceptions of learning, *Review of Education Research*, 56: 411-436.
- Taylor, M.J. & McCormack, C. (2007) Effective Verbal Feedback for Project-Based Assessment: A Case Study of the Graphic Design Technique in Steve Frankland (ed), *Enhancing Teaching and Learning through Assessment* (Springer, 2007) 52, 53–4.
- Trigwell, K., Prosser, M., & Waterhouse, F. (1999) Relations between teachers approaches to teaching students' approaches to learning, *Higher Education*, 37: 57-70.
- Winsor, K. (1989) Introduction to Materials for Students — Problem Based Learning Segment, (unpublished manuscript, College of Law, 1989), quoted in Keith Winsor (1989), Toe in the Bathwater: Testing the Temperature with Problem-Based Learning, *Journal of Professional Legal Education*, 7(1): 1-13.
- Wolski, B. (2009) Beyond Mooting: Designing an Advocacy, Ethics and Values Matrix for the Law School Curriculum, *Legal Education Review* 19: 41-51.

APPENDIX 1

Moot topic 1

Jim Jones decides to open a hamburger store and does so on 18 March, 2012. He rents a store from Mrs Martha and advertises for the opening lunch to be held on Sunday, 30 April. Chris lives in one of the apartments on top of the hamburger store and since 18 March has been very concerned about the smell of burnt meat. He is also unhappy with the hip-hop music blasting from the store played every night until 1.30am. Between the music and the smell, he can't sleep or concentrate on his university studies. Chris remembers that the hamburger store used to be a computer store in the past, and was owned by Mrs Martha, a computer genius. Chris wonders whether the store can even be used to sell fast food. He rings up the Environment Protection Authority to report the late night noise. Buzz, the local council enforcement officer hears a number of complaints about Jim's hamburger store and decides to close it down because it just doesn't seem to fit into the neighbourhood.

Plaintiff side

You act for Jim Jones and you have been instructed by Jim to defend his business interests. He must continue trading especially as open day is just days away. Jim brings his lawyer mate with him to court.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Defendant side

You act for the local council and you are on the enforcement team. You wish to close down the business because you checked council records and Jim has no planning permit to run the store as a restaurant. Mrs Martha is on standby in case you need to call her as a witness.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Moot trial 2

Smith runs an abattoir, which he inherited from his grandfather, Grandpa Joe. The business has been operating for 50 years. Smith believes that the business needs to be modernized and so he takes over running the business. Grandpa Joe is still the Director of the company, but has no day-to-day knowledge of the business, as he prefers to surf.

Smith tries out a new cleaning method which involves a bright blue chemical. Karen runs a tannery next door to the abattoir. For 20 years, she has purchased skins from Smith's grandfather. They worked well together. Last month, Karen noticed a bright blue stream of liquid running out of the gate of the abattoir and into the next door stream. Karen telephoned Smith and left a message on the answer service as to what was going on and asked whether the blue liquid was a 'once off' occurrence. Smith never responded but Karen has noticed weekly emissions of the blue liquid. Karen is unsure whether Smith has a works approval for the blue liquid and is afraid that the local council or, even the Environment Protection Authority itself, may blame her for the liquid which now runs daily into the stream and this is land owned by the local council. Karen summons Smith to court and wants to force him to stop the 'illegal emission' via a court injunction.

Plaintiff side

You act for Karen who is a keen environmentalist. Karen brings with her to court members of the No Contaminated Waters group who travel from all over the world to fight contaminated oceans.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Defendant side

You act for Smith who has no idea about the emission of the blue liquid. In fact, he thinks it may actually be from Karen's tannery. Smith brings his grandfather with him, in case he needs to call him as a witness.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Moot trial 3

Janine loves to dance and opens a dance studio. The studio is located next door to a club for the 70 plus age group and is called Bingo Buzz. The club has been operating for the past 50 years. Tuesday night is bingo night at the club as well as late night Zumba at the dance studio. It has been very difficult for the bingo club members to concentrate over the past three Tuesday nights due to the loud music which often goes past 8pm. Bingo club chair, Mrs Maurice, wants to put a stop to the music and asks Environment advocate, James, to bring the matter to court to stop the dance studio from operating because it may be 'late night Tuesday Zumba today but tomorrow may bring all sorts of other trouble'.

Plaintiff side

You act for Bingo Buzz, the club bringing the matter to court. You are James Wright, keen and crafty environment advocate. All loud noise is bad news, you think, but this is only a personal belief. You feel sorry for the Bingo club and want to help out so you come with a number of the committee members to court.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Defendant side

You act for Janine and you want to defend your right to operate your business as you wish. In any event, you always make sure that all music is turned off by 10pm every weeknight. You bring Zip the Zumba king instructor with you, who thinks that the Bingo club is motivated by the fear of losing its members to Zumba.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Moot trial 4

Fred is the Chief Executive Officer (CEO) of an oil refinery located very close to the West Gate Bridge. The plant has been on the site for some 55 years and is run by a board and the CEO. Fred is a busy man and needs to get to Geelong twice a week. Each Tuesday and Thursday, at 5.30am, he drives to the plant and Stan, his pilot, flies him to Geelong in the company helicopter at 5.45am. Sunrises are lovely at that hour. Jim lives 4km from the plant and finds the helicopter noise unpleasant. He is also annoyed by smells which emit from the plant. Jim wishes to stop Stan from flying so early in the morning and organizes for a court summons to go out to Stan to stop the flights. Jim also requests in his court documents for the plant to cut its fuel storage by 35% so as to reduce the bad smell into the surrounds.

Plaintiff side

You act for Jim who represents the local Save our Suburbs group. Jim brings with himself an expert who deals with unpleasant odours and noise.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Defendant side

You act for Fred and you ask Stan to come with you to court to tell all that you really do need to fly to Geelong early in the morning and that you mean no harm to anyone.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Moot 5

Mrs Grey enjoys her garden and often sprays her plants with blue insect spray. From time to time, the rain washes this spray on to neighbourhood properties.

Mrs Grey is getting older and brings home a large Alsatian dog which was purchased to protect her. She calls him Biggdog, the protector. Mrs Grey can't hear the dog bark but then, she has also been 80% deaf for the past three years. Sarah lives next door and after a week can't take the noise as it is interfering with her university homework. Sarah hears the dog regularly barking in the middle of the night. She is also upset because the dog often jumps the fence and urinates on Sarah's luscious green grass. Sarah is convinced that the dog must be fed some strange chemical and she has told her friends that the dog 'regularly urinates in blue'. Sarah has asked the local council enforcement officer to take the matter to court so that the dog can be put down.

Plaintiff

You act for Sarah, who is represented today by the local council enforcement officer. Sarah knows she could be called as a witness, and has brought with her recordings of the barking dog and photos of the 'blue urine'.

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Defendant side

You act for Mrs Grey, who is terribly upset to have to go to court today. She makes sure that she wears her brand new hearing aid and that she takes her brother, Mark, with her. She also brings Biggdog to show the court that he does not bark loudly, ever!

Come to court to argue your case and also with suggestions to put to the judge on how to resolve the dispute.

Planning research and educational partnerships with Indigenous Communities: Practice, Realities and Lessons

Darryl Low Choy and David Jones

¹Griffith University ²Deakin University

Abstract:

Increasingly planning practice and research are having to engage with Indigenous communities in Australia to empower and position their knowledge in planning strategies and arguments. But also to act as articulators of their cultural knowledge, landscape aspirations and responsibilities and the need to ensure that they are directly consulted in projects that impact upon their 'country' generally and specifically. This need has changed rapidly over the last 25 years because of land title claim legal precedents, state and Commonwealth legislative changes, and policy shifts to address reconciliation and the consequences of the fore-going precedents and enactments. While planning instruments and their policies have shifted, as well as research grant expectations and obligations, many of these Western protocols do not recognise and sympathetically deal with the cultural and practical realities of Indigenous community management dynamics, consultation practices and procedures, and cultural events much of which are placing considerable strain upon communities who do not have the human and financial resources to manage, respond, co-operate and inform in the same manner expected of non-Indigenous communities in Australia. This paper reviews several planning formal research, contract research and educational engagements and case studies between the authors and various Indigenous communities, and highlights key issues, myths and flaws in the way Western planning and research expectations are imposed upon Indigenous communities that often thwart the quality and uncertainty of planning outcomes for which the clients, research agencies, and government entities were seeking to create.

Introduction

The following paper draws from several years of research and academic engagement with Indigenous communities in Australia (Western Australia, South Australia, Victoria and Queensland) over the last 15 years and draws some salient points about this engagement. Central are flaws and misunderstandings and the lack of comprehension of cultural dynamics and obligations that our research activities with Indigenous communities have raised. In particular it focuses upon the contradictions, mis-assumptions and dichotomies made by mainstream research and institutional organisations who predicate their paperwork, timelines and expectations upon Western protocols and understandings.

Community Engagement

It is clear that many grant agencies, government instrumentalities and university entities do not understand Indigenous community engagement protocols and the time necessary to satisfy inquiries from the Indigenous perspective.

At the recent National Climate Change Adaptation Research Facility (NCCARF; <http://www.nccarf.edu.au>) national conference in Melbourne, for example, all 2012 NCCARF Indigenous grant recipients voiced a common concern that NCCARF did not comprehend the complexities of Indigenous community consultation (<http://www.nccarf.edu.au/conference2012/>). In particular, the grant recipient conclusions were that NCCARF had applied a naïve time frame to achieve what they considered were normal expectations, and that they were pre-occupied with research outcomes and ethics hurdles rather than research quality, robustness and comparativeness that both the recipients and the community audiences wishes to express and consider (Low Choy *et al.*, 2012). This researcher chorus was irrespective of the temporal warnings in the *National Climate Change Adaptation Research Plan: Indigenous Communities* (2012) report by Langton *et al.* (<http://www.nccarf.edu.au/publications/national-climate-change-adaptation-research-plan-indigenous-communities>).

There are three points pertinent here. The first is that there is a generic assumption that a researcher can wander into an Indigenous community or search out an Indigenous community in the same way as we can wander up and down a shopping street and undertake questionnaires and surveys, to venture into a suburb and questionnaire newly arrived couples about their sense of place or the quality of the suburbia they have bought into. This is a false assumption, as time and community structure, scope of knowledge expertise and empowerment, community availability but also community willingness are factors at play. Some of these issues are discussed at length under 'Indians and Chiefs', 'Country', 'Knowledge and No Knowledge' below. But the essential issue is that you cannot approach this 'community' in the same way that you approach a generic non-Indigenous Australian community.

The second pertinent point is time. As articulated at the NCCARF conference, Western research ‘production’ timelines impose unrealistic constraints upon both successful and quality engagement and thereby research outcomes. Experience working in Broome has revealed a phase called ‘Broome time’. In essence it means ‘what will occur will occur’ but it will occur in its own particular time frame and you cannot force it, expedite it, shorten it, because time in Indigenous Australia is a cultural concept linked to society and not a Western cultural concept linked to accountability. This was a perspective offered by *Nyikina* elder; ‘Uncle’ Paddy Roe (1912-2001) (Sinatra & Murphy 2001; <http://www.goolarabooloo.org.au/obituary.html>) and is eloquently captured in Muecke and Benterrak’s *Reading the Country* (Muecke & Benterrak 1996; Sinatra & Murphy 1999)

Time, in our sensibilities and that our research production and accountability masters, is however very much a Western construct institutionalised in the Gregorian Calendar reinforced by the need to date stamp and time annotated our actions (<http://en.wikipedia.org/wiki/Calendar>). Thus, it is accountability that is temporally measured and mapped. Our frame therefore is the Western calendar year of 365 days that is broken into four season and 12 months, and thereupon its 29-31 days phases, comprised of hours, minutes, seconds, milli-seconds, etc. It is world that we take for granted, and is very much embedded in our psyche of short-term, long-term 2030, etc., plans and plan making as ours is a short term perspective compared to an Indigenous perspective.

Damein Bell, a *Gunditjmarra* man, poetically expresses it in an analogy; ‘you fella’s have been here a short time; when you have finished mucking with our country we will heal it and restore it to what generations of our forebears have looked after it’ (Bell & Jones, 2011). Thus, we were here before you arrived in the 1830s, and thereupon you have subsequently mis-managed the land by mis-burning, vegetation changes, fencing and enclosure, drainage works, etc. You leave and we will simply act to heal this land back to the cultural expectations we have been entrusted to undertake. This action is already occurring whereby the *Gunditjmarra* have acquired management rights over Lake Condah, a landscape extensively drained in the 1920s-30s, and re-established the original natural drain system, flooding the landscape, and dramatically changing the ecological and biodiversity richness of this landscape within 12 months (Bell & Johnson, 2008; Gunditjmarra with Wettenhall 2010; LCSDP, 2012).



Figure 1: Map of the Gunditjmarra Country as a Registered Aboriginal Party;

Source: <http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties/table-of-registered-parties#Gunditj>

Also, ‘this place is our country; it is special to us’, as expressed by ‘Uncle’ Kenny Saunders (a Councillor on the Glenelg Shire Council) of the *Gunditjmarra*, reinforces the *Gunditjmarra* expression that this is a sacred landscape in their eyes for which they have special custodianship responsibilities over irrespective of its elevation as a National Heritage Landscape under the Commonwealth’s *Environment Protection and*



Figure 2: Map of the Budj Bim National Heritage Landscape;

Source: <http://www.environment.gov.au/heritage/places/national/budj-bim/information.html>

The third point is ‘protocols’. There seems to be a propensity to write, discuss and publish protocols, but their accessibility and their actual adherence is little addressed. As an example, an extensively canvassed protocol document formulated in South Australia with three communities resulted in an excellent document (Four Nations Governance Group, 2011). But, the *Protocols* (2011) itself has had limited distribution; its enabling through a government department ought to have ensured its credibility to both fellow government departments and their consultants but such has not occurred and the document now languishes on a bookshelf; the document was published in a hardcopy format only but its cost (\$60) ensured limited market catchment as also its lack of a pdf e-version delimits its access; the *Protocols* (2011) is hidden on a government department www site and despite political rhetoric to the contrary, the elevation of this document would logically be perceived as politically correct (South Australia, 2012). Other comments in respect to protocols are contained below under “Ethics”.

Country

Most grant agencies and university entities continue to assume that there is one ‘Aboriginal’ community. That ‘Aboriginal’ implies one identifiable generic ethnic grouping of people which is far from the truth. This perception is manifest in the nature and manner of their paperwork and oral questions and in the way their information retrieval systems are constructed.

This content is further complicated by state legislation in Victoria that has incorrectly delineated cultural ‘counties’ and who are the spokespersons. The *Victorian Aboriginal Heritage Act 2006* recognises Aboriginal people as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage. At a local level, Registered Aboriginal Parties (RAPs) are the voice of Aboriginal people in the management and protection of Aboriginal cultural heritage. RAPs have responsibilities relating to the management of Aboriginal cultural heritage under the Act. These include evaluating Cultural Heritage Management Plans, providing advice on applications for Cultural Heritage Permits, decisions about Cultural Heritage Agreements

and advice or application for interim or ongoing Protection Declarations (<http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties>).

Thus, the *Wathaurong* (<http://www.wathaurong.org.au/>) of the Geelong, Werribee Plains and Bellarine Peninsula have been de-enfranchised by the *Wathaurung* (<http://www.wathcorp.com.au/>) of the Ballarat region who are the legal spokespersons for this overall country as delineated under this *Act* and documented on the RAP www site (<http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties/table-of-registered-parties#Wathaurung>). But the Ballarat 'mob' do not know the knowledge of the Werribee Plains – Bellarine Peninsula region, and there is a clear custodial and cultural divide between both 'mobs' causing considerable friction and angst. Note the spelling difference in this nation or community nomenclature: *Wathaurong* and *Wathaurung*. So, for example, when the City of Greater Geelong Council seeks a *Wathaurong* to do a 'welcome to country' ceremony they seek out a *Wathaurong* as distinct from a *Wathaurung* causing considerable angst in the Ballarat 'mob'. Even the Wikipedia entry on the 'Wathaurong people' confuses the dilemma (http://en.wikipedia.org/wiki/Wathaurong_people) .

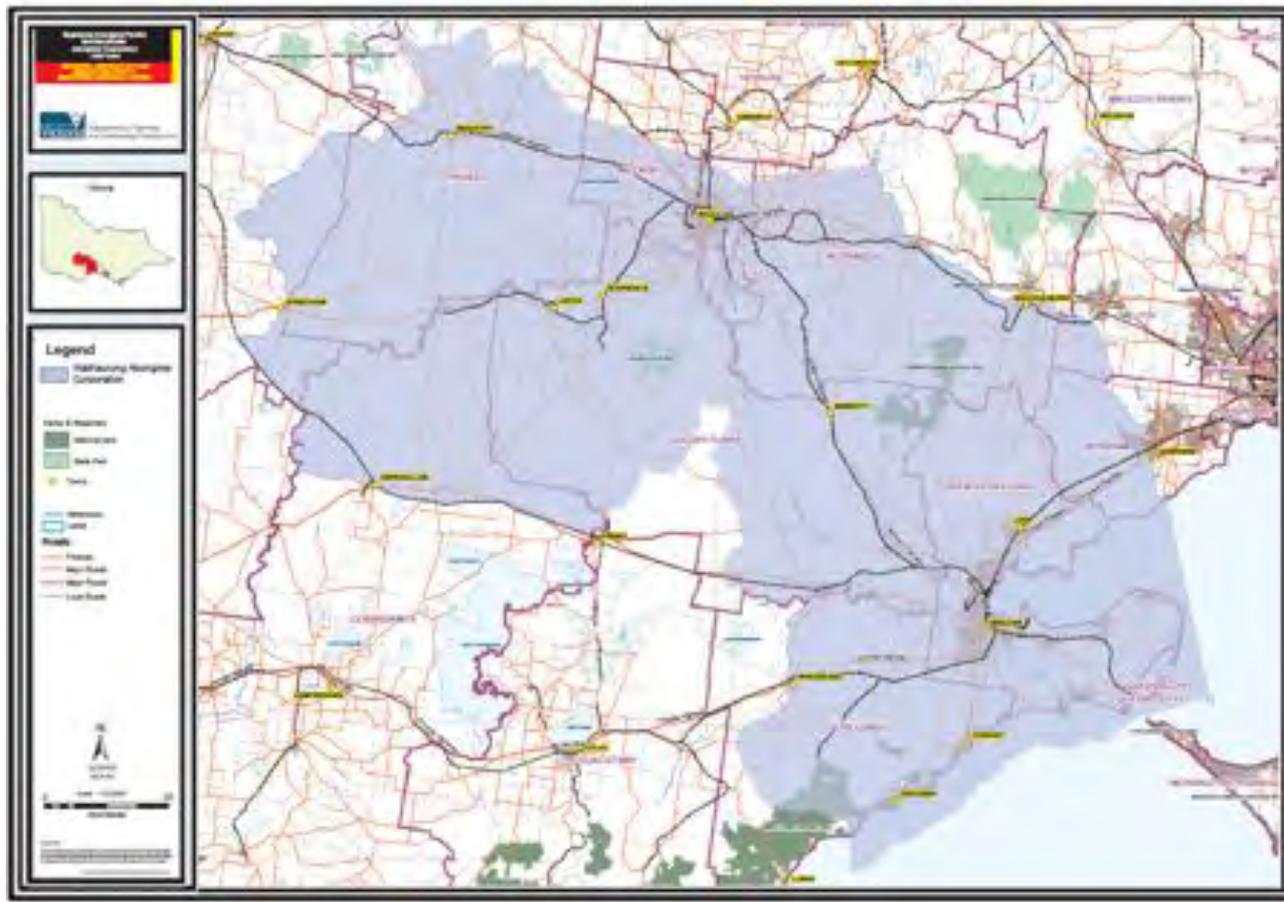


Figure 3: Map of the Wathaurung Country as a Registered Aboriginal Party;

Source: <http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties/table-of-registered-parties#Wathaurung>

'Country', in most areas, is characterised by one Indigenous language. While Tindale dissected Australian into over 250-300 Indigenous language area that were anthropologically translated into countries or nations, his research established the conceptual spatial regions where common threads of one language were evident. A suite of anthropological dissertations in the 1980s and 1990s reinforced the finer detail of these countries; by detailing the 'mobs' residents and unfortunately drawing black ink lines in the manner of which cartographers and planners love to express. Thus the *Wathaurong* and the *Wathaurung* suddenly became the *Wathaurung* and the state government notionally legislated these country boundaries in an attempt to create representative councils or committees per community to rationalise the Western perceived quagmire of people, groups, and communities claiming 'leadership', knowledge and custodianship and ethnic obligations to seemingly unclear and ever changing tracts of land. Thereupon the Registered Aboriginal Parties (RAP's) were instrumentalised (<http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties>). While logical on one hand, it has also been divisive on another. Thus the *Wathaurong* and the *Wathaurung* are ethically distinct but now legally grouped in one country.

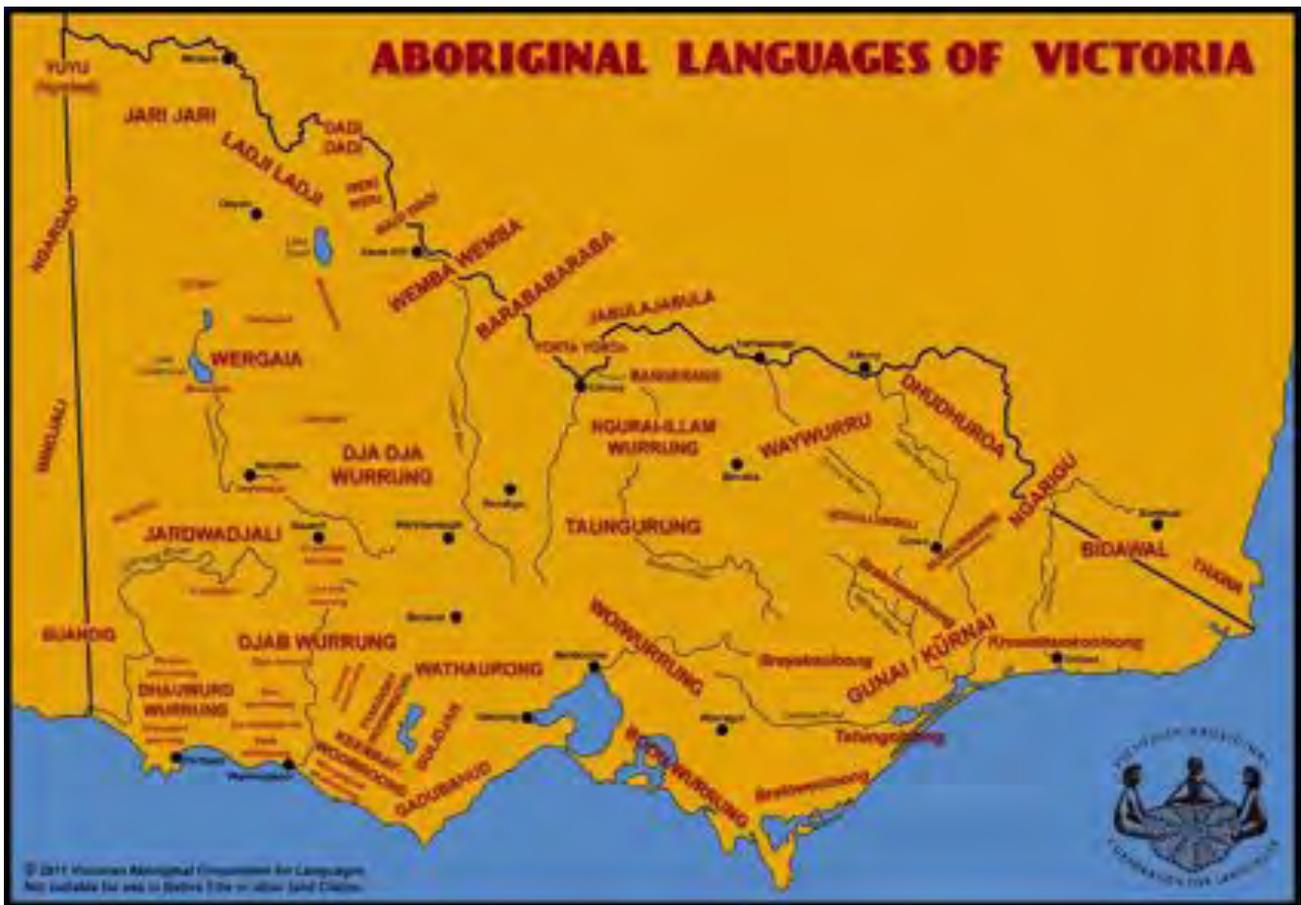


Figure 4: Indigenous language map for Victoria; VACL, 2011,
<http://www.vaclang.org.au/admin%5Cfile%5Ccontent11%5Cc7%5CVACLMap2011%28A4%29.jpg>

For the *Boon Wurrung*, there is a political divide between the south-eastern Melbourne - Mornington Peninsula mob to the mob that 'claims' custodianship for the Bass Coast-Wilsons Promontory region.

Contemporary political, anthropological and even Museum Victoria maps prescribe clear spatial boundaries for the *Boon Wurrung* and the *Wurundjeri*; the latter is the community whose country is demarked as being north of the River Yarra and the Princes Highway eastern alignment down to the Warragul locality. But, this is a boundary in transition that belies internal political and cultural re-negotiations that have been transpiring using anthropological and family records. In the last 12 months this boundary has been dramatically re-drawn whereby the *Boon Wurrung* are now recognised as having their country extending over inner central Melbourne reaching up to the Coburg-Brunswick line but also including a large portion of The Dandenong Ranges. As part of the negotiations, the change of inner Melbourne has been dealt with by recognition and that the tract of country has mutual neutrality but clarity of ancestral obligations linked directly to the *Boon Wurrung* (Briggs 2012, *pers. comm.*). Thus, a large and important central portion of Melbourne's Indigenous boundary lines have been re-drawn with little non-Indigenous participation and announcement.

Thus, the complexity of country in Melbourne assumes that it is all *Wurundjeri* 'land'. Factually, the *Wurundjeri* are the custodians for the western, northern and eastern regions of Melbourne but the *Boon Wurrung* are the custodians for the south-eastern coastal fringe together with the Mornington Peninsula and the Western Port regions demonstrating that boundaries are not socio-political in Western thought and systems.

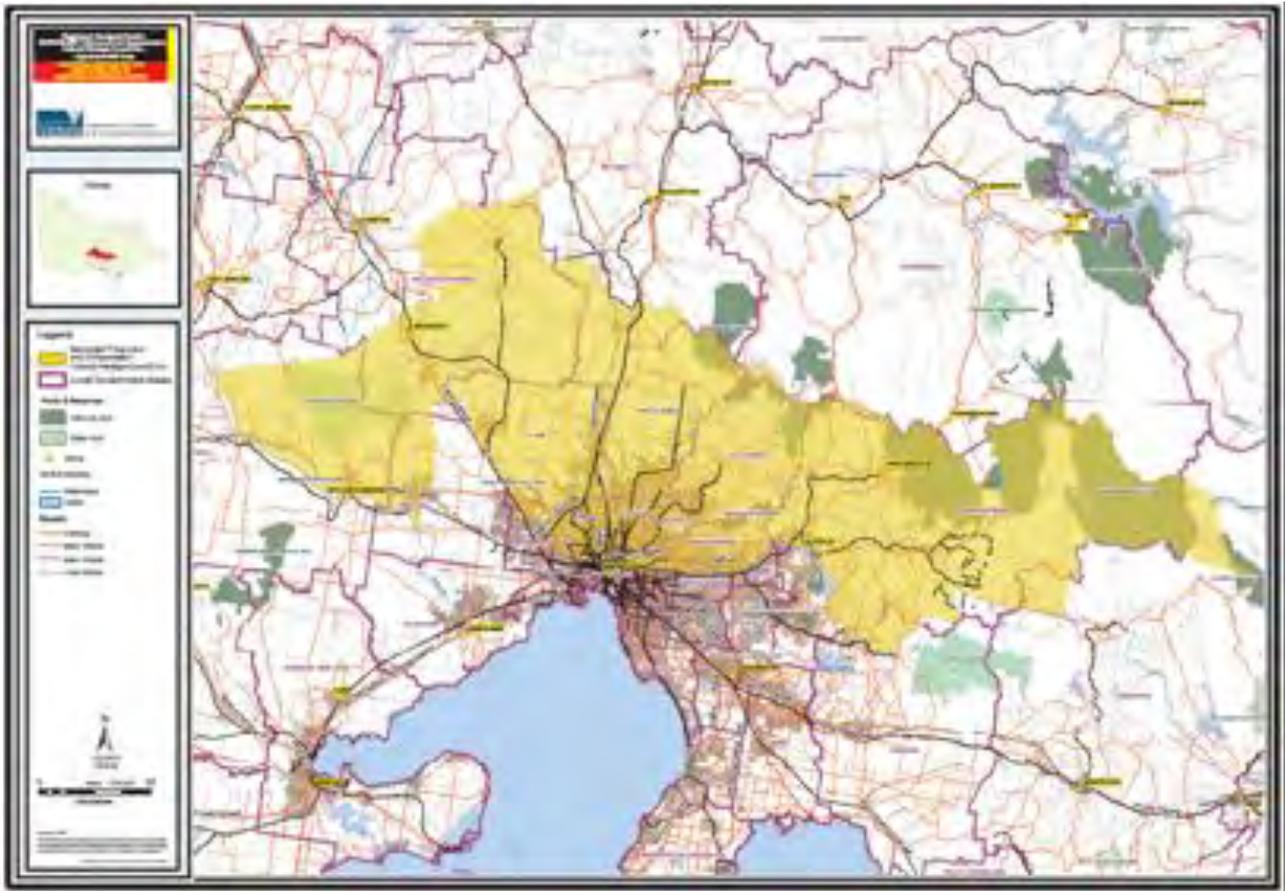


Figure 5: Figure: Map of the Wurundjeri Country as a Registered Aboriginal Party. Source: <http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties/table-of-registered-parties#Wurundjeri>

For the *Gunditjmara* (*Dhauwurd Wurrung* language), early native title arrangements and agreements promulgated by the Portland Alumina smelter project split their community along the north-south Moyne River corridor. The west, the main *Gunditjmara* have forged perhaps the most cohesive and respected Indigenous community in Victoria. To the east, the *Gunditjmara* name has been washed with political intrigue and financial mismanagement allied to their core property assets at Framlingham, and thankfully in it the nomenclature 'Framlingham' has identified them in the media and government writings alleviating negative connotations to the western *Gunditjmara* community. This cohort of *Gunditjmara* are actually *Girai Wurrung* along with surviving *Djargurd Wurrung* descendants within the larger language grouping (as defined by Western anthropologists) of *Dhauwurd Wurrung* ([http://en.wikipedia.org/wiki/Framlingham, Victoria](http://en.wikipedia.org/wiki/Framlingham,_Victoria)), and again Wikipedia muddies the whole situation by combining all parties into one entry at 'Gunditjmara people' ([http://en.wikipedia.org/wiki/Gunditjmara people](http://en.wikipedia.org/wiki/Gunditjmara_people)).

Aunties and Uncles

In each community there is a system of 'Aunties' and 'Uncles' that are the 'elders' of these communities. These individuals are well respected in their communities as the custodians of knowledge but they also hold certain knowledge and not all knowledge. Further Western research systems incorrectly assume that a supposed 'hierarchy' of leadership, enraptured in these epithets, exists when such knowledge may in fact be stratified by sub-geography, gender, location and or theme.

In one sense the notion of one 'Aboriginal' community perpetuates the *terra nullius* myth in that all unknowns are buddled together into one category. In reality, there are over 250-300 separate Indigenous languages in Australia, and ethnographically some 600 dialects, that are directly linked to specific tracts of 'country'. One analogy that explains this situation is Europe whereby over 50 languages are prevalent and some 30 countries adhoc'ly independent or subsumed within the European Union (EU). Thus, the Basque's and the Catalan's are colonised within Spain but fiercely and identifiably maintain their cultural different, language and identity. We witnessed this with the Barcelona Olympics whereby the Catalan's led and drove the Olympic experience in Barcelona drawing upon their culture with Madrid totally supporting it but keeping arm's length from the design, identity-making, infrastructure and management of what transpired. Madrid has been loath to intercede in these regional debates unless the notion of self-independent arises; thus the strife in the northern Basque area of Spain.

In the Australian context, what is *Quandamooka* 'land' pre-colonisation was a 'country' bound together by a particular language, cultural ties and cultural narratives (<http://www.atns.net.au/agreement.asp?EntityID=966>; <http://www.redland.qld.gov.au/AboutRedlands/NorthStradbrokeIsland/Pages/Quandamooka.aspx>). While Dreaming trails inter-lined across *Quandamooka* 'land', enabling passage of other communities and individuals along invisible neutral political routes, the *Quandamooka* community knew the boundaries, obligations and patterns and trails of their country but not the same in a neighbouring country and nor could they speak on behalf of or about that neighbouring country.

So, while the recent successful Native Claim has given recognition to part of the spatial country of the *Quandamooka* community it has now left a void in how to manage this tract of land and water under the logic of the Queensland state legislative framework and *Acts*. This is because, the framework of these structures partly assume a northern Queensland scenario whereby the claimant establishes the equivalent of a local council to levy rates, undertake service provision and formally manage the land under Western legislative constraints as well as *Quandamooka* cultural rules, expectations and obligations.



Figure 6: Scope of the recently successful *Quandamooka* native title claim determination; <http://www.redland.qld.gov.au/AboutRedlands/NorthStradbrokeIsland/Pages/Quandamooka.aspx>

Knowledge and No Knowledge

There is a false assumption that one or several elders in a community have 'the' knowledge. This is an incorrect historical anthropological assumption that has been perpetuated in translations of Dreaming story 'ownership' and the assumed nature of elder status.

One substantive 'truth' is that one elder can in fact hold that over-arching knowledge but may only offer a male portion of that knowledge. Thus, 'knowledge' is in parcels that can be both or either vertical and horizontal in their characteristics and while one elder may be responsible for a parcel of 'knowledge' several elders may be responsible for a collection of parcels. This is a difficult concept to explain and appreciate sometimes. In addition, while we can converse with a *Kaurna* elder about a spectrum of topics, we have witnessed clear breaks in the discussions that rotate around the cultural inability to either discuss a topic that you would presume he/she has jurisdiction over by virtue of their supposed hierarchy in the community. Or, that they do not have this knowledge and are either not prepared to admit this thereupon charting the conversation onto an alternate topic.

One student project we have been involved in implicated the *Wurundjeri* community from the upper Yarra Valley north-east of Melbourne in conjunction with Indigenous staff from Museum Victoria (Jones *et al* 1998; Jones *et al* 1997). Through progressive and incremental on-site and in-class discussions and research investigations the student and we increasingly felt that we were going around circles and not realising a *Wurundjeri*-relevant outcome, because of the continual neutral, expressionless, circuitous and unguided discussions, sketching's and draft oral presentations. Nothing could be further from the truth.

A 'chance' -- although in retrospective it was not a 'chance' invitation that appeared at the mid-project point -- invitation to an Indigenous art gallery opening in South Melbourne confounded this apparition. All night students, with glass in hand, urgently darted back to one of us saying "this elder" or "that elder" or "this non-*Wurundjeri* person" has said something curious to them that substantively said "you are doing excellent work"; "you are definitely on the right track"; "keep going." Needless to say, this project encapsulated the upper Yarra Valley seasonal calendar that is today the theory behind the award-winning design of the 'Gallery of Life' (<http://museumvictoria.com.au/melbournemuseum/>) designed by Taylor Cullity Lethlean at the Museum and the core environmental seasons explanation of the upper Yarra Valley for the *Wurundjeri*. Thus, in part we were being tested. But, on another level, the *Wurundjeri* representatives were culturally not able to confirm or deny the conclusions we and the students were drawing, and it was left to other *Wurundjeri* and several non-*Wurundjeri* to endorse and encourage the research inquiries without being able to say that the substantive and detailed conclusions were correct.

Indians and Chiefs

For each Indigenous community, there is an inherent assumption that there is a hierarchical system operating led by 'Chiefs' and an endless number of 'Indians' available to assist research. This is a false assumption.

The 'Indian' and 'Chief' scenario is a false assumption. It is predicated on Western notions that, a hierarchy in the traditional sense exists, and if contacted, the community can provide one persons who can serve as a spokesperson or representative on the task at hand.

Nothing can be from this 'truth'. Instead, various scenarios can occur, ranging from what seem avoidance of calls and messages to someone appearing suddenly on your door-step. A sub-assumption is that there is an endless supply of representatives and that they have plenty of time, and similarly that the representatives can in fact speak for the community and 'chiefs'.

For one community we have worked with, they simply did not have the time to deal with 'menial' research projects as they had to address Native Title fall-out issues as well as a review of the state Indigenous heritage legislation. Thus, they had too much 'on their plate'. For another, one community actually 'appointed' a representative from a different 'country' -- some 1500km away -- to serve as their conduit. Thus, they were desirous of partaking the project but did not have the human resources internally within their own community to assist. In another instance, we struggled getting the appointed representative to address the task, and defaulted to discussing the matter directly with an elder -- which was not protocol -- whom we had a long-standing knowledge relationship with, and suddenly two days later the project dramatically escalated. Thus, a 'Chief can be very instrumental but it is not always protocol to approach an elder in a community; and there are different elders and different levels and realms of their 'authority.'

The notion that there is also one community is false. We can talk about the *Kaurna* of the Adelaide Plains (Cape Jervis to Port Wakefield) and while conceptually on paper there is one language -- *Kaurna* -- and one 'community' -- *Kaurna* -- there are in fact is least 3 sub-communities. Each sub-community recognises that they are *Kaurna* and that they have custodianship responsibilities for one tract of the *Kaurna* 'country'. Thus, there is an Elisabeth Plains 'mob', a Port Adelaide 'mob' and a Marion-Noarlunga 'mob', and you need to respect the protocols of both the 'community' and as well as the mob depending upon the geographical nature of the project. For each mob there are a cluster of elders -- 'Aunties' and 'Uncles' -- whom curate their respective knowledge and county but there is also a mutual respect that certain elders can speak on behalf of the overall 'mobs' or certain issues. Thus, there is a multi-dimensional hierarchy of jurisdictions and even a seasoned practitioner can be confounded and discover that their assumed roles and capacities can vary suddenly.

There is also a false assumption that these 'arrangements' remain constant. An Indigenous person designated as a representative may suddenly be relieved of this status without your's, or their's, knowledge and warning due to totally tangential issues theta are often subtly rotating around cultural knowledge trust and boundaries. A Kurna colleague found himself in this situation earlier this year, and could not explain such to me the rationale for the situation because he was culturally not allowed to. Instead, protocols and a new representative had to be re-negotiated.

The death of a member of a community can also interrupt research activities. For example, a recent death on Stradbroke Island of a Quandamooka individual (and non-Elder) suspended native title workshops for a day due to cultural respect protocols, but in more remote areas such a suspension can range from 1 day to up to six months depending upon the standing of that individual in a community. For the Kurna, we dread the day when either of the two senior elders may die, as it is likely to suspend numerous Kurna-related research projects for at least six months while the traditional mourning period occurs, but also the invisible internal hierarchical system is re-assembled and succession occurs.

Ethics and the Ethics Paperwork Culture

National ethics forms (NEAF; <https://www.neaf.gov.au/default.aspx>), procedures and their administrators do not understand nor can accommodate the foregoing. While there are increasing numbers of 'guidelines' or 'protocols' for ethical research with Australian Indigenous communities, each is of varying applicability. The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) (2012) version (<http://www.aiatsis.gov.au/research/ethical.html>) is perhaps the most comprehensive yet 'plain English' in its configuration, whereas the Australian Housing & Urban Research Institute (AHURI) (2012) version (<http://www.ahuri.edu.au/>) provides a comprehensive discussion of principles and methodologies for conducting research and evaluation in Indigenous housing but its bias is generic in ambit and it does not distinguish between urban and non-urban and peri-urban circumstances. The former embodies 11 principles which are relevant to quote:

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Consultation, negotiation and mutual understanding

1. Consultation, negotiation and free and informed consent are the foundations for research with or about Indigenous peoples
2. The responsibility for consultation and negotiation is ongoing
3. Consultation and negotiation should achieve mutual understanding about the proposed research.

Respect, recognition and involvement

4. Indigenous knowledge systems and processes must be respected.
5. There must be recognition of the diversity and uniqueness of peoples as well as of individuals.
6. The intellectual and cultural property rights of Indigenous peoples must be respected and preserved.
7. Indigenous researchers, individuals and communities should be involved in research as collaborators.

Benefits, outcomes and agreement

8. The use of, and access to, research results should be agreed.
9. A researched community should benefit from, and not be disadvantaged by, the research project.
10. The negotiation of outcomes should include results specific to the needs of the researched community.
11. Negotiation should result in a formal agreement for the conduct of a research project, based on good faith and free and informed consent.

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Figure 7: Eleven Practical Points for Ethical Engagement with Australian Indigenous Communities. Source: <http://www.aiatsis.gov.au/research/ethical.html>

As exemplars, the *Guidelines for ethical research in Indigenous studies*, by AIATSIS provides perhaps the best document to work from (<http://www.aiatsis.gov.au/research/docs/GERAIS.pdf>), and the Queensland Department of Aboriginal and Torres Strait Islander policy protocols for consultation and negotiation with Aboriginal people also offers some relevance albeit biased towards non-urban Indigenous communities (<http://www.communities.qld.gov.au/resources/atsis/everybodys-business/protocols-aboriginal/section4-1.pdf>). The AHURI funded *Investigating appropriate evaluation methods and indicators for Indigenous housing programs* provides a discussion of principles and methodologies for conducting research and evaluation in Indigenous housing. The majority of ethical principles, guidelines, or points pertain to medical human research and experimentation and not environmental and built environment situations.

A key dilemma in internal University and NEAF ethical processes is perception and cultural comprehension. In a recent re-joiner we were asked "what happens if that elder does not consent" asking us to nominate an alternate. Such was not culturally possible but was not the logic they applied and thereupon persisted in applying when we explained the situation.

In another, the re-joiner asked for the Registered Aboriginal Parties (RAP) organisation to grant consent in writing for a project within their legally designated region. For clarification,

... the Victorian Aboriginal Heritage Act 2006 recognises Aboriginal people as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage. At a local level, Registered Aboriginal Parties (RAPs) are the voice of Aboriginal people in the management and protection of Aboriginal cultural heritage (<http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties>; accessed 15th July 2012).

It is exceedingly difficult to say, despite this Victorian legal framework, that this RAP has no cultural rights over the community subject to the research projects and that the community concerned was ethnically insulted that a project they wished to participate in had to be vetted and endorsed by a community that they had a divisive dialogue with and no real cultural links to less commonalities in language. It was a situation with the NEAF process analogously asking London to be the arbitrators for a project that rotated around Scottish country and language for which they clearly had no cultural knowledge or regionalist appreciation of. The ethics administrators would not budge and nor would the community, so the project ceased and it was useless debating the matter with the ethics administrators.

In another situation, a non-elder who has inherited a university leadership capacity as the 'Indigenous' leader or professor has sought to establish a framework whereby all Indigenous-related research projects must be vetted and approved by him/her before they can be lodged in the name of the university. Thus, a non-elder from a country not associated with that university's campuses and properties has sought to determine and 'gate keep' all Indigenous-related projects in deference to projects that may have written consent from a community and their elders from a totally different country. Thus, a political football match has occurred with major cultural implications. The situation has caused considerable internal university angst but also confusion and negativity by the community to the leader and the university hierarchy of which the latter is totally oblivious as to these implications. In essence it raises the question of who 'owns' and can consent to engagement and whether someone from a different country can be the arbitrator of knowledge access. Thus, the EU president has said I cannot do a project in France despite having written French consent.

University codes of ethics go so far with research protocols to guide researchers engaged with indigenous communities. In many cases they are silent or limited in a number of matters such as detailing the mutual benefits from the research, recognition of intellectual property, and confidentiality matters. These shortcomings have led to the development of a set of engagement protocols to complement the standard research protocols that provide greater certainty and confidence to Indigenous communities. These engagement protocols are underpinned with the acknowledgement '...that Indigenous communities and their people are custodians of their traditional knowledge and have their own customary law and protocols for managing, sharing and protecting this knowledge. This must be respected throughout any research process' (Low Choy et al, 2011:1).

The very fact that the NEAF system classifies 'Aboriginal and Torres Strait Islanders' as 'high risk' research audiences is discriminatory, and exactly why attempts are being made to amend the Australian Constitution. Professor Marcia Langton (<http://www.sph.unimelb.edu.au/about/contact/allstaff/langton>) expressed this angst in her recent speech wherein she stated:

Defining Aboriginal people as a race, as the Constitution does, sets up the conditions for indigenous people to be treated, not just as different but exceptional, and inherently incapable of joining the Australian polity and society.

The legislation and policy applied to indigenous people demonstrates this: not citizens until after the 1967 referendum; the shameful effects of the nearly half-century old Community Development Employment Program (a work-for-the dole scheme); the Northern Territory emergency intervention; and this is to name only a few of the exceptionalist initiatives that have isolated the Aboriginal world from Australian economic and social life.

In turn, many indigenous people have developed a sense of entitlement to special treatment on the grounds of race. This exceptionalist status, to which many Aboriginal people have ascribed unwittingly, involves a degree of self-loathing, dehumanisation and complicity in racism. As the exotic, indigenous people are not required to be normal, such as attending school regularly or competing in a meritocracy

Figure 8: Langton Speech. Source: <http://www.theaustralian.com.au/national-affairs/opinion/get-rid-of-race-to-stop-racism/story-e6frgd0x-1226461968870>

No other Australian ethnic or cultural group endures this specific identification. The stereotype by NEAF is the illiterate semi-sedentary in a Northern Territory tropical community with paint brush and didgeridoo in hand. How then do we collegially approach someone like well-respected Langton and ask her to sign a pre-consent form and then sign an interview Plain English Language (PLE) form just to interview her about her perceptions about climate change and the Australian landscape. To her it is insulting, discriminatory, and a continuation of the Western stereotyping let alone denying her her academic freedom of and elders-hip responsibilities. Similar thoughts have been articulated to us by *Gunditjmara*, *Kaurna* and *Wathaurong* elders and university degree-holding recipients.

Thoughts Forward

The short conclusion is, do not assume that the Western logical is in fact the Indigenous logical. Do not enter into discussions blithely without respecting and proceeding through protocols. The AIATSIS points offer the best guide in approaching research activities with indigenous communities, but the rider is that you cannot approach each community generically irrespective of their geographical or intellectual context. But, recognise that there is not one consistent answer, hierarchical system, and protocol route but that each can be different per community and their 'mob's within.

But, clearly parochialism and naivety still persist. At a recent signing of a legal co-operative management agreement for the Wilsons Promontory National Park, a *Boon Wurrung* elder was asked by a state government official to sign the agreement by use of a hand print rather than signature. This request, echoing the colonial impost of Batman's Treaty for land title over Melbourne, was greeted with considerable angst and frustration, and refusal to sign an agreement in such a culturally demeaning manner. To the *Boon Wurrung* this was culturally insulting, a perpetuation of their colonisation, but also a slight on their education level that was comparable to a university educated person and not an individual that signed with a symbol or 'x' or an  as what occurred on the Treaty. For information, Batman's Treaty, signed on the banks of a creek on 16 June 1835, was an agreement with eight Aboriginal leaders to transfer the land of the Port Phillip area to colonialist and adventurer John Batman. Both the transfer to a person rather than the Crown, and its implicit recognition of Indigenous ownership and occupation of the land, prompted Governor Bourke to disallow the Treaty the same year.



Figure: John Batman's Treaty. Source: <http://foundingdocs.gov.au/enlargement-eid-17-pid-73.html>

References:

- Australia 2012, *Environment Protection and Biodiversity Conservation Act 1999*; <http://www.environment.gov.au/epbc/index.html>; accessed 20 August 2012.
- Australia 2012, <http://www.environment.gov.au/heritage/places/national/budj-bim/index.html>; accessed 20 August 2012;
- Australia 2012, <http://www.environment.gov.au/heritage/places/national/budj-bim/information.html>, accessed 20 August 2012.
- Australian Housing & Urban Research Institute 2012, *Ethical Principles and Guidelines for Indigenous Research*; accessed 20 August 2012.
- Agreements, Treaties and Negotiated Settlements database (ATNS) 2012, <http://www.atns.net.au/>; accessed 20 August 2012.
- Australian Institute for Aboriginal & Torres Straits Islander Studies 2012, *Guidelines for ethical research in Indigenous studies*, (<http://www.aiatsis.gov.au/research/docs/GERAIS.pdf>); accessed 20 August 2012.
- Batman, J 1835, 'Batman's Treaty'; <http://foundingdocs.gov.au/enlargement-eid-17-pid-73.html>; accessed 20 August 2012.
- Bell, D & C. Johnson, 2008., Budj Bim: Caring for Spirit and the People; in: 16th ICOMOS General Assembly and International Symposium: 'Finding the spirit of place – between the tangible and the intangible', 29 Sept – 4 Oct 2008, Quebec, Canada www.openarchive.icomos.org/12/1/77-7xnf-104.pdf ; <http://openarchive.icomos.org/12/>; accessed 20 August 2012.
- Bell, D & DS Jones 2011, 'Reinstating Indigenous Landscape Planning Curatorship: The Lake Condah Restoration Project', in *Proceedings of the 3rd World Planning Schools Congress, Planning's Future – Futures Planning: Planning in an Era of Global (Un)Certainty and Transformation, 4-8 July 2011*, Perth, WA. Perth, WA: University of Western Australia & Australian & New Zealand Association of Planning Schools (ANZAPS).
- Bell, D. and J. Elley, nd, Whose Heritage? www.environment.gov.au/.../pubs/essay-whoseheritage-bell-elley.pdf ; accessed 20 August 2012.
- Benterrak, K., S. Muecke, P. Roe with R. Keogh, 'Butcher' J. (Nangan), and E.M. Lohe 1996, *Reading the Country: Introduction to Nomadology*. Fremantle Arts Centre Press; Fremantle, WA.
- Four Nations Governance Group, Four Nations *NRM Governance Group Consultation and Engagement Protocols*; <http://www.amlnrm.sa.gov.au/Aboutus/AdvisoryCommittees/FourNationsGovernanceGroup.aspx>; accessed 20 August 2012.
- Framlingham, 2012, http://en.wikipedia.org/wiki/Framlingham,_Victoria; accessed 20 August 2012.
- Gunditjmarra people with G Wettenhall 2010, *The People of Budj Bim: Engineers of aquaculture, builders of stone house settlements and warriors defending country*. EmPress: Ballarat, Victoria.
- Gunditjmarra people, 2012, http://en.wikipedia.org/wiki/Gunditjmarra_people; accessed 20 August 2012.
- Jones, D.S., S. Mackay & A-M. Pisani 1997, "Patterns in the Valley of the Christmas Bush: A Seasonal Calendar for the Upper Yarra Valley," *Victorian Naturalist* 114 (5): 242-245.
- Jones, D.S., S. Mackay, I. Paton & A-M. Pisani 1998, *Seasons of the Upper Yarra Valley: a report for the Museum of Victoria*. Adelaide, SA: School of Architecture, Landscape Architecture & Urban Design, The University of Adelaide, Adelaide, SA
- Lake Condah Sustainable Development Project (LCSDP), 2012, <http://www.lakecondah.com/budjbim.html>; accessed 20 August 2012.
- Langton, M. 2012, <http://www.sph.unimelb.edu.au/about/contact/allstaff/langton>; accessed 20 August 2012.
- Langton, M., et al, 2011, <http://www.nccarf.edu.au/publications/national-climate-change-adaptation-research-plan-indigenous-communities>; accessed 20 August 2012.
- Low Choy, D, DS Jones, P Clarke & R Hale 2012, 'Understanding Urban and Peri-urban Indigenous People's vulnerability and adaptive capacity to Climate Change', in *Proceedings of Climate Adaptation in Action 2012: Sharing knowledge to adapt*; National Climate Change Adaptation Research Facility & CSIRO, 26-28 June 2012, Melbourne, p. 278.

- Low Choy, D, J Wadsworth, T Edwards & D Burns, 2011, *Project Protocol for Incorporating Indigenous Landscape Values into Regional Planning Processes, South East Queensland*, Version 3 (November 2011), Griffith University.
- Muecke, S & K. Benterrak 1996, *Reading the country: Introduction to Nomadology*, with P. Roe, R. Keogh, 'Butcher' J. [Nangan] and E.M. Lohe. Fremantle, W.A. Fremantle Arts Centre Press.
- Museum Victoria, 2012, (<http://museumvictoria.com.au/melbournemuseum/>); accessed 20 August 2012.
- National Climate Change Adaptation Research Facility (NCCARF) 2012, <http://www.nccarf.edu.au>; accessed 20 August 2012
- NCCARF 2012, <http://www.nccarf.edu.au/conference2012/>; accessed 20 August 2012.
- NCCARF 2012, National Climate Change Adaptation Research Plan: Indigenous Communities, <http://www.nccarf.edu.au/publications/national-climate-change-adaptation-research-plan-indigenous-communities>; access 20 August 2012.
- Redlands Council 2012, <http://www.redland.qld.gov.au/AboutRedlands/NorthStradbrokeIsland/Pages/Quandamooka.aspx>; accessed 20 August 2012.
- Sinatra, J & P. Murphy 2001; <http://www.goolarabooloo.org.au/obituary.html>; accessed 20 August 2012.
- Sinatra, J. & P. Murphy 1999, *Listen to the people, listen to the land*. Carlton, Vic: Melbourne University Press.
- South Australia, 2012, <http://www.environment.sa.gov.au/Home>; accessed 20 August 2012.
- Victoria 2012, <http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties/table-of-registered-parties#Gunditj>; accessed 20 August 2012.
- Victoria 2012, <http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties/table-of-registered-parties#Wathaurung>; accessed 20 August 2012.
- Victoria, 2012, <http://www.dpcd.vic.gov.au/indigenous/aboriginal-heritage-council/registered-aboriginal-parties>; accessed 20 August 2012.
- Victorian Aboriginal Corporation for Languages (VACL), 2011, <http://www.vaclang.org.au/admin%5Cfile%5Ccontent11%5Cc7%5CVACLMap2011%28A4%29.jpg>; accessed 20 August 2012.
- Wathaurong Aboriginal Co-Operative, 2012, <http://www.wathaurong.org.au/>; accessed 20 August 2012.
- Wathaurung / Wadawurrong, 2012, <http://www.wathcorp.com.au/>; accessed 20 August 2012.
- Wikipedia 2012, <http://en.wikipedia.org/wiki/Calendar>; accessed 20 august 2012.
- Wikipedia 2012, http://en.wikipedia.org/wiki/Wathaurong_people; accessed 20 august 2012.

Appendix A:

Extract from the NEAF Ethics Form

9.7 Research Involving Aboriginal and Torres Strait Islander Peoples

- 9.7.1 What is the estimated proportion of Aboriginal and Torres Strait Islanders peoples in the population from which participants will be recruited?
- 9.7.2 Will the Aboriginal or Torres Strait Islander status of participants be recorded?
- 9.7.2.1.1 Explain why the Aboriginal or Torres Strait Islander status of participants will be recorded
- 9.7.3 Will there be or has there been a process of consultation and negotiation between Aboriginal or Torres Strait Islander peoples and the researchers / investigators regarding the proposed research?
- 9.7.2.1.1 Describe this process of consultation and negotiation. Include, as appropriate: -how the consultation process and the research proposal demonstrates the integrity of the researcher - negotiation of the aims, anticipated outcomes and priorities of the research, - consultation regarding community and individual consent to participation in the research, - the process for negotiating ongoing advice as the research progresses, to monitor ethical standards and minimise unintended consequences, - how the processes show engagement with the values and processes of participating communities, and - the process of negotiating access to, and /or control of the results of the research.
- 9.7.4 Has there been a role for Aboriginal or Torres Strait Islander peoples in the development of the research and or will there be a role for Aboriginal or Torres Strait Islander peoples in the implementation of the research proposal.
- 9.7.4.1.1 Describe the role of Aboriginal or Torres Strait Islander peoples in the development and or implementation of the research. Include, as appropriate: - whether any or all of the researchers / investigators are Aboriginal or Torres Strait Islander people, - how Aboriginal or Torres Strait Islander peoples from the community involved in, or affected by, the research have collaborated in the development of the research, - whether the participating communities have expressed satisfaction with the research agreement, potential benefits and their distribution, - the extent to which reciprocal obligations, responsibilities and benefits is demonstrated between the researchers / investigators and the community
- 9.7.7 Describe how the research will provide benefits to the Aboriginal and Torres Strait Islander peoples. Include, as appropriate: - a description of how the research relates to the health priorities and needs of participant communities, - a description of benefits for participants and the communities, including establishment and/or enhancement of capacities, opportunities and outcomes beyond the project, - a description of how the research shows an intent to contribute to the advancement of the health and well being of participants and their communities

The Problem of Recognition: An Exploration of the Establishment and Accreditation of a New Zealand Planning Programme

Ian Luxmoore & Caroline Miller

Resource & Environmental Planning, Massey University

Abstract

The first New Zealand university based planning course was established in 1957 at the Auckland University College (now the University of Auckland) in a time when internationally planning education was developing rapidly in response to the post-war reconstruction. The Auckland course was to have a monopoly in New Zealand until the 1970s when the increasing visibility of planners in combination with the growth of New Zealand universities stirred interest in establishing new planning courses. By the end of the 1970s a range of planning courses had been established across New Zealand and the New Zealand Planning Institute (NZPI), which had supported the establishment of the Auckland University course, now faced the problem of determining if any of these new courses should be recognised as leading to full membership of the institute. This paper will provide a preliminary exploration of the initial development of planning education in New Zealand from 1957 to the 1980s and how the NZPI dealt with professional recognition of these courses via a case study of the Massey University's undergraduate planning course.

Keywords: Planning Education, New Zealand, Massey University, NZPI

Introduction

Professions face a complex issue in determining the nature, extent and focus of education for that profession, given that the existence of a unique body of disciplinary knowledge is a key aspect of the standard definition of a profession. If new entrants to that profession are not imbued with that common knowledge (and some may add skills), then there cannot be the certainty that the profession as a whole is founded on some common disciplinary knowledge. This inevitably leads professions to seek involvement in prescribing or at least the exercising some oversight of the delivery of professional education courses. Having achieved this oversight/approval power the profession can then utilise completion of an approved course as one of the first steps to achieving full membership of that profession. However, this connection between the profession and the academics has the potential to create a tension between the academic and professional practice aspects of courses (see Beard & Basolo, 2009, 233).

Planning, in the present day, is little different to other professions in its desire to ensure that there is the transmission of disciplinary knowledge to new entrants to the profession via education courses and the use of the completion of an approved course as the first step to full membership. The New Zealand Planning Institute (NZPI) like equivalent professional bodies throughout the world has an Education Policy which requires planning courses which wish to gain approval as courses leading to membership of the profession, subject their courses to a process of accreditation and reaccreditation. It is a relatively tidy system that is generally understood by the profession, the universities and planning educators.

However, historically the path to professional education has not been so smooth, particularly when the demand for planners expanded exponentially in the post-World War II period. In New Zealand there was only a very small university community to deliver planning courses, courses that were developed at a time when the university sector both locally and globally was in a time of change and flux. Thus this paper will explore how the New Zealand university sector responded to the demand for planning education from 1957 by looking at the context that led to the development of the first New Zealand planning degree at Auckland University and then, through a case study, will focus on the development of the planning programme at Massey University which is now a well-established programme offering degrees at both undergraduate and postgraduate levels. Some of the material for the case studies was obtained from archival sources and interviews with Bryan Saunders, a now retired foundation member of staff of the first Massey planning degree.

The Profession and Planning Education

Planning is a relatively new profession dating from the start of the twentieth century, with the first Chair in Town Planning and Civic Design and its associated courses being established at the University of Liverpool in 1909. This relatively late start to both the profession and planning education meant that it was developing its programmes at a time when university based education for the professions was increasingly accepted.

The alternative model was a type of apprenticeship model whereby the new entrant learnt on the job from experienced practitioners and proved their attainment of the required knowledge and skills through professional exams and interviews. In the New Zealand context surveyors used this education model until 1961 when the surveying degree was established at the University of Otago, after many decades of struggling to achieve this (see McRae, 1989).

The establishment of the first course at Liverpool as Cherry observes saw 'the demand for town planning knowledge' grow and that as a consequence 'other academic initiatives unfolded' (Cherry, 1996,39). These initiatives saw the establishment of further university-based courses at Birmingham and London universities in England. The relationship between these new courses and the profession in Britain remained relatively close at the start partly because the profession, as was the case in later years in New Zealand, was still relatively small and known to each other. Stanley Adshead who headed the Liverpool and the London courses and Patrick Abercrombie, research fellow at Liverpool, 'were founder members of the Town Planning Institute' (TPI) in 1914 (Cherry, 1996,39). Nevertheless, close and reassuring as this relationship was it was not one that could be sustained if the profession expanded and the number of planning education providers continued to grow. Thus the TPI like other professions in the pre-World War II era established professional exams that were usually taken after completion of a planning qualification and a period in practice. Passing these exams provided a path to full professional membership and responsibilities while one's planning education provided the disciplinary knowledge and academic underpinnings for the practice of planning.

The alternative was for the profession to provide the education directly and to exercise a much closer control over the development of professional and disciplinary knowledge. In the United States the federal nature of government and the resultant emergence of multiple planning systems and statutes saw the use of this model. The American Planning Association (APA later the AIP), the most prominent of the American professional planning organisations, created the 'so called Green Books ..whose successive versions encompassed the growing knowledge and techniques of the field (of planning)' (Birch,2001,408). These Green Books which were revised on average once every ten years represented the 'core' of professional and disciplinary knowledge allowing new entrants to be tested against it when they sought membership. A relatively small number of universities offered courses in city planning which combined with the small number of professional planners — about 100 by 1938 (Birch, 2001), created strong bonds between the profession and the planning educators. As Birch observes the leaders of these academic programmes, such as Frederick Adams and G.Holmes Perkins, 'working on the AIP's successive education committees...fleshed out ..curriculum development in their own institutions' (Birch, 2001,409). This was the ultimate in the integration of the educators and the profession, with the educators essentially shaping the education and thus professional standards for the professional organisation.

The Development of Planning Education in New Zealand

This model of planning education as a preparation for professional membership is fine as long as potential new entrants to the profession can gain access to the required planning education. For many New Zealand students attendance at university was not possible given that the TPI was in effect the professional organisation for many of the British 'colonies' and there were no recognised courses available locally. The TPI acknowledged this issue and recognised the correspondence courses in town planning offered by the School of Planning and Research for Regional Development in London, as preparation for membership. These were advertised during World War II for 'students serving in the armed forces' (Advert, 1948,530). The Institute continued to offer these courses after the war and they were advertised as 'particularly designed for men and women throughout the British Empire and in the United States' which would ensure students would 'be fully equipped to sit the Final Examinations of the Town Planning Institute' (Advert, 1948,530). As Miller (2007 & 2011) discusses, candidates for TPI membership sought assistance preparing for the exams from many sources including town planners such as John Mawson and Reginald Hammond, articles such as those written by Cyril Knight, Professor of Architecture and graduate of the Liverpool town planning course, and the journal of the New Zealand Town Planning Institute (TPINZ), *Community Planning*. The candidates for membership undertook the Intermediate and Final examinations which were made up of two parts, with one exam consisting of a whole day design exam involving the production of a plan for a town. There was also a testimony of study consisting of seven three hour exams on topics as diverse as bridge design and the history of planning plus an oral exam/interview. This made it an arduous course and not surprisingly few candidates were willing to undertake it particularly as there was little commitment from local government to town planning, making job prospects similarly poor.

The TPINZ, a broadly based organisation of professional planners and those interested in planning established in 1930, joined with Professor Knight and John Mawson, to lobby for a town planning course. While Mawson and Knight worked persistently on this issue they made no real progress through the 1930s. These attempts failed mainly due to the arrival of the Depression which significantly reduced student numbers at all of the university colleges and because of the concern that there would be insufficient work to

employ a person full-time as a town planner. The idea that town planning would at best be an adjunct to another profession persisted until the *Town and Country Planning Act* 1953 was passed in law. This act proved to be a watershed for the profession and planning education as it made the production of a district scheme compulsory for every city, borough and county council, establishing work for planners for the foreseeable future. Central government also increased its interest in town planning with the establishment of the Town and Country Planning Division of the Ministry of Works (later the Ministry of Works and Development) after World War II which became a major employer of town planners. From the late 1950s onwards private consultancies also emerged mainly to serve the local bodies who did not afford to or could not attract a town planner to their staff.

Thus from 1953 there was a strong case for a town planning qualification to be established particularly as the university system was beginning to change and to expand. Until 1961 university education and more importantly the granting of degrees was the responsibility of the University of New Zealand that was established in 1870. The University of New Zealand consisted of four colleges, The Auckland University College, the Victoria University College (in Wellington), the Canterbury University College (in Christchurch) and the Otago University College (Dunedin). These Colleges were responsible for their day-to-day management with the Senate of the University of New Zealand having the sole power to determine what diplomas and degrees the Colleges could offer. Each College was granted one or more 'special schools, such as the engineering school at Canterbury, a school of home science at Otago and the architecture school at Auckland. These special schools were highly valued as they were seen as providing a 'point of difference' from other institutions and because they were 'in considerable measure, a source of grants from the state' (Parton, 1979, 118).

The advocacy for the establishment of a town planning course was led by the New Zealand Institute of Town and Country Planning (NZITCP), a fully professional body established in 1949 that was made up of local members of the English TPI, numbers that were boosted by the arrival of town planners, many of whom were recruited from Britain in the post-war years by the Ministry of Works. Advocacy also came from the Joint Advisory Committee on Town and Country Planning, formed in 1957 by the NZITCP and the surveying (NZIS), architecture (NZIA) and engineering's professional institutes (NZIE). One of its objects was 'to promote, maintain and foster the best training and interest of those engaged in Town and Country Planning and to maintain a liaison with the authorities responsible for the education of the planners' (Constitution, 1958). While the Senate of the University of New Zealand actually approved the establishment of a Department of Town and Country Planning at Auckland University College, complete with a professorial chair in 1955, the department was not physically established until 1957 when local philanthropist NB Spencer provided the funding (Sinclair 1983).

The creation of a local town planning school immediately raised questions as to how it would relate to the profession and who would determine its teaching content. By this point the English TPI had begun to exert greater control over university courses while their content had undergone a shake-up from the results of the Schuster Report of 1950. That report was the outcome of a British government official inquiry by Sir George Schuster 'into the education and qualifications of planners' (Cherry, 1996,132).The fact that the government of the day saw planning as a being of sufficient importance to be worthy of such an inquiry and that there was government concern about the number of planners being produced, was a sign of the growing importance of the profession and its work. The Schuster Report, as William Holford, Professor of Town Planning in the University of London observed, presented a problem to the TPI with its advocacy of widening the scope of planning education and the establishment of new planning schools; 'Their plea for a wider basis of recruitment to the profession cannot be ignored on educational grounds, although it sets a pretty problem to the Town Planning Institute as the present and only guardian of the gates of entry'.(Holford,1951,360).It was a sign of things to come when the production of planning education might become detached from the entry requirements of the profession. If this gap was to be closed there had to be a close relationship between the profession and the planning educators.

The location of the Auckland course in the architecture school was almost inevitable and was quite normal as Birch observes when she notes that 'with the exception of the short-lived experiment at Chicago, most (planning) programs lodged with sister disciplines, architecture and landscape architecture, in schools of design firmly dominated by practitioner outlooks'(Birch, 2001,410). The profession through the NZITCP tried at the outset to ensure the profession-educator gap did not open, through its comments on draft syllabi and submissions on the length of the qualification. The NZITCP wanted a two year diploma to ensure students obtained sufficient knowledge and experience but the university was adamant that it would be a one-year course (Miller, 2007,27). This was an able demonstration of the relatively inferior status on the professional body vis-a-vis the university, despite the fact that on a daily basis there appeared to be, from anecdotal recollections (Dart, Pers.Com.,2005), a close relationship between the town planning programme and local

practitioners. Most students were in fact part-timers which almost automatically ensured such connections were established and maintained.

The NZITCP throughout the 1950s and 60s remained very much a professional institute, resisting several attempts to widen membership to include those with no planning qualifications but an interest in town planning. This meant that the link between education and membership was maintained and in 1966 when the NZITCP reorganised its administration, one of the four committees created was an Education and Membership Committee (Miller 2007, 37). Membership however remained the preserve of the English TPI which in 1960 accepted the Auckland Diploma of Town Planning as an approved prerequisite for membership, though students still had to complete the professional exams. The NZITCP made an effort to regularise its membership practices and in particular its desire to exclude unqualified planners who began to increase in the 1960s. There was particular concern that the Lane Committee report to the English TPI in 1964 which caused a rift in the British profession, would require them to admit such practitioners. However, change was coming as the rather complex arrangement between the TPI and the NZITCP was about to come to an end as the New Zealand qualified members had come to outnumber the TPI qualified members. As a result in 1969 the newly christened NZPI was established as an independent body, free to make its own arrangement with regard to education and membership.

The Changing Face of Planning Education

While it was not made explicit in the Schuster Report, there was also a move by the late 1950s and early 1960s to move the basis of planning courses from civic/architectural design to the social sciences which had expanded in the post-war era. The relatively narrow approaches of the past seemed unequal to the task of addressing the complex urban issues that had arisen in Britain, Europe and the United States in planning and developing the built environment. By the mid-1960s the social sciences primarily geography, sociology, economics and political science became more influential in the work of planners particularly those involved with housing and urban renewal programmes and the New Towns programme. Geography provided models for the spatial development and structure of cities while sociology underpinned concepts of neighbourhoods and community development in Britain, Europe and the US. Consequently, it was inevitable that planning education would be similarly changed by these forces which coincided with an expansion in university education. There was also according to Cherry (1996) a destabilization in that period arising from a questioning of the traditional models of urban growth and form and the expectation that planners could predict urban futures. This move to planning education with a social science base was perhaps at its strongest in America given the urban strife that emerged in that period. This produced 'a period of great intellectual ferment' which produced 'change within planning and allied disciplines' (Krueckberg, 1994,26). As such it made the positioning of the town planning diploma within an architecture school in 1957 somewhat out of step with the emerging direction of planning education. This happened in New Zealand because in educational and professional circles there was still an expectation that planning would have a design base, with the relative lack of major urban development issues not providing a compelling case for situating planning in the social sciences.

The Establishment of the Massey University Bachelor of Regional Planning

The expansion of university education that occurred from the mid-1960s onward which gave rise to a range of new universities and university courses in Britain and the United States was also apparent in New Zealand. Massey University, based at Palmerston North was established as Massey Agricultural College in 1927 and was the base for a wide range of agricultural research and teaching led by luminaries in the fields such as Geoffrey Peren and William Riddet. Like all other university colleges it came under the control of the University of New Zealand and when this ceased to exist in 1961 the renamed Massey College associated itself with Victoria University of Wellington. The new college continued to develop adding horticulture and technology to its coverage and in 1962 becoming the location of the country's only veterinary science programme. In addition the Palmerston North University College, a branch of Victoria University was established in the city 1960 to provide extramural education in arts subjects and the two organisations existed side by side until 1963 when they were amalgamated. The former Palmerston North University College became the Faculty of General Studies of the new Massey University College.

The new university was essentially a product in the growth of tertiary education which expanded both the scope of what was offered and the numbers of students who might be expected to attend a university. After the demise of the University of New Zealand universities became largely self-governing with their own Councils and internal administrative structures. While the universities had been freed from the control of the University of New Zealand they were not completely free to plan their future expansion. The Vice-Chancellor's Committee provided administrative oversight of the universities and most importantly determined if a new diploma or degree could be offered. Until the restructuring of the New Zealand's society and economy which commenced in the mid-1980s the Vice Chancellor's Committee aimed to limit the

number of courses of a particular type that could be offered by different universities. Thus in this period there were only two engineering schools one each at Canterbury and Auckland Universities, two medical schools one each at Auckland and Otago Universities and a single landscape architecture programme at Lincoln College (later Lincoln University). If a new degree or programme was proposed it had to go through an approval process that included allowing all existing universities, even if they were offering a similar programme, to make comment on it. It was a harsh system which was probably a reflection of the limited resources that were available to the tertiary sector. A version of this approval system still exists though it is much less likely for any proposal to be turned down as courses proliferated from 1989 onwards when new university legislation was passed.

This system meant that newly created universities such as Massey University were at some disadvantages given that many of the specialist degrees and programmes had already been claimed by the older universities. There was nothing to stop humanities and social science subjects being expanded and Massey had a particular interest in doing this given it was the designated extramural university (the equivalent of the British Open University) and had a protected status as such. The university was for many years in the 1970s somewhat ambivalent about this role as there was concern that this style of education delivery would undermine internal teaching and encourage large numbers of long term part-time students (Professorial Board Minutes 1960-1980). The university did however already have a proclivity for what may be called applied degrees which was probably a reflection of its agricultural, horticultural and vet qualifications.

Within Massey the various disciplines were arranged into Faculties, headed by a Dean who in turn created a series of Faculty committees to assist with the administration that faculty and which reported to the Dean. In turn the Deans formed part of the university committee system, including Professorial Board representing senior academics, all of which reported to the University Council headed by the Vice Chancellor. Geography as one of the newly established social science programmes, was located in the Faculty of Social Science and was headed by Professor Keith Thomson who was also the Dean of the Faculty of Social Science. Among the early geography staff was Bryan Saunders (appointed 1960), a cartography specialist, who developed some interest in planning and planning history (Saunders, 2003). Most of that 'planning history' content was urban history with a concentration on the 'Black Country' and New Towns. From the mid-1960s onwards, Saunders with the agreement of the Dean developed with Dr Peter Phillips and later appointees a series of planning papers including one on planning theory, which found a ready market (Saunders, 2003, 18). The only problem was that the students could at best leave with a BA in geography as all the papers were technically still geography papers and they certainly were not recognised by the NZPI. In the early 1970s Phillips and Saunders led an attempt to establish a geographically based postgraduate planning degree presumably to avoid clashing with the existing town planning programmes at Auckland University, which in 1975 had been expanded to include a four-year undergraduate Bachelor of Town Planning. The development came to nought probably because postgraduate degrees were less popular at the time. The geography programme continued to take an interest in planning related topics and papers reflecting the shifts to situate planning in the social sciences. In 1977 Derek Williams, who held a Diploma of Town Planning from the Oxford Polytechnic and was a RTPI member, was appointed to the geography programme. He led a project to develop a planning degree but this time at an undergraduate level. In 1979 another English practitioner who also had some New Zealand planning experience, Hugh Norwood was appointed to the geography programme. Both these appointments strengthened the planning teaching base for the proposed degree and were probably essential if the degree was to be recognised, while the core planning papers were already largely in place.

The process to obtain university agreement for a new qualification, begun late in 1977, was as complex as it was opaque with only some of the required records being available through the Massey University Archive. However, from archival research supplemented by some memories from Bryan Saunders (Pers. Com. 2012) it was clear that it was a multi-stage process as the Table 1 illustrates:

Table 1 Approving a Degree

1. The proposal for a degree was developed by Williams and Saunders.
2. The proposal was put to a Faculty staff meeting which supported the proposal provided students couldn't opt out at the end of part II (year three) with a BA.
3. The proposal then went to the Social Sciences Faculty Board where it was approved.
4. It then went to Professorial Board which approved with "certain (minor) modifications" to the degree regulations and "the proposed degree was approved by the Professorial Board and will be forwarded to the Council".
5. The University Council then gave the degree its final approval.

(Compiled from Minutes of Staff, Faculty Board Meetings, Professorial Board & the University Council, 1970-1980, Massey University Archive)

Internal approval of the degree was the first step as the proposal now had to go to the Vice Chancellors Committee, a process that opened the proposal to comment and potential opposition from the other universities. There are no records of how that process proceeded but it was ultimately successful as the Bachelor of Regional Planning and Bachelor of Regional Planning (Honours) both of four years duration, were offered in 1978. In the next year the planning teaching staff was supplemented with a planning law lecturer, Peter Horsley who also taught papers in the wider Faculty of Social Science.

The naming of the degree was fully considered when the degree was completing its internal processes. A Faculty of Social Sciences document makes it clear the intent was to distinguish it from other professional degrees by focusing it back on geography:

“Inclusion of the word ‘Regional’ makes it clear that the degree is not concerned with the subject of planning in general but with the particular problems associated with the future development of regions of the earth. The degree is thus distinguished from subjects such as ‘educational planning’, ‘social planning’ or ‘economic planning’. (S.Sc.FB77/39, Faculty Board Minutes 1970 – 1980, Massey Archive)

This concern with other professional degrees reflected the times which saw the university developing a Bachelor of Education and Bachelor of Police Studies around the same time. Calling the degree a regional planning degree was probably also a pragmatic choice intended to distinguish it from the Auckland ‘town planning’ degree. It was in many ways a misleading name for the degree given that at the time the planning legislation while providing for regional planning (see Miller, 2008), did not make it compulsory meaning that it was only pursued in Auckland, Wellington and Christchurch. Not an employment scene that looked very fruitful. Some students entering the degree believed that the Massey degree was focused on a type of broadly based spatial planning, an image that was also used by the student recruiters and thus related to their favourite school subject of geography. For some the realisation that it was not the case saw them exit the degree (Mansvelt, Pers.Com, 2012).

Despite having different origins the coverage of the Massey and Auckland degrees were remarkably similar as Table 2 (below) shows. The unique aspect of the new Massey degree was the requirement that every student complete 24 weeks of practical work, not required to be achieved consecutively, before having their degree granted. The idea was that students would work in planning offices during their vacations to obtain some practical experience to complement their academic work. The problem was that students by the mid-1980s found it increasingly difficult to obtain work, particularly as the numbers of students completing the degree grew in volume while the opportunities for employment were conversely declining as the economy tightened. By the end of the 1980s the requirement had to be abandoned.

Table 2 A Comparison Between the Auckland and Massey Planning Degrees Circa 1979

	Bachelor of Town Planning (Auckland)	Bachelor of Regional Planning (Massey)
Years 1 & 2	<i>General papers from:</i>	<i>General papers from:</i>
	Anthropology	Geology
	Art History	History
	Biology	Mathematics
	Botany	Philosophy
	Computer Science	Political Studies
	Economics	Psychology
	English	Sociology
Year 3	Geography	Zoology
	Planning Theory	Planning Theory & Techniques
	Planning Techniques	Regional Development Planning
	Planning Law & Administration	Planning Law & Administration
	Urban Settlements	History of Urban & Regional Planning New Zealand
	Society & Settlements	Research & Field Techniques
Year 4	Communications & Utilities	
	Advanced Planning Theory	Planning Theory
	Advanced Planning Techniques	Planning Techniques
	Advanced Planning Law & Administration	Planning Practice
	Urban Design	Land Classification and Utilisation
	History of Town Planning	Planning Related Paper
	Resource Management	Planning Practical
	Housing	Planning Project
Practical Work		

(Source: adapted from Anon.,1979,19-21)

Becoming a Recognised Degree

The next challenge for the new BRP degree was to be recognised by the NZPI as qualifying a holder for full membership. Membership was always a crucial issue for the profession and remains so to this day, with the issue of how unqualified planners should be treated being a persistent worry. It was not an unjustified worry as a survey by Memon in 1980 indicated that 25% of planners had no involvement with the NZPI and over 40% of practicing non-members had no qualification at all (Memon, 1981). The NZPI clearly never contemplated that there would be more than one provider of planning education given that in 1972 the following resolution was passed at the 1972 AGM — ‘That the policy of the NZPI is to support Auckland courses, including the establishment of undergraduate courses’ (Miller, 2007,81). However, the increasing demand for planners meant that in 1974 that the NZPI’s Education Committee, after a visit to all the universities resolved ‘to work closely with the universities whose ‘courses seemed the most fruitful’ to ensure that their graduates met the Institute’s requirements’ (Miller, 2007, 82). By 1974 the Institute had produced a set of guidelines, including what was regarded as ‘core planning knowledge’ that a course had to demonstrate it could provide if it was to be recognised. That core broadly consisted of planning theory, planning techniques/practice and planning law and administration. In 1977 the Massey course was given

preliminary approval with the caveat the full recognition would not be given until the degrees graduates had been seen in practice. In 1979 the Massey BRP degree was given full recognition and by then the flood gates had truly opened with degrees having been established at a range of universities.

The arrival of these new course in many ways undermined the very close relationship that had existed between the Auckland university course and the NZPI, a relationship inevitably based on the fact that most of the Institute Council of the time were likely to be Auckland graduates and the support that the Institute had had to provide to get a New Zealand based qualification established. A similar relationship developed in the surveying profession with McCrae commenting that there 'has always been a close and amicable one, between the Institute and the School [of Surveying] (McRae,1989,155). Professor Boileau, the head of the Auckland Planning School complained to the Institute that there would soon be an oversupply of planners given the number of courses that were being recognised by the NZPI (Miller,2007,84). While the Institute tried to calm Professor Boileau's concerns their image of what a planning school should be was firmly rooted in the model Auckland provided (Miller,2007. Overseas planning institutes routinely used their power to approve/recognise a degree to and some programmes used these requirements to deflect university demands. Paul Davidoff, the noted American planning educator and theoretician, used the AIP Membership Guidelines to try to ensure the Hunter College Planning Program remained an independent entity'(Rao,2012,231). Despite Boileau's views he remained part of the NZPI Education Committee with little thought to the ethical issues involved (Miller, 2007,84-85). While the Institute agreed to recognise the Massey BRP it clearly required some changes to the degree and an aggrieved Bryan Saunders recorded '...because I had not received professional training I was forced to relinquish my commitment in the theory of planning and practice fields..'(Saunders, 2003,22). The NZPI was presumably reflecting the fact that papers from what was considered the core planning papers were being taught by a person with no planning qualification or experience.

Conclusion

From the discussion above it is clear that the production of planning education goes through, as an early work by Healey and Samuels (1983) suggested, a series of distinct stages. The first is the Foundation Stage where the basics of education for the profession are established, the struggle to develop planning education begins and there is a dependence on the profession establishing standards through an exam system. The second stage is the Establishment Stage where the focus is on establishing a planning education provider and when links to the profession will be strong and direct, reflecting the effective vulnerability of both organisations. The final stage is the Independence and Expansion Stage where the planning education is well established and expanding as new providers appear and when the relationship between the profession and the educators has to change. The latter occurs because at this point the profession has to formulate specific standards and requirements for education and recognition which ultimately gives rise to independent accreditation and education policies. It is clear that all these stages can be identified in the development of planning education in New Zealand. The first stage was the period when it was a struggle to get a planning education and when there was a reliance professional exams to determine if the requisite professional/disciplinary knowledge had been achieved. The second stage occurred from 1957 to the late 1970s when the Auckland University course provide a single producer of planning education and when there was a close relationship between the profession and the university. In the last stage that relationship has to be revised as the profession was required to stand back and to create more standardised educational requirements as the arrival of new planning education providers raised issues of how recognition of a planning degree should be determined. In reality the profession was slow to recognise that it was moving from one stage to the next, producing a rather uneven process for determining recognition which ultimately became formalised into a full degree/programme accreditation. This in turn has had some lasting effects of the relationship between the profession and education providers. It is area where further research could provide some potentially interesting insights into these relationships.

REFERENCES

- Anonymous 1979 Alternative Planning Education, *Town Planning Quarterly*, 57, December, pp.19-21
- Beard,V & Basolo,V 2009 Commentary: Moving Beyond Crisis, Crossroads, and the Abyss in the Disciplinary Formation of Planning, *Journal of Planning Education & Research*, 29,233-242
- Birch, L 2001 Practitioners and the Art of Planning, *Journal of Planning Education and Research*, 20(4), pp. 407-422
- Cherry,G.E. 1996 *Town Planning in Britain Since 1900: The Rise and Fall of the Planning Ideal*, Blackwell Publishers, Oxford.
- Constitution of the Joint Advisory Committee on Town and Country Planning, NZPI Archive, Auckland

- Healey, P & Samuels, O 1983 *British Planning Education in the 1970s and 1980s*, Working Paper No.70, Department of Planning, Oxford Polytechnic/Social Science Research Council, Oxford
- Holford, W 1951 Qualifications for Town and Country Planners: A Review of the Report of the Committee, *The Town Planning Review*, 21,4, pp.357-361
- Krueckberg, D 1994 *The American Planner: Biographies and Recollections*, Second Edition Methuen, New York
- McRae, J A 1989 *New Zealand Institute of Surveyors 1888 – 1989*, New Zealand Institute of Surveyors/University of Otago, Dunedin
- Memon, P A 1981, *Urban and Regional Planners in New Zealand*, Department of Geography, Otago University, Dunedin
- Miller, C L 2007 *The Unsung Profession: A History of the New Zealand Planning Institute 1946 -2002*, NZPI/Dunmore Press, Wellington
- Miller, C. L. 2008. 'Puatahanui By the Sea: Planning for Wellington's Growth', in McConville, C. (ed) *The Proceedings of The 9th Australasian Urban History/Planning History Conference*, University of the Sunshine Coast, Caloundra, CD-ROM.
- Miller, C.L. 2011 'The lack of competent town planners in the Dominion': The Development of Planning Education in New Zealand 1926-1960, in Magin, P (ed.) *Proceedings of Planning's Future – Future's Planning: Proceedings of the World Planning Schools Congress*, Perth, Australia, 4-8 July 2011, CD-Rom, 1-15
- Parton, H. 1979 *The University of New Zealand*, Auckland/Oxford University Press, Auckland
- Rao, M V 2012 Paul Davidoff and Planning education: A study of the Origins of the Urban Planning Program at Hunter College, *Journal of Planning History*, 11,3,226-241
- Saunders, B 2003 *Massey University Geography: Forging a Distinctive Place in Massey's World*, Geography Programme, School of People, Environment & Planning, Massey University, Palmerston North
- Sinclair, K (1983) *A History of the University of Auckland:1883 – 1983*, Auckland: Auckland University Press/Oxford University Press

Oral History Interviews

- An interview with Jim Dart, former Senior Lecturer, NZPI Councillor, TPQ Editor and Planning Tribunal, Auckland, February and July 2005
- An interview with Bryan G Saunders, former Reader at Massey University, Palmerston North, July, 2012
- An interview with Dr Juliana Mansvelt, former planning student, Palmerston North, July 2012

The spaces we work in: consultation about Curtin's Architecture and Planning building

Diana MacCallum and Shahed Khan⁴

Department of Urban and Regional Planning, Curtin University

Abstract

In 2009, Curtin University made an in-principle commitment to a 're-life' project for Building 201, which houses its School of Built Environment. The project, Build 201.1, was to represent a major overhaul of the building's space, which has been subject to ad hoc incremental, sometimes desperate and often disjointed changes to cope with changing demands through its forty-year history. In November 2011, the School took the highly unusual step of holding a stakeholder forum to identify user concerns and needs and, thus, inform the project definition statement (which will form the basis of a detailed budget and tender documents). In this paper we, as the organisers of that forum, reflect on its process and outcomes, in relation not only to the physical space we work in but – equally crucially – to the spaces of governance and communication that shape our institutional environment.

This reflection is informed by responses from 20 of the forum's 52 participants (students, academics, general staff and sessional tutors) to a post-event questionnaire, which sought to determine how various actors saw the process represented by the forum and how they reflect on their experience of engagement in it.

Keywords: University governance; academic working environment; deliberative democracy

Introduction

Curtin University's Architecture and Planning Building, "Building 201", celebrated its 40th birthday in September 2011. It was commissioned by the then WA Institute of Technology in 1970 and designed by government architect Vin Davies in the 'Brutalist' style, of which it is considered an excellent example. But since its opening in 1971, Building 201 has been adapted and re-adapted to changing circumstances, such as the need to accommodate different disciplines (Construction Management, Cultural Heritage, Design), increasing student numbers, changing technologies and teaching modes, and an expanding research workforce. It is also increasingly used by the University for general teaching purposes and for holding special events.

In 2009, Building 201 was identified as a strategic asset to support the University's continued growth, and an in-principle commitment was made to a "Re-life" project, *Building 201.1*. Rather than continuing with ad-hoc adaptations, the proposed Re-life represents a major refit/reconfiguration to cope with the changes ahead – higher student numbers, more and increasingly inter-disciplinary research activities, revised patterns/modes of teaching and learning, and continuing consultancy work.

The Re-life project is still in its infancy and has not yet (June 2012) received a budget. In order to inform the project definition statement, which will be the basis for budget approval and developing tender documents for project management and design, the School of Built Environment (SOBE) held a stakeholder forum in late 2011. The purpose of the forum was to identify and discuss the needs, issues and challenges experienced by the building's main users – staff and students in the four Built Environment Disciplines (Architecture, Interior Architecture, Planning, Construction Management), technical, administrative and support staff, and other university stakeholders (including Properties, the Office of Teaching and Learning and the Faculty of Humanities).

The authors of this paper, both from the Department of Urban and Regional Planning, organised and facilitated the forum at the request of the Head of School. During the planning stage, it became clear that the Re-life project already had a rather controversial history. Staff members from the Departments of Architecture and Interior Architecture raised a number of questions about how the project was to be managed – including questions about why planners, rather than architects, were running the forum. Several had already used departmental and school staff meetings (and in some cases findings from their own research) to express their views about the Re-life project, and to suggest strategies for its implementation and management – views which were raised forcefully again when we appeared on the scene. To both our relief and our trepidation, most of these critics also signed up to attend the forum.

⁴ Corresponding author: s.khan@curtin.edu.au

After the difficult discussions noted above, we expected a fairly cynical reception and, potentially, a highly problematic meeting; however, we also saw it as an interesting opportunity to 'test' principles of deliberative planning in a uniquely informed, cautious and potentially sceptical environment. In this paper, we present some reflections on the experience as it actually unfolded. Following a description of the mechanics of the event, we discuss the context its conduct and outcomes in the context of current shifts in the governance of Curtin University. This reflection is informed by responses from 20 of the forum's participants to a post-event questionnaire, which sought to interrogate how various actors understood the process represented by the forum and how they reflected on their experience of engagement in it.

The event

The Building 201.1 Re-life Forum was held on Wednesday 23 November 2011 from 12-3 pm in a large flatbed classroom in Building 201. It was attended by 42 people, of whom most were staff and students of SOBE – principally from the Architecture, Interior Architecture and Planning departments, but also including a good number of general staff. To assist us as the overall convenors, ten students from 2nd, 3rd and 4th years of the URP undergraduate degree facilitated and recorded the small group discussions.

Following a brief introduction by the Head of School and a representative from Properties, the forum mainly consisted of two breakout sessions (brainstorming discussions in small groups of up to 8 people): the first to identify needs and challenges in relation to the building, the second to 'vision' the type of facilities that the Re-life project should aim to achieve from various perspectives, as below:

Breakout Session 1 – all tables addressed the same four questions:

- Experiences of the building
- Things that need to change
- Things that need to stay
- Top three priorities

Breakout Session 2 – each participant chose a table which discussed ONE of the following questions:

- What would an exemplary set of teaching spaces for Built Environment be like?
- What would ideal research facilities be like?
- What facilities and spaces would help to enhance the student experience?
- What would enhance the building as a working environment for all staff?
- What are some of the crucial technical, design, performance and procurement issues to consider?

In addition to these scheduled activities, material was displayed in poster form around the room which showed a range of comments received before the forum from interested parties, as well as some historical information – including the original 1970 and current floor plans of Building 201 – and statements of its architectural significance. At the end of the event, many participants submitted additional comments – about the building, about the forum, and about possible futures – via a small form provided to them (Appendix 1), or in another format.

The discussions brought out a wide range of issues with the building and hopes for its future. These formed the basis of a report that was compiled and presented to the Head of School, which was also circulated to participants in January 2012. While those issues are not the subject of this paper, some points on which almost all participants agreed are listed below to give a flavour of the discussion. These included:

- Current poor environmental performance and the need to improve comfort levels.
- The need for flexibility/adaptability, particularly over the long term.
- Teaching and learning facilities should cater better for our particular departments' needs (especially in relation to studio and workshop space).
- The importance of the existing resource centre (a low-key library, equipment bank and communal workspace) in supporting undergraduate study, and its constantly overcrowded state.
- A critical shortage of informal common spaces (for both staff and students).
- Various problems resulting from over-centralised space management, particularly in relation to teaching and postgraduate research.
- The opportunity for the re-lived building to express high aspirations and act to attract quality staff and students.

Much of the feedback from participants was accompanied by an overtly expressed sense of frustration that there was not yet a clear commitment from the University (for instance, in the form of an approved budget or even of a line item in the next budget) to the Re-life 201.1 project. However, we were pleased to find that this frustration did not seem to prevent participants from taking the exercise seriously – neither from contributing their experiences, opinions and expertise, nor from listening respectfully to those of others. Moreover, almost all participants expressed interest in being involved in similar exercises as the project progresses –

even though several were dubious about whether it would do so. In what follows, we reflect on this (to us, somewhat surprising) outcome. We describe its place in the context of broader institutional changes affecting university management before outlining what we were trying to achieve, drawing upon theoretical norms of deliberative democracy, and briefly evaluating the outcomes. We conclude that even the most cynical participants responded well to the chance to discuss common problems, supporting the idea that opportunities for deliberation can enhance an institutional environment that is undergoing rapid, difficult change.

Context

It is well known that public universities in Australia – as elsewhere – have been subject to immense change since the Dawkins reforms of the late 1980s. Rapid shifts towards a profit-making model, coupled with ever-increasing managerialism⁵, have led to a crisis of academic identity and high levels of dissatisfaction within the academic workforce, which might be attributed partly to a crisis of academic identity (Winter 2009; Churchman 2006) and a general perceived erosion of traditional scholarship in favour of a more corporate orientation to knowledge production (Winter et al. 2000). This discontent, according to some enquiries (e.g. Harman 2007), seems to be particularly rife within humanities and social science disciplines – such as the School of Built Environment within Curtin University's structure.

Equally importantly, complex and ever-evolving organisational structures place demands on employees to perform across various facets of ever-expanding job descriptions, which in turn lead to greatly increased workloads, to the point where many academics can only find time for research by 'fiddling' it from their leisure/home time (Anderson 2006). They also tend to create a culture of competition for survival and covering one's back (Winter et al. 2000). Trust between employees and the management and also among the employees themselves tends to be eroded with trust and social capital becoming rare commodities. This situation can be made worse by the fact that colleagues sharing the work space often are too time-stressed to engage in normal social interaction amongst themselves other than with those within their working teams. The disconnect created by the University-wide centralisation of functions such as timetabling and classroom allocations further worsen the situation by creating a disconnect between workplace teams who share common tasks and workplace spaces where various tasks are performed. It may be noted here that this was a recurring comment made at the forum.

At Curtin University, these problems have been highlighted in our annual staff survey, "YourVoice"⁶. In this survey, staff consistently cite poor communication and mistrust of senior management as sources of unhappiness, while relying on relationships with their immediate departmental colleagues for job satisfaction (see e.g. <http://blogs.curtin.edu.au/your-voice/files/2010/12/your-voice-newsletter-2010.pdf>). Over-reliance on immediate colleagues tend to lead to a situation where issues with the workplace are either ignored or tackled in isolation. The solutions adopted thus may serve the needs or interests of some groups better than that of others. Because workplace issues are often not framed as common problems requiring wider interaction and input from the users of the workplace, solutions are likely to be piecemeal.

In this context, it is easy to be cynical about an event such as the 201.1 Re-life forum; to see it as a disingenuous attempt either to legitimise management decisions with the 'stamp' of consultation, or to 'manage' potential conflict resulting from stakeholder dissatisfaction. Indeed, our initial discussions with staff from the university's Properties section suggested to us that the principal aim of the forum was to manage or contain the high levels of interest and criticism already evident in comments from the architecture staff by giving it a formal site for expression. Nonetheless, we were determined to take up the exercise seriously as an opportunity to gather stakeholders together to deal with a common problem. We hoped that the resulting personal interaction might help to break down the perception of competition among the parties and effectively de-emphasize the need to protect and pursue self-interest. We hoped, therefore, that the forum could perhaps lead to greater cooperation, trust and a sense of common good – an oft-noted benefit of deliberative planning (e.g. Innes and Booher 2010).

Norms of deliberation

A large selection of normative principles exist for the practice of deliberation, predicated on the belief that democratic legitimacy inheres more in the process of decision making than in the substance of decisions (e.g. Benhabib 1996; Mansbridge 1995; Elster 1998). While specific evaluative criteria differ in emphasis, there is general agreement on several conceptual norms, which are summarised by Hartz-Karp (2007), for example, as *representation*, *deliberation*, and *influence*. The first of these concerns a requirement that all citizens, especially those affected by resulting decisions, have the chance to be represented in the process – representation is, in practice, often a proxy for the broader, more ethically founded notion of *inclusion* (O'Neill

⁵ Remember when deans were elected by their peers?

⁶ Note the 'you' in this construction – a (no doubt unintentional) realisation of the gap between management and 'the rest'.

2001; Little et al. 2002; Margerum 2002; Hopkins 2004) or, as Gutmann and Thompson (1996) would have it, *fair opportunity*. Certainly, it was relatively easy for this forum to reach out to most users of the workplace who could be affected by the Re-life project. We had the advantage of access to the university's staff and student mailing lists, and were able – in a small way – to incorporate written contributions from those who could not attend in person. We also attempted to provide a representative 'voice' for future users by inviting 'experts' from our Office of Assessment Teaching and Learning (who sent a representative) and Office of Research and Development (who did not).

However, we also faced some problems in relation to the criterion of representation. Firstly, the identification of participants was somewhat subjective and pragmatic. While 'stakeholders' was supposed by management to include a range of external interests, for example the accrediting bodies for our courses (PIA, in our case), we decided that the presence of people who did not actually use the building (and who might therefore not be very familiar with it) would confuse the conversation, in particular by requiring a different level of information provision. Secondly, and perhaps more critically, because the consultation process was limited to a single event (albeit with the 'written comment' option), it is likely that some stakeholders were excluded. In particular, the timing of the event, just after the end of semester examination period, meant that quite a lot of students and staff were on holiday or otherwise not especially focussed on the university environment. This timing was dictated by administrative needs, rather than democratic ones, and may have resulted in a somewhat skewed participation. Those who did attend cannot realistically be called 'representatives' of any groups, because they were self-selected. As such, the forum would be best considered as part of a wider-reaching process – a possibility that remains at the discretion of the university management and the consultants undertaking the next stage of the Re-life project.

In relation to the 'deliberation' criterion, we might see this as a requirement that participants adhere to principles of what Innes (1995, 2004; Innes and Booher 2010) calls 'authentic dialogue', a commitment to (Habermasian) communicative principles of comprehensibility, sincerity, legitimacy and truth (Forester 1993, 1989). Assuming, as we do, that it is not possible to eliminate power inequalities or even to regulate them through ground rules this implies that, following Gutmann and Thompson (1996), deliberative forums must protect co-operators and provide incentives to participants to listen open-mindedly to others' points of view.

In the case of the forum, it must be noted that its topic could potentially be seen as representing a common problem and that the way its solution was approached would positively or negatively affect all users of the workplace in some form or the other – a realisation of Innes and Booher's (2010) 'interdependency of interests' and a crucial incentive for participation in consensus building processes. However, it could also be safely concluded that whichever approach to defining and/ or solving problems was to be taken, the consequences would not be immediately drastic or severe for anyone –the issue lacked the kind of 'spark' of urgency that often motivates participants to seek mutually satisfying solutions. Also, given the nature of the institution, while there is likely to be some reservation of speaking out for fear of being noticed and perhaps noted down mentally as 'uncooperative' or 'unsociable' by others, outright discrimination or persecution would be seen as highly unlikely to occur. It could be safely assumed that we work in an environment that is (or should be) characterised by a healthy respect for divergence of opinion, not to mention one that encourages rhetorical (even if not cooperative) debate. In a forum not oriented to 'hard' decision making, we felt that this scarcely mattered – though it might become significant if and when the project moves forward.

Gutmann and Thompson (1996) claim that the mere adoption of a deliberative *process* is not enough to ensure 'moral reasoning' in democratic decision making: they prescribe instead a framework that blurs boundaries between procedure and substance: "Deliberative democracy seeks not consensus for its own sake but rather a morally justified consensus" (1996: 42). They list several essential requirements. The first and most important requirement is *reciprocity*, which ensures free and open dialogue in a spirit of interest in each other's welfare as well as one's own.⁷ This was easily attainable mainly because the stakes at this stage of the Re-life project were not high and there were no clearly defined winning and losing alternatives. Most of the discussion was aspirational and no tangible visions were produced. As such cooperation was easy to achieve and, as we have noted, reciprocity was practised in terms of allowing others' opinions to be heard and respecting their input.

The second requirement is *accountability* or *public reasoning*, which requires that representatives expose their reasons and arguments to each other and also to their constituents, thus taking into account rationality and mutual accountability. This was also easily achieved, partly because participants were not representatives in any strict sense, but perhaps mainly because the forum did not identify any party as the 'officials' or 'regulators' while the others were identified as 'citizens', as would be normal in the context of application of deliberative democracy. While the Head of School and the representative of the Properties

⁷ 'Reciprocity' in Gutmann's and Thompson's framework lies between 'impartiality', which assumes a *universality* of interests and 'prudence', based on self interest – or seeking 'mutual gains' in the lingo of alternative dispute resolution (Fisher and Ury 1981) – alone.

Office could be seen as personifying authority due to their managerial / technocratic positions, they were not acknowledged as such except at the initial opening when they made brief introductions. Immediately following that, the forum was taken over by the authors and discussions around the tables were facilitated and recorded by students. In the absence of such distinction, the forum yielded the chance for dialogue among equals and one where participants were willing to be moved by reason. This intention – perhaps surprisingly given that it represents a somewhat ‘naive’ view of power (e.g. McGuirk 2001; Huxley and Yiftachel 2000; others) – seems to have been largely realised; records from the tables at which these ‘authorities’ sat show divergent opinions and rationales. One participant, however, a young research assistant on casual contract, did report verbally that they found the presence of the HOS at their table a little inhibiting.

Related to this requirement, ‘good deliberation’ is also generally considered to be informed by good knowledge, and by comprehensive information which is equally accessible to all participants (Hartz-Karp 2007; Innes 2004). We contend that guaranteeing (or even pursuing) equally accessible knowledge among all participants is impractical if not impossible in most contexts. However, it can be quite practical to strive for equal access to information. In the case of the forum, for example, though we provided what we could in the way of project background and published information about the building, it was not possible to meet the condition of equal access to knowledge given that most of the academics and students participating were specialists in one aspect or another of production of the built environment and at various stages of training. This would result in different areas of knowledge being possessed by each participant. Furthermore, participants also included administrative staff who would have a greater knowledge of administrative matters rather than specialist knowledge related to the built environment. Most participants, however, seemed to have made good use of each other’s expertise/experience. Two students commented later that they had learnt more about the school as a whole (as a set of departments and functions) during the hours of the forum than they had ever suspected was there. Another participant, a lecturer in architecture: “I was heartened to see not only the number of people, but also the diversity of backgrounds, interests and expertise”.

The third of Gutmann and Thompson’s points is ‘*publicity*’ of reasoning and transparency of the process, something normally achieved through the establishment of ‘ground rules’. This was easily achieved again because of the absence of ‘administrators’ leading the process. The authors, coordinating and facilitating the forum, were careful not to imply any special status resulting from either some notion of authority or expertise. Our role was clearly spelt out as mere coordinators/ facilitators of an event that could fit into the larger decision-making process carried out later by others. The overall process was explained at the onset to all participants, and student facilitators were briefed in detail on how to manage the dialogue – something that they succeeded in remarkably well (this was commented upon by many participants). More difficult in this respect was how to deal with an intrinsic lack of clarity about the purpose, scope and influence of the forum itself – something that we discuss further below.

A fourth principle, *liberty*, implies a lack of coercion or pressure to participate (or not to), to adopt particular points of view, or to agree prematurely with a forced ‘consensus’. Again, this kind of freedom was simple to achieve – indeed it was assumed by participants, and clearly apparent in their conduct, that discussions and deliberation would be unconstrained within the broad structure that was provided at the onset of the sessions. Moreover, in spite of this free discussion, a fair degree of consensus was achieved. However, freedom also refers to the ability to act on the basis of results of the deliberation, something that resonates with Hartz-Karp’s third norm, *influence*. This may be seen as somewhat tricky because many participants did not believe that the decisions taken at the forum would necessarily translate into action. We attempted to limit ambitions to ‘input to the project definition statement’, which many found unsatisfactory. At this stage, there is no commitment from the university to act on the outcomes of the forum – probably rightly given some of the issues noted above about representation and incompleteness.

Since the forum a report, documenting the discussions and foregrounding some issues on which there was general agreement, has been circulated to participants. This report has also been given for information purposes to a consultant architect, Geoff Warn (of Donaldson and Warn) who has now been engaged to develop proposals for building works following the sudden, alarming collapse of Building 201’s ceiling in March this year.⁸ Whether the outcome of the forum will amount to ‘influence’ remains to be seen.

Certainly, some of the participants remain unconvinced. Four responses to the survey were dominated by their authors’ reaction to the lack of budgetary commitment and a perception that the politics of the projects history were behind management’s decision to hold the forum: “I was hoping the forum might cut through all

⁸ The ceiling disaster coincided, both ironically and fortuitously, with the initial circulation of our forum report – a catalyst for action! However, it should be noted that the project is still at the planning stage and no firm commitment has yet been made to fund the necessary works.

the politics, but it was not to be ... the university can now drag its feet ...". Most disappointingly, two of these responses were from planning students – an experience intended to enhance their interest in and approach to community engagement served instead to disillusion them somewhat: "[the university's purpose was] to add weight to an already set agenda, to complete a compulsory consultation process"). Nonetheless, their behaviour on the day did not reflect this disillusionment, and overall the experience of participants seems to have been positive.

In general though, on the basis of the feedback we received, including that from the post-hoc questionnaire, we would consider the forum a success. A majority of participants claimed to have enjoyed the event, to have learnt more about their colleagues' concerns, and to have had ample opportunity to express themselves. Given the potential for the project's historical baggage to negatively affect the conversation, this could be seen as a positive result. The forum was seen by most as a rare opportunity for a dialogue that could help move away from apathy and mistrust between real and imaginary divergent interests among the various users sharing the work environment. For example, one participant commented, "I was able to engage with a group of students and was interested to learn how important a sense of ownership is to them ...". It provided a means to promote face-to-face interaction among colleagues and co-workers sharing the space, resulting in discussions aimed at identifying and resolving issues through a reasoned (and structured) dialogue. As such, the forum presented itself as a chance to identify, recognise and share common concerns relating to the place we work in.

Concluding remarks

Whether the Forum remains as a one-off event or is adopted by the management as a process to deal with similar issues remains to be seen. Meanwhile, however, we claim that the Forum at a minimum has contributed positively as a small step towards conceptualising and realising the possibility of a deliberative and participatory organisational culture.

We borrow the words of Joshua Cohen (1997, p.99), to describe the role we believe the Forum has played in progressing towards "a framework of social and institutional conditions that facilitates free discussion among equal citizens - by providing favourable conditions for participation, association, and expression". We believe it has done so among those sharing the workplace and those thereby likely to be affected by the manner in which the common problem is perceived and resolved. However, the Forum has never claimed to be an event that would fulfil all the conditions seen as prerequisite for deliberative democracy. It has been promoted as a means to generate dialogue and, hopefully, enhanced collegiality. Cohen sees deliberative democracy as a process that "ties the authorization to exercise public power (and the exercise itself) to such discussion" (Cohen 1997, p.99). The Forum was not designed to directly serve such purpose. As explained to participants at the outset, the Forum was meant to merely inform the design and decision making process that is to be picked up later by someone else. The initial opening statement by the Head of School about the lack of budget approval for the Re-life project served to further undermine the expectation of action emanating from the discussions and decisions made at the Forum.

We concede that the deliberation that was made possible by the Forum may remain absent from further decision-making. However, there is no doubt that it has served as a positive precedent. There is good reason to believe that it has created a perception of 'empowerment' or at least improved collegiality among the various users of the workplace. More importantly, the positive approach by participants that included academic staff, general staff and students, should serve to encourage the senior management to undertake further deliberative events such as this forum.

References

- Anderson, G. (2006), Carving out time and space in the managerial university. *Journal of Organizational Change Management*, 19(5), 578-592.
- Benhabib, S. (1996), Toward a Deliberative Model of Democratic Legitimacy. In S. Benhabib (Ed.), *Democracy and Difference: Contesting the Boundaries of the Political*, Princeton, New Jersey: Princeton University Press, pp. 67-94.
- Churchman, D. (2006), Institutional Commitments, Individual Compromises: Identity-related responses to compromise in an Australian university. *Journal of Higher Education Policy and Management*, 28(13-15),
- Cohen, J. (1997), Procedure and Substance in Deliberative Democracy in Essays in James Bohman and William Rehg (Eds) *Reason and Politics: Deliberative Democracy*, Cambridge: MIT Press.
- Elster, J. (1998), Introduction. In J. Elster (Ed.), *Deliberative Democracy*, Cambridge: Cambridge University Press, pp. 1-18..
- Fisher, R. and Ury, W. (1981), *Getting to Yes: Negotiating Agreement Without Giving In*, London: Penguin.

- Forester, J. (1989), *Planning in the Face of Power* (1989 ed.), Berkeley: University of California Press.
- Forester, J. (1993), *Critical Theory, public Policy and Planning Practice: Toward a Critical Pragmatism*. Albany: State University of New York Press.
- Gutmann, A., & Thompson, D. (1996), *Democracy and disagreement*. Cambridge, Mass.: the Belknap Press of Harvard University Press.
- Hartz-Karp, J. (2007), How and Why Deliberative Democracy Enables Co-Intelligence and Brings Wisdom to Governance. *Journal of Public Deliberation*, 3(1), Article 6.
- Hopkins, D. (2004, September), *Deliberative democracy in planning practice: important departures from theory*. Paper presented at the Annual Conference of the Australia and New Zealand Association of Planning Schools, Perth.
- Huxley, M., & Yiftachel, O. (2000), New Paradigm or Old Myopia? Unsettling the Communicative Turn in Planning Theory, from Symposium: The Limits to Communicative Planning Theory. *Journal of Planning Education and Research*, 19, 333-342.
- Innes, J., & Booher, D. (2010), *Planning with Complexity: An introduction to collaborative rationality for public policy*. London: Routledge.
- Innes, J. E. (1995), Planning Theory's Emerging Paradigm: Communicative Action and Interactive Practice. *Journal of Planning Education and Research*, 14(3), 183-189.
- Innes, J. E. (2004), Consensus building: clarifications for the critics. *Planning Theory*, 3(1), 5-20.
- Little, M., Jordens, C. F. C., Paul, K., Sayers, E.-J., Cruikshank, J. A., Stegeman, J., & Montgomery, K. (2002), Discourse in different voices: reconciling N = 1 and N = many. *Social Science and Medicine*, 55(7), 1079-1087.
- Mansbridge, J. (1995), A deliberative perspective on neocorporatism. In E. Wright (Ed.), *Associations and Democracy*. London: Verso.
- Margerum, R. D. (2002), Collaborative Planning: Building Consensus and Building a Distinct Model for Practice. *Journal of Planning Education and Research*, 21(2), 237-253.
- McGuirk, P. M. (2001), Situating communicative planning theory: context, power, and knowledge. *Environment and Planning A*, 33(2), 195-217.
- O'Neill, J. (2001), Representing people, representing nature, representing the world. *Environment and Planning C: Government and Policy*, 19, 483-500.
- Winter, R. (2009), Academic manager or managed academic? Academic identity schisms in higher education, *Journal of Higher Education Policy and Management*, 31(2), 121-131.
- Winter, R., Taylor, T., & Sarros, J. (2000), Trouble at Mill: Quality of academic worklife issues within a comprehensive Australian university. *Studies in Higher Education*, 25(3), 279-294.

Appendix 1: post-event comment form

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Building 2012 Re-life Project
Future Involvement Study

1. What are your 3 top priorities to come out of today's forum?

2. Do you have important issues or needs that did not come out in today's forum?

3. Do you wish to be further involved in planning for the Building 2012 Re-life project after today's forum? If so, how?

What Do Current Planning Students and Recent Graduates Think Planners Do?

Lachlan McClure¹, Ruth Potts², Aysin Dedekorkut-Howes² and Mellini Sloan¹

Queensland University of Technology¹ and Griffith University²

Abstract

A planner's view of the purpose of their actions, the role they play, the focus of their work and in whose interest they operate greatly influence their approach to planning and the outcome of their work. However there is no common and established understanding within the profession on these themes. Contemporary planning theory, practice and education is characterised by the parallel existence of multiple, often contradictory schools of thought. What values and perspectives are held by the next generation of planning professionals as they emerge from contemporary planning programs? This preliminary investigation seeks to identify the views and perspectives of early career planners on the purpose and role of planning, the degree to which planning is oriented on the future and the nature of the public interest, using various schools of planning thought as a thematic framework. In the current phase of a larger project, extant students and recent graduates from planning courses at three Queensland universities were surveyed electronically to ascertain their views, with plans to undertake a broader study of similar populations across Australia. Within the current pilot, students and graduates did not identify strongly with a single school of planning thought, but favoured contrasting rational and collaborative definitions of the role and purpose of planning and the public interest and pragmatic concepts of partial knowledge of the future and the value of experience in managing present issues.

Keywords: planning education; student views of planning; early career views of planning

1.0 Introduction

The Planning Institute of Australia's *Accreditation Policy for the Recognition of Australian Planning Qualifications* (2011) requires that graduates have '(k)nowledge of planning theory and (the) capacity to critically apply this theory as a framework for undertaking planning' (p. 11). Planning theory does not, however, exist as a unitary voice, with differing views as to the underlying purpose of planning, the roles of planners, the appropriate foci of their work and the identification of the interests planning serves, or is supposed to serve (Campbell and Feinstein, 2003; Hemmens, 2007), giving rise to various distinct schools of planning thought (Connell, 2010). The diversity of these schools is further complicated by the long acknowledged reality that planners, as fallible humans, can not truly operate outside the context and influence of their personal values and perspectives (Stollman, 1979; Howe and Kaufman, 1981), with even the basic planning tasks of defining problems and selecting priorities acknowledged as value-laden and political acts (Davidoff and Reiner, 1962). Given the significance of planning education in shaping a planner's ideology, the influence of such ideology on professional practice (Gunder, 2004; Poxon, 2001; Teitz, 1984; Dalton, 2001), and the consequent impacts of these views on society at large, it is pertinent to reflect on the question of what perspectives of planning practice are held by the emerging generation of planners in Australia, and to further consider possibilities for re-shaping how the academy teaches planning theory.

This study, conducted primarily by two postgraduate planning students, each having recently completed undergraduate planning degrees, seeks to clarify the outcomes of planning education, examining views and perspectives of fellow students and graduates, the emerging generation of planning professionals. While academic staff were involved in the project, it was primarily in a consultative role at this stage, with expectations of participation to grow as the project shifts into recommendations for planning educators, an early set of which are included in the conclusions of this paper.

The current study draws on literature on both planning pedagogy and schools of planning thought and the results of a statistical analysis of a pilot survey of extant students and recent graduates to investigate their perspectives on a number of themes. These themes include the purpose of planning, the role of planning, the future orientation of planning and existence and nature of the public interest in planning. Particular perspectives on these themes identify with particular schools of planning thought including the rational, new right, critical, pragmatic, advocacy, and postmodern schools (Allmendinger, 2002; Connell, 2010). The analysis identifies what perspectives are favoured and how diverse the range of perspectives is on a particular theme, how consistently group perspectives correlate across themes with particular schools of thought and how student and graduate perspective differ.

2.0 Planning Education

2.1 History of Planning Education

Planning education has evolved simultaneously to shifts in philosophy within the planning profession and has been shaped by emerging planning theory, political agendas and historical events. Early planning practice grew out of schools of architecture in England in the late 1800s and responded to societal concerns surrounding the social and environmental impacts of the industrial revolution by constructing parks, open spaces and destroying slums in an attempt to improve physical conditions. Although admirable, the design-oriented focus of the profession failed to fully resolve the root cause of the problems of urban areas pre-WWII.

The post-WWII reconstruction efforts in England stimulated a shift in the role of the planner from being a city architect and aesthetic-focused designer, to a public servant focused on land use planning (Sandercock and Berry, 1983). Consequently, planning education for the emerging specialized profession in England from the 1940s was defined by the idea that *'to plan was to express in a drawing the form of existing or proposed land uses and buildings, and that town planning was concerned with the arrangement of land uses and communication routes in the most satisfactory practicable form'* (Sandercock and Berry, 1983, p.35).

Planning was first taught in Australia in the 1950s, at the South Australian School of Mines and Industries, the University of Sydney, and the University of Melbourne, primarily by British expatriate planners (Hamnett, 1999). The design and architecture-based rhetoric of the early 1900s continued to dominate planning education in these *'technical, apolitical, supposedly "value-free" specialist and design-oriented planning courses'* (Sandercock, 1983, p.36). These courses relied on the concept of rationalism that is based on the assumption that logical, scientific knowledge and processes can be applied to society to improve conditions (Watson, 2001). Sandercock and Berry (1983) and Watson (2001) argue that it was evident by the 1970s that the rational paradigm-based planning education of the 1940s and 1950s resulted in planning professionals who were ill-equipped to deal with the large-scale social, economic and political dimensions of urban conurbations that expanded after the war.

During the 1970s there was a shift in the focus of planning education, which proposed a greater theoretical and professional recognition of the political and social role planners now fulfilled in practice and that planners should have a greater focus on social and community issues (Stretton, 1970). Consequently, there was considerable growth in para-planning courses in Australia to retrain planners in the emergent post-positivist paradigm (Sandercock and Berry, 1983). Planning education of the 1970s rejected the rational model and stepped away from its design origins towards the supposition that *'urban planning is really a social science, or a policy science and that questions of design belong in the architecture schools'* (Sandercock, 1997, p.94).

By the mid-1970s significant and ongoing criticism argued that the focus on land use planning had led to planners becoming tools of *'the process of capital accumulation...powerless to do anything but follow and assist the logic of capitalist development'* (Sandercock, 1983, p.39). Based on these neo-Marxist criticisms, programs in urban studies which placed emphasis on the ability to critically analyse the urban environment and the role of planning emerged. These courses emphasised the philosophy that planners should be more than facilitators of capital accumulation (Sandercock, 1997).

Planning education in Australia followed worldwide trends. Despite criticism, the rational model has remained a core element of many planning programs largely because few theories have supplanted the firm grasp of rationality on the planning profession (Hemmens, 1980). However during the 1980s economic liberalism and communicative action introduced alternative planning philosophies. The communicative theory provided *'a new way of understanding action, or what a planner does, as attention shaping (communicative action), rather than more narrowly as a means to a particular action'* (Forester, 1980, p.275).

Emphasis on the environment and sustainable development gained increasing attention in planning programs and courses during the 1980s. Environmentalism emerged on the international policy agenda following the release of the *World Conservation Strategy* (IUCN, 1980; Weiss, 1988) and gained greater traction in planning programs following the publication of *Our Common Future (Brundtland Report)* (IUCN, 1980). This led to further critique of the purpose of planning and the role of the planner in responding to environmental issues which eventually led to a gradual widening of the scope of the identity of the planning profession (Weiss, 1988; Colman, 1993).

By the mid-1990s there was greater focus on linking practice and education through the practice movement. This movement was centred on the notion of learning from practice to inform practice. Planning programs began examining *'planning as an activity and on the actual practices of planners as they undertake work that*

is now accepted as fundamentally political in nature' (Watson, 2001, p.179). The pragmatist planning philosophy relates planners' success to their intuition and ability to draw on experience. The practice movement resulted in practical experience-based planning courses becoming central to Australian planning education during the 1990s. Practicum courses were introduced worldwide to have students engage with the planning profession and to encourage students to reflect and participate in dialogues surrounding planning practice (Hughes, 1998; Brooks et al., 2002; Coiacetto, 2004).

2.2 Links between Planning Education and Practice

The theories and philosophies students are exposed to throughout their education undoubtedly shape their understanding of planning and inform professional practice (Gunder, 2004; Poxon, 2001; Teitz, 1984; Dalton, 2001). A comparison of planning programs in Australia and New Zealand found that the location of the planning program within a university school structure influenced the philosophies and skills taught. Planning programs within design or architecture schools had more policy courses than programs within science schools (Gunder and Fookes, 1997).

Beauregard (1995) argues that planning theory only became a core element of planning education in the 1960s, after the profession had formed an identity separate from its architectural roots. Existing planning programs in Australia tend to waver between presenting a multitude of different planning models and focusing primarily on the practicalities of professional practice. This has meant that planners emerging from such programs have entered the profession with a broadly inconsistent and fragmented theoretical grounding. However, Gunder and Fookes (1997) argue that the strength of Australian planning education is that it presents a diverse range of perspectives rather than a single philosophy or theoretical underpinning.

The purpose of planning education is to prepare prospective planners for the realities of the profession and provide them with appropriate knowledge, understanding of theory and skill levels. Planning programs are designed to '*expose the student to the various ethical and ideological frameworks that influence planning decision-making*' (Burayidi, 1993). Consequently, it is important that planning programs are structured to provide students with the knowledge and skills that practice will demand them to have (Gunder and Fookes, 1997; Memon and Cullen, 1988; Colman, 1993). The scope of the planning profession has broadened significantly since the profession's inception. Many planning graduates will gain employment in traditional, rational land-use planning positions, while others will be employed in less traditional roles such as environmental planners and officers, in public health, community services, transportation and mining. This broadening has required planning education programs to also offer a broader array of elective courses providing students with a greater number of multidisciplinary skills and knowledge.

3.0 Views and Perspectives of Planning Practice

Various views of the purpose and role of planning, the degree to which it is oriented on the future and concepts of the nature of the public interest are held by planners. These views frame and influence planning practice. Different perspectives on these themes reflect the various fields and specialities of planning, the broad range of intellectual influences on the profession and the different world views, ideologies and experiences of planners. The lack of a commonly agreed view on these themes within the profession (Campbell and Feinstein, 2003; Hemmens, 2007) underpins and separates the various schools of planning thought (Connell, 2010).

This investigation required a framework or scale of perspectives held by planners on the role and purpose of planning, future orientation and public interest. Various typologies of planning theory offer a framework including the procedural-substantive dichotomy (Faludi, 1973), Hudson's (1979) differentiation between synoptic, incremental, transitive, advocacy and radical schools, Friedman's (1987) identification of societal reform, policy analysis, social learning and social mobilisation traditions and Yiftachel's (1989) typology based on explanatory-prescriptive and substantive-procedural dimensions. Allmendinger's (2002) typology differentiates between the systems and rational, new right, critical, pragmatic, advocacy, postmodern and collaborative schools of thought. Under this typology, a school of thought is '*a collection of mostly coherent and self-supporting theories/ideas/philosophies*' (Allmendinger, 2002, p.X). Connell (2010) outlines the different positions and views of each school on the philosophy of knowledge, purpose and role of planning, future orientation and the public interest.

Allmendinger's (2002) typology of schools of planning thought and Connell's (2010) account of each school's perspectives and positions is used as a framework to structure survey questions and responses. The purpose of this article is not to debate planning theory, this typology of planning theory is merely used to structure and categorise student and graduate perspectives on questions of the role and purpose of planning, future orientation and the public interest. This typology, presented in Table 1, was selected as it has previously been used as a framework by Connell (2010) to discuss the themes being investigated.

Table 1: Comparisons of Schools of Planning Thought (adapted from Almendinger, 2002 and Connell, 2010)

	Rational	Critical	New Right	Pragmatic	Advocacy	Postmodern	Collaborative
Philosophy	Positivist	Positivist	Positivist	Pragmatic	Post-positivist	Post-positivist	Post-positivist
Decision or Process Orientation	Make or enact decisions	Enact decisions	Make decisions	Make decisions	Manage processes	Manage processes	Manage processes
Decisions Make	Concerned with predicting controlling activities	Complicit in patterns of accumulation & distribution	Mediate local externalities of issues & problems	Manage present problems	Address inequalities among stakeholders	Engage diverse stakeholders	Support communicative decision making
Role of Planners	Expert technical professionals	Instruments entrenched systems	Facilitators of efficient market	Experienced practitioners act on ideas	Advocates of marginalised groups	Narrators of different experiences & values	Facilitators of collaboration & agreement
Future Orientation	Strong: predict & control	Critique: strong	Moderate: defer to market	Weak: spontaneous order	Weak: injustices	Weak: diversity	Moderate: collaborative visioning
Knowledge of Future	Knowable through modelling forecasting	Knowable through & extrapolation of existing conditions	Partially knowable through analysis of market trends	Partially knowable through intuition & experience	Partially knowable through extrapolation of present injustices	Unknownable: involves complex & unstructured events	Unknownable: involves individual decisions
Public Interest Alternative	Public interest of maximum utility	False interest status quo	Greatest overall individual freedom	What works benefits community	& Pluralist: guided by social justice	Pluralist: aims to support diversity	Pluralist: substitutes understanding & agreement

3.1 The Pluralism of Planning Approaches

While the shifting influences on practice can be traced, no single paradigm currently dominates the profession (Campbell and Feinstein, 2003; Hemmens, 2007). Rather than superseding past approaches, developments in planning theory have added to and increased the range of perspectives and theoretical rationales embraced by the profession (Hudson, 1979). Planners have a *'latitude of choice among analytical paradigms'* (Hudson, 1979, p.396). The rational tradition persists despite widespread critique as it reinforces a form of professionalization attractive to planning practitioners and institutions (Dalton, 1986). Variegated approaches have emerged such as mixed scanning, which draw on both comprehensive and incremental scales. Sager (2009) suggests that the communicative model advocated by educators and the professional community conflicts with the new public management approach favoured by politicians and administrators. Some theorists (Hudson, 1979; Dalton 1986) argue that the diverse applications of planning and the complexity of planning situations require parallel application of complementary and countervailing approaches. Ultimately no one theory has satisfied the majority of practitioners or theorists of its independent sufficiency for the profession (Hemmens, 1980).

Some see the disagreement on a single approach to or perspective of planning (Campbell and Feinstein, 2003) as providing *'several useful forms of reasoning of value to planning'* (Dalton, 1986, p.151) and embrace it under the reasoning that *'having planners with the ability to mix approaches is the only way to assure that they can respond with sensitivity to the diversity of problems and settings confronted, and to the complexity of any given situation'* (Hudson, 1979, p.396). However others have observed tensions between the unworkably conflicting values and expectations of some approaches (Sager, 2009) and issues such as the convenient and selective misuse of theoretical reasoning in justification of established decisions (March, 2010).

3.2 Planners' Views in Practice

Planning thought influences practice by providing *'a conceptual framework for organising actors' perceptions of their life worlds and consequentially informing practices and actions'* (Alexander, 2010, p.102). The schools of thought articulated through planning education influence the approaches planners may draw upon (Dalton, 1986; Alexander, 2010) and shape the beliefs and ideologies of individual planners and the larger profession (Dalton, 2001; Gunder, 2004; Poxon, 2001). While the lack of a clear understanding of formal planning theory among some planners has been noted (Friedmann, 2003), studies have shown that a planner's value positions on planning themes (Howe and Kaufman, 1981) and perspectives (Raja and Verma, 2010; Alexander, 1998) both influence professional practice and planning outcomes.

4.0 Planning Programs Surveyed in Pilot Study

The pilot study focuses on students and graduates of the three planning programs in southeast Queensland: Griffith University (GU), the Queensland University of Technology (QUT) and the University of Queensland (UQ). These programs were chosen as they account for the majority of planning graduates in Queensland and established networks and knowledge of the institutions aided survey distribution. The purpose of this paper is not to compare the differences in the teaching of planning theory or how the various schools of planning thought are articulated in planning programs; this is beyond the approved scope of this research. Basic information on the presentation of planning theory in these planning courses is provided only as a backdrop to the views and perspectives students and graduates identify.

While each planning program in the pilot study includes planning theory, some programs integrate theory throughout the program while others have dedicated theory units (see Table 2). All programs expose students to a broad range of theoretical perspectives and schools of planning thought and a broad range of readings are listed for each theory unit. As all three courses are accredited by the Planning Institute of Australia they have satisfied the requirement that graduates have *'knowledge of planning theory and capacity to critically apply this theory as a framework for undertaking planning'* (PIA, 2011, p. 11).

Table 2: Units with Substantial Planning Theory Emphases in Planning Courses

University (Location of Planning Course) - Degree Conferred	Units Identified by Review of Unit Outlines ⁹
GU (School of Environment) - Bachelor of Urban and Environmental Planning	Introduction to Environmental Planning (1017ENV) Urban Analysis (2056ENV) Planning Practicum (4016ENV/4017ENV)
QUT (School of Civil Engineering and Built Environment) - Bachelor of Urban Development (Urban and Regional Planning)	Introduction to Planning & Design (UDB161) Planning Processes & Consultation (UDB266) Planning Theory & Ethics (UDB473)
UQ (School of Geography Planning and Environmental Management) - Bachelor of Regional and Town Planning	Foundational Ideas for Planning (PLAN1100) Planning Theory (PLAN2001) Advanced Planning Theory (PLAN4001)

5.0 Methods

Survey questions were developed based on the crosscutting themes identified by Connell (2010); the purpose of planning, the role of planning, the future orientation of planning and the existence and nature of the public interest. Response scales were constructed to reflect the position and rationale of each school of planning thought on each theme, these had to be concise and yet complete. As most positions when presented in an affirmative sense appeared reasonable and agreeable, questions were phrased so that the respondents ranked each option with the aim of eliciting an indication of their favoured perspective. Respondents were asked to rank the various perspectives on each theme numerically on an absolute scale corresponding to the degree to which they agreed with that perspective. The difficulty of expressing complex opinions with a simple numerical scale is acknowledged but within the scope of this study unavoidable and considered to be of little consequence to the broad patterns observed.

The sampling frame included planning students and recent graduates of the three major planning schools in southeast Queensland as identified above (GU, QUT, and UQ). Extant undergraduate planning students predominantly in the third and fourth year of their degree were included as they have had the opportunity to be exposed to various schools of thought. Early career planning professionals who graduated in the past five years were included as their views and perspectives reflect practice. Consequently the graduate responses will indicate if student views change in response to the experience of professional practice. The pilot survey was published online using a university based online survey tool and distributed through email requests sent by faculty members, social media and personal networks. The survey was available for three weeks in June during university holidays, which may have influenced the response rate.

Statistical analyses of the pilot survey data focused on identifying four trends: the perspectives respondents favoured on each theme, the diversity of perspectives identified with on each theme, the degree to which responses across themes converge on particular schools of thought, and the degree to which student and graduate responses differ. Statistics including mean scores and standard deviations, were used to identify significant patterns in survey results. T-tests were used to identify differences between student and graduate responses.

6.0 Results

The survey was completed by 56 participants (41% QUT, 34% GU, 25% UQ), with current planning students composing two thirds of the respondents. Recent graduates which accounted for one third of the respondents completed their studies primarily in 2010 and 2011. The population of current planning students who responded to the survey is heavily weighted towards those who expect to graduate in 2012 (44%), with diminishing representation of those who are at earlier stages of study (31% class 2013, 19% 2014 and only 6% 2015). Gender bias is evident among the respondents with nearly two thirds of the respondents identifying as female. Approximately half of the respondents had completed a month or less of practical experience in the planning profession while a fifth had completed 12 months or greater.

⁹ Identified from review of published unit outlines or equivalent documents in the pilot study phase. Future efforts towards this study will involve consultation with program leaders to ascertain full listings of units with substantial planning theory components.

6.1 Philosophy of Knowledge

Three questions measured which of the three philosophies of positivist, post-positivist and pragmatic the respondents most agreed to through a three-point Likert scale in which a score of one indicates the highest level of agreement and three indicates the lowest. Overall both graduates and students identified greatest with a broad statement presenting a post-positivist view that in planning practice knowledge and information should be based on contextual evidence, experience and the interpretation of complex interactions and relationships (1.52). This was followed by the almost equally rated positivist statement (2.23) which asserted that knowledge and information should be based on value-neutral evidence, logical and systematic experimentation, observation and measurement and pragmatic statement (2.25) which asserted that knowledge and information should be based on what makes sense to practitioners from ongoing experience, incite and reflection on practice (Table 3). There is no statistically significant difference in perspectives between student and graduate groups. These results suggest that respondents may favour the contextual and experiential based information of the post-positivist planning schools while the objective and scientific information of the rational school is viewed with some scepticism.

Table 3: Generation of Knowledge and Information in Planning Practice (Mean Likert Scale Values)¹⁰

	Positivist	Post-Positivist	Pragmatic
Students (Standard Deviation)	2.22 (0.74)	1.46 (0.60)	2.32 (0.81)
Graduates (Standard Deviation)	2.26 (0.81)	1.63 (0.68)	2.11 (0.88)
All Respondents (Standard Deviation)	2.23 (0.76)	1.52 (0.63)	2.25 (0.84)
P(T<=t) two-tail	0.83	0.34	0.36

6.2 Substantive and Procedural Orientation

When asked to identify to what extent planners should focus on making decisions about outcomes or manage processes, respondents favoured a balanced approach. Nearly half of the graduates (45.95%) and students (52.63%) chose the balanced perspective, with the remaining respondents equally split between perspectives which biased substantive or procedural orientation (Table 4). This distribution of responses does not privilege either the view held by the rational school that planners make substantive decisions or the view held by the advocacy and communicative schools that planners manage processes. Again, there is no statistically significant difference in perspectives between student and graduate groups.

Table 4: Substantive & Procedural Orientations (Percentages of Respondents)

	Substantive Orientation		Balanced	Procedural Orientation	
	Make decisions about outcomes	Principally make decisions about outcomes but also manage processes	Equally make decisions about outcomes and manage processes	Principally manage processes but also make decisions about outcomes	Manage processes
Students	0.00%	24.32%	45.95%	29.73%	0.00%
Graduates	0.00%	21.05%	52.63%	21.05%	5.26%
All Respondents	0.00%	23.21%	48.21%	26.79%	1.79%

6.3 Decisions Planners Make

In response to the question of what decisions planners make measured through a seven-point rank comparison in which a score of one indicates the highest level of agreement both groups of respondents overwhelmingly identified with the rational school (Table 5). The rational school sees the planner as a decision-making with authority surrounding land uses, human activities, patterns and flows of development and manage change. The pragmatic school, which is concerned with present issues and problems, was the

¹⁰ A value of 1 indicates the highest level of agreement with 3 indicating the lowest level of agreement.

second most commonly identified perspective identified by both graduates and students. This was followed by the new right focus on the external impacts of local development markets. There is little difference in the ranked scores of the current students and graduates with the exception of the sixth and seventh ranked philosophies. This indicates that time spent and exposed to planning practice has had some, though limited influence on the perspective of graduates on their understanding of the decisions that planners make in reality.

Table 5: Decisions Planners Make (Mean Rank Values)¹¹

	Rational	Pragmatic	New Right	Collaborative	Postmodern	Advocacy	Critical
Students	2.08	3.49	4.08	4.15	4.31	4.47	5.51
Graduates	2.47	2.70	3.73	4.05	4.61	5.47	4.56

6.4 Planners' Roles in Decision-making

When asked to rank the type of decisions planners make respondents were divided between privileging rational and collaborative schools. The rational school perspective that planners are expert professionals was ranked first by 38% of respondents and the collaborative school perspective that planners are facilitators of collaboration among stakeholders by 39% of respondents while the pragmatic view of planners as experienced practitioners who act on ideas and beliefs was also consistently ranked highly (Table 6). The responses indicate that students and graduates differ in their understanding of the role of the planner. Half of the students consider that the planner's primary role in practice is to facilitate collaboration among stakeholders compared to only a fifth of graduates. Graduates most commonly identified with the perspective of planners being expert professionals followed by experienced practitioners. This suggests that the collaborative definition of planning held by students may be challenged by rational and pragmatic processes they encounter later in practice.

Table 6: Planners' Roles in Decision-making (Mean Rank Values)¹²

	Collaborative	Rational	Pragmatic	Postmodern	Advocacy	Critical	New Right
Students	2.32	3.32	3.89	3.95	4.35	4.95	5.22
Graduates	3.89	3.16	3.37	4.16	5.00	4.11	4.32

6.5 Present & Future Orientation

Half of the respondents favoured a balanced perspective with regard to consideration of future conditions and present issues, with just over a third advocating for a perspective which focused more on future conditions while still considering present issues as shown in Table 7. Students and graduates differ significantly in their orientation towards future conditions or present issues. While two thirds of graduates believed that planners should focus equally on future conditions and present issues, students were equally likely to agree that planners should focus equally to a balanced perspective or to a future orientation which still considered present issues. The higher weight placed by graduates on present issues reflects the immediacy of the issues they deal with at the work place compared to the idealism of the students. Exclusive orientations to either the future or the present were largely unsupported showing that neither future-oriented practice as held by the rational school or present-oriented practice as held by the advocacy and pragmatic schools are fully rejected. The bent toward focusing on future conditions among some respondents may cause them identify with rational school processes concerned with control and prediction over the pragmatic school's exclusive focus on the present.

¹¹ Ibid.

¹² Ibid.

Table 7: Present & Future Orientation (Percentages of Respondents)

	Present Orientation		Balanced	Future Orientation	
	Focus on present issues	Principally focus on present issues but also consider future conditions	Equally focus on future conditions and present issues	Principally focus on future conditions but also consider present issues	Focus on future issues
Students	0.00%	13.51%	43.24%	43.24%	0.00%
Graduates	5.26%	15.79%	63.15%	15.79%	0.00%
All Respondents	1.79%	14.29%	50.00%	33.93%	0.00%

6.6 Knowledge of the Future

Graduate and student perspectives on the ability of planners to forecast and know about future conditions are relatively similar, however there are differences as to the intensity of their agreement. Both groups of respondents overwhelmingly identified with the pragmatic school, supporting the idea that the future is only partially knowable (Table 8).

Table 8: Knowledge of the Future (Mean Rank Values)¹³

	Pragmatic	New Right	Advocacy	Critical	Rational	Postmodern	Collaborative
Students	2.84	3.00	3.35	4.14	4.30	4.95	5.43
Graduates	2.68	3.63	4.95	4.16	4.52	4.89	4.21

6.7 Planners & the Public Interest

When questioned as to the nature of the public interest that guides planners, respondents identified with the contrasting rational, pragmatic and collaborative philosophies (Table 9). Students most commonly ranked the rational perspective of the public interest (3) before a pragmatic perspective (3.11) followed by a collaborative perspective (3.59). This trend is reversed as graduates ranked the collaborative perspective of the public interest first (2.84), before a pragmatic perspective (3.11) followed by a rational perspective (4).

Table 9: Planners & the Public Interest (Mean Rank Values)¹⁴

	Rational	Pragmatic	Collaborative	Critical	New Right	Advocacy	Postmodern
Students	3.00	3.11	3.59	4.32	4.41	4.46	5.11
Graduates	4.00	3.11	2.84	4.79	4.26	4.47	4.53

¹³ Ibid.

¹⁴ Ibid.

7.0 Discussion

7.1 The Multiple and Dominant Schools of Thought of the Emerging Generation of Planners

Overall this investigation found that extant students and recent graduates did not consistently identify with positions related to a single school of planning thought on either an individual or group level. Particular perspectives on each theme were favoured, however these perspectives did not correlate across themes. Moreover conflicting perspectives on a range of themes were ranked consecutively. Respondents identified with a post-positivist philosophy of contextual and experiential generation of information and knowledge. On the question of the decision planners make, rational and then pragmatic perspectives were favoured, while on the question of the role of planners, rational and collaborative perspectives were equally favoured followed by a pragmatic perspective. An equal orientation towards future conditions and present issues was favoured while scepticism of the ability to fully predict future conditions is evident with respondents identifying with new right, pragmatic and advocacy perspectives of a partially knowable future. Concerning the nature of the public interest, contrasting utilitarian and communicative concepts were favoured followed by a pragmatic perspective.

These findings corroborate the literature discussed previously which has noted the parallel existence of multiple contrasting theoretical perspectives within the profession and taught in planning programs and the selective and mixed application of approaches by planners in practice. The concurrent identification with conflicting perspectives shows that either respondents have not fully considered their views, see no need to reconcile the conflict or hold that one of a number of perspectives may be validly held. The results also suggest that the professional conception and utilitarian public interest of the rational school is still held by the emerging generation of planners despite their identification with a pragmatic scepticism of knowledge of the future and the addition of collaborative roles and perspectives of the public interest. The consistently high ranking of pragmatic perspectives suggests a degree of confidence with the value of experience and the grounded practicality of the profession.

7.2 The Differences between the Student and Graduate Responses

Overall student and graduate responses reflected the same theoretical perspective, however some differences exist in the most favoured perspectives relating to the role of the planner in practice, the nature of the public interest and the degree to which planners are oriented on future conditions. Students highly favoured a collaborative perspective on the role of planners while graduates favoured the rational and pragmatic perspectives. Contrastingly, students favoured a rational perspective of the public interest while graduates showed high confidence in a collaborative perspective. Students were equally split between favouring a balanced focus and a future bias on the orientation of planning while graduates overwhelmingly favoured a balanced focus.

These differences are explicable by the varied levels of practical experience. Graduates are more likely than students to have participated as planners in decision-making and planning processes and their perspectives are informed by experience in addition to education. Graduate tendencies to recognise the planner as an expert professional may be linked to their increased interest in the professional identity of planning or the institutions they work for and are associated with. Sager (2009) emphasises this point, concluding that institutions favour the *planner as expert* philosophy of the rational school because it gives greater control over the outcomes of planning processes. Lower graduate ranking of a rational school utilitarian concept of the public interest may suggest that professional experience has demonstrated the practical difficulties of this perspective or challenged their view of the capability for objectivity in practice. Likewise the differing perspectives of the orientation of planning on future conditions may result from planning practice being more incremental and less future focused than projected by planning education.

8.0 Conclusion

Inevitably there is a variation between the planning philosophies of current students and practicing graduates due to the broadening influences of experience, time and reflection. This paper set out to analyse the consistency of planning student and planning graduate philosophies based on themes, including the purpose of planning, the role of planning, the future orientation of planning and existence and the nature of the public interest in planning. The statistical analysis of the survey responses revealed a degree of consensus between students and graduates particularly relating to the purpose of planning and the degree to which planning focuses on the future. Variations in the student and graduate philosophies were evident surrounding the role of the planner in practice and the nature of the public interest.

The lack of an overarching dominant philosophy for either group indicates that the next generation of planners are likely to follow in the footsteps of previous graduates and have varied philosophies surrounding

different components of their profession. It is likely that education has a significant role to play in shaping professional planning philosophies, however further study is necessary to confirm this. The results of the survey analysed and presented in this paper indicate that planning programs are exposing students to multiple planning philosophies and encouraging the students to build on their education through experience and practice.

References

- Alexander, E. (1998). Planning theory in practice: the case of planning Highway 6 in Israel. *Environment and Planning B: Planning and Design*, 25(3), 435-445.
- Alexander, E. (2010). Introduction: Does planning theory affect practice, and if so, how? *Planning Theory*, 9(2), 99-107.
- Allmendinger, P. (2002). *Planning Theory*. New York: Palgrave Macmillan.
- Beauregard, R. (1995). Edge Critics. *Journal of Planning Education and Research*, 14, 163-166.
- Brooks, K., Nocks, B., Farris, J., & Cunningham, M. (2002). Teaching for Practice: Implementing a Process to Integrate Work Experience in an MCRP Curriculum. *Journal of Planning Education and Research*, 22(2), 188-200.
- Burayidi, M. (1993). Dualism and Universalism: Competing Paradigms in Planning Education? *Journal of Planning Education and Research*, 12, 223-229.
- Campbell, S., & Fainstein, S. (2003). Introduction: The Structure and Debates of Planning Theory. In *Readings in Planning Theory*. Malden, Massachusetts: Blackwell Publishing
- Coiacetto, E. (2004). The Value of a Structured Planning Practicum Program: Insights from experience. *Australian Planner*, 41(2), 74-82.
- Colman, J. (1993). Planning education in the 90s. *Australian Planner*, 31(2), 19-23.
- Connell, D. (2010). Schools of Planning Thought: Exploring Differences through Similarities. *International Planning Studies*, 15(4), 269-280.
- Dalton, L. (1986). Why the Rational Paradigm Persists: The Resistance of Professional Education and Practice to Alternative Forms of Planning. *Journal of Planning Education and Research*, 5(3), 147-153.
- Dalton, L. (2001). Weaving the Fabric of Planning as Education. *Journal of Planning Education and Research*, 20(4), 423-436.
- Fainstein, S. (2000). New Directions in Planning Theory. *Urban Affairs Review*, 35(4), 451-478.
- Faludi, A. (1973) *Planning Theory*. Oxford: Pergamon.
- Forester, J. (1980). Critical Theory and Planning Practice. *Journal of the American Planning Association*, 46(3), 275-286.
- Friedmann, J. (1987). *Planning in the Public Domain: From Knowledge to Action*. Princeton, New Jersey: Princeton University Press.
- Friedmann, J. (2003). Why Do Planning Theory? *Planning Theory*, 2(1), 7-10.
- Friedmann, J. (2008). The Uses of Planning Theory. *Journal of Planning Education and Research*, 28(2), 247-257.
- Gunder, M. (2004). Shaping the Planner's Ego-Ideal. *Journal of Planning Education and Research*, 23(3), 299-311.
- Gunder, M., & Fookes, T. (1997). Planning School Programs in Australia and New Zealand: A comparison of accredited programs: vocational vs critical content. *Australian Planner*, 34(1), 54-61.
- Hamnett, S. (1999). 50 Years of Planning Education in Australia. *Australian Planner*, 36(1), 5-6.
- Hemmens, G. (1980). New Directions in Planning Theory Introduction. *Journal of the American Planning Association*, 46(3), 259-260.
- Hudson, B.(1979). Comparison of Current Planning Theories: Counterparts and Contradictions. *Journal of the American Planning Association*, 45(4), 387-398.

- Hughes, C. (1998). Practicum Learning: perils of the authentic workplace. *Higher Education Research and Development*, 17(2), 207-227.
- (IUCN) International Union for Conservation of Nature and Natural Resources. (1980). World Conservation Strategy: Living Resource Conservation for Sustainable Development. Accessed <http://data.iucn.org/dbtw-wpd/edocs/WCS-004.pdf>.
- March, A. (2010). Practising theory: When theory affects urban planning. *Planning Theory*, 9(2), 108-125.
- Memon, A., & Cullen, R. (1988). Planning education: perceptions of recently graduated practitioners. *Planning Quarterly*, 89, 20-23.
- (PIA) Planning Institute of Australia. (2011). *Accreditation Policy for the Recognition of Australian Planning Qualifications for the Urban and Regional Planning Chapter*. Accessed <http://www.planning.org.au/documents/item/3406>.
- Poxon, J. (2001). Shaping the planning profession of the future: the role of planning education. *Environment and Planning B: Planning and Design*, 28(4), 563-580.
- Raja, S., & Verma, N. (2010). Got perspective? A theoretical view of fiscal impact analysis. *Planning Theory*, 9(2), 126-136.
- Sager, T. (2008). Planners' Role: Torn between Dialogical Ideals and Neo-liberal Realities. *European Planning Studies*, 17(1), 65-84.
- Sandercock, L. (1997). The planner tamed. *Australian Planner*, 34(2), 90-95.
- Sandercock, L., & Berry, M. (1983). Educating Planners. In L. Sandercock & M. Berry (Eds.), *Urban Political Economy* (Vol. 34-44): Allen and Unwin.
- Watson, V. (2001). Do we learn from Planning Practice? The contribution of the practice movement to planning theory. *Journal of Planning Education and Research*, 22, 178-187.
- Weiss, M. (1988). Planning Education and Research: Retrospect and Prospect. *Journal of Planning Education and Research*, 7, 96-98.
- Yiftachel, O. (1989). Towards a New Typology of Urban Planning Theories. *Environment and Planning B: Planning and Design*, 16: 23-39.

Satisfactory performance by whose measure? The challenges of delivering a professional planning degree in a post-modern world at the University of New England, Armidale.

Paul McFarland & Robyn Bartel

Division of Geography and Planning, University of New England, Armidale

Abstract

University education in post-modern times requires the delivery of courses that are responsive to a variety of political, institutional, market, community and individual expectations. These expectations manifest in a multitude of different forms – economic efficiency, student satisfaction, employability, institutional frameworks. For professional degrees, such as Urban & Regional Planning, there are the added dimensions of course accreditation and employer expectations. Multi-modal forms of education delivery, i.e. a mix of internal and on-line, distance education, greatly increases the complexity. Using the Urban & Regional Planning programmes at the University of New England as a case study, this paper argues that planning courses must maintain a focus on delivering quality outcomes that are focused beyond the immediate metrics used to measure course and unit 'success' and focus on developing forward-thinking students that are capable of delivering outcomes for wider social benefit.

Keywords: Academic standards, planning, teaching, learning.

Introduction

In the last decade, or so, a series of changes have affected the way universities generally approach education and research in the broader sense. Much of this has arisen as governments have developed and implemented systems of fiscal responsibility and accountability on universities. Measures of university performance have also been made publicly available, such as the recent Australian Government's *My University* website, (Aust. Gov't, online). Such is the pace of change and the diversity of views to be answered in this post-modern world.

Higher education reforms attempt to satisfy a multitude of objectives, such as 'addressing weaknesses and build on strengths', 'putting students clearly at the centre of its reforms', 'to educate the graduates needed by an economy based on knowledge, skills and innovation, 'to participate in, and benefit from, the global knowledge economy', 'funding that meets student demand – coupled with ambitious targets, rigorous quality assurance and full transparency', and 'open the doors of higher education to a new generation' (Australian Government, 2009:5). From objectives such as these funding and monitoring systems are implemented to which universities must respond. In doing so university administrations implement systems to monitor course and unit performance using metrics such as enrolment and retention numbers, and student satisfaction surveys. These outcomes are used to encourage course, unit and teaching reform so as to improve the outcomes for immediate institutional benefit. If there is any longer-term benefit of this at the institutional level then it is implicit and more by good fortune than direct managerial intent or intervention

Further complexity is added where an institution delivers courses in different modes. Delivery of teaching in internal, full-time and by distance education, part-time modes requires different approaches (physically and technologically) in order to deliver the same learning outcomes and as close to the same experiences as possible. In addition, some courses and units use intensive schools as part of the mix, or as the prime source of teaching, and this adds another dimension to teaching and learning.

Professionally accredited degrees add a further dimension to the complexity, as accreditation requires a course / university to satisfy standards of a professional body and expectations of the industry that body represents. Such expectations may differ considerably from academic norms (Jones, *et al.*, 2009).

The complexity described is a reflection of the contemporary variety of expectations in our community and social fabric. This means that unit and course development and delivery is more than just the subject area and the view of the academic who is teaching into a course. Students, university administration, the

accrediting body and, ultimately, the government all have an affect on the structure, content and delivery of courses and units; and such views and expectations are constantly changing.

Gurran *et al.* (2008) identified the above issues in their discussion paper on planning education for the Planning Institute of Australia.

Having regard to the above issues, how then do university courses and units manage to deliver the outcomes expected by such diverse interests in and era of constant change? Whose interests are to be satisfied and what should be the focus? This paper examines these questions in the context of the University of New England's (UNE) Urban & Regional Planning (URP) Courses. The first section of the paper describes the URP courses at UNE. The section following discusses issues associated with the URP courses in the context of academic standards and student-centered learning. A discussion on the URP courses and accreditation then follows. The final section suggests some ways that planning courses can deal with immediate and sometimes competing demands while maintaining an academic focus in the structure and delivery of courses and units. The paper finally concludes that it is possible to address the multiplicity of immediate pressure so long as a focus is maintained on developing critically thinking, professional planners capable of meeting challenges that have yet to be.

UNE's URP courses in the context of the broader educational environment

Urban & Regional Planning courses at the University of New England are into their third decade. The present courses are the Diploma of Town Planning (DTP), Bachelor of urban & Regional Planning (BURP), Graduate Diploma of Urban & Regional Planning (GDURP) and the Master of Urban & Regional Planning (MURP). All these courses are taught in either full-time or part-time mode and area available on or off-campus (distance education).

Table 1 – Urban & Regional Planning Courses at the University of New England, Armidale.

Course	Duration (years full-time / part-time)	Number of Units	Credit Points	Comments
Diploma of Town Planning (DTP)	1 / 2	8	48	Articulates to the BURP
Bachelor of Urban & Regional Planning (BURP)	4 / 8	32	192	PIA accredited
Graduate Diploma in Urban & Regional Planning (GDURP)	1.5 / 3	12	72	All coursework; PIA accredited
Master of Urban & Regional Planning (MURP)	1.5 / 3	12	72	Articulates with the GDURP – 8 units coursework, 4 units dissertation; PIA accredited

Approximately 240 students are currently enrolled in UNE's URP courses; with enrolments divided in almost equal numbers between the BURP and GDURP / MURP. The ratio between external, part-time and internal, full-time enrollment is about 5:1.

Significantly, the variety of courses offered in the different modes means that in some advanced-level core units there are students with no background in planning or university study through to those with significant experience in planning, or a para-planning profession and with significant grasp of language, terminology, processes, structure, legislative framework, and so on. Added to this, just over 50% of the core units offer a non-mandatory, intensive residential school.

The Division of Geography & Planning comprises 12 full-time academic staff, of whom 3 are academically

qualified and practice-experienced planners. The remaining staff are Human Geographers (5) and Physical Geographers (4). There are staff from other disciplines that teach into the planning programme, such as English & Communication and Environmental Sciences.

A Course Advisory Committee (CAC), composed of 2 industry representatives (one from private practice; one from local government); 2 students (one undergraduate, one postgraduate); 2 academic staff (one from UNE and one from another university with a PIA accredited planning programme) and one community representative, meets annually. The CAC considers the structure and content of UNE's planning courses in the context of institutional and professional requirements. PIA's Educational Policy forms part of the terms of reference for the CAC. The Committee also tries to envisage future directions of planning education and practice.

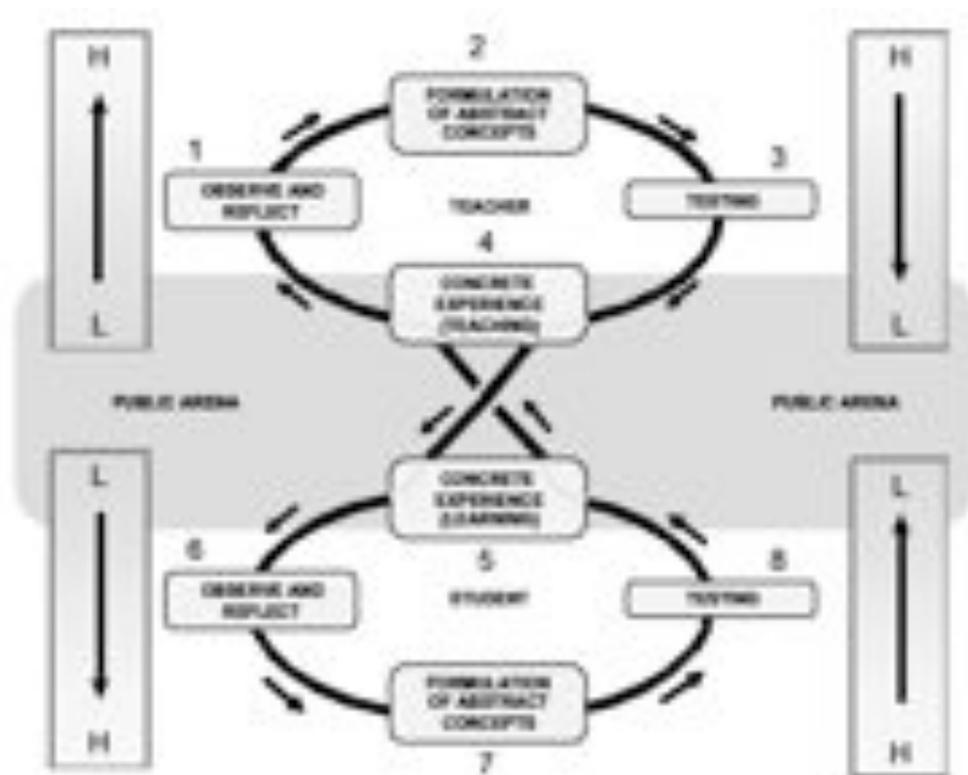
Academic standards and student-centred learning

The development of academic standards for university education is part of an international trend (ALTC, 2010; AUQA, 2009; Harris, 2009; OECD, 2006; Spellings, 2006). Academic standards (AS) describe 'what a learner is expected to know, understand and/or be able to do at the end of a learning experience' (CEDEFOP, 2008; Feutrie, 2010).

AS, also known as 'learning outcomes' and 'subject benchmarks', are primarily designed to generate improvements in student learning. Indeed, AS are viewed both nationally and internationally as central to the delivery of improved student learning outcomes (AUQA, 2009; Harris, 2009; Aust. Gov't, 2008; Houghton, 2002). In pursuit of this objective, AS have been developed in recent years for disciplinary degree programmes within nations (for e.g. ALTC, 2010; Beck, 2008; QAA, 2003), within and across regional economic communities (the Tuning process in Europe) and internationally (OECD's Assessment of Higher Education Learning Outcomes (AHELO) project).

As Shah, *et al.*, (2011:208) state: 'The new standard-based quality assurance framework needs to ensure that any effort to improve quality assurance should improve student satisfaction/experience.' Kinchin and Miller (2012) argue that, while student-centred learning is important 'it may be too complex a phenomenon to be considered as a single concept. Kinchin and Miller posit that Kolb's (1984) discussion of an individual's learning style leads to a conclusion that the interaction between a student and a teacher could be regarded as a double cycle (Figure 1). This seems to be a much more appropriate way to view student-centered learning than the single-sided student satisfaction surveys currently in use.

Figure 1 - Kinchin and Miller's 'Double Kolb Cycle'



Source: Kinchin & Miller, 2012.

The involvement of students and teachers in direct conversations about a unit / course have been regarded as more informative than the more superficial, impersonal surveys (Harris & Bretag, 2003). Conversations between teachers and students enables exploration of their perceptions, issues and suggestions for change (Lizzio, *et al.*, 2002).

Federal reforms for university funding refer to a 'student centred funding system' (DEEWR¹, on-line).

Universities will enter into an agreement to meet institutional performance targets for teaching and learning quality, which could include measures of student engagement, and participation by under-represented groups. They will receive performance funding if they meet their targets. (DWEER², on-line)

What will actually constitute teaching and learning quality has yet to be articulated. There are provisions elsewhere that discuss a framework of national standards for course accreditation (Aust. Gov't, 2011:5). The framework will ensure consistency in the period of study for particular types of qualifications. Nothing in the framework indicates how this will actually produce quality teaching and learning *per se*. The inference is that improving teaching and learning outcomes is left to each institution.

In 2006 the Commonwealth Government introduced the Learning Teaching Performance Fund (LTPF), using student feedback information to financially reward universities. This system uses student satisfaction and graduate destination surveys alone to make the determination of 'excellence'. As Oliver and Pegden (2009) point out student satisfaction survey results can vary markedly between internal and external surveys. Ogden and Pegden's approach is not to use student surveys as a measure of course excellence, but as a tool to indicate the student's understanding of strengths and deficiencies in a course and from this look to course improvement.

UNE's URP courses, accreditation and university education

Discussion about university education often focuses on the need to foster a student's deep learning and independent thinking in the context of assessable tasks using a pre-determined grading system (Jones, *et al.*, 2009). Professionally accrediting bodies are more concerned about the applicability and application of the knowledge and skills to the workplace.

It is the role of accreditation to deal with the content of the planning program and to satisfy itself that the content is sufficiently comprehensive and in depth that a person completing a planning program has satisfied a set of stated and agreed learning standards (PIA, 2010:5).

Capabilities and competencies are core to accreditation. Some capabilities, such as independent research, communication, team work, problem solving and work readiness are common to both university course statements and accreditation expectations.

'Competencies are generally held to be rather more behaviourally and skill oriented' (Jones, *et al.*, 2009). PIA requires competencies in planning to be demonstrated in three core areas: professionalism, practice and ethics; plan making, land use allocation and management, and design; and, governance, law, plan making and administration (PIA, 2010). Each institution is free to develop its programme as it sees appropriate, provided it can satisfy PIA that has addressed these capabilities and competencies in a coherent programme.

UNE has had accredited planning courses for many years and has been through a number of cycles of course accreditation visits by PIA's Visiting Board. In intervening years between accreditation visits UNE has had in place a Course Advisory Committee (CAC) for its planning programmes for some years (CACs have become a formal requirement of accredited courses in PIA's 2010 policy). Both the Visiting Board and CAC have provided invaluable fora for self-reflection and analysis leading to course and unit improvement.

Visiting Boards and CACs provide the opportunity for academic staff, industry representatives, current and former students to share views on the structure and operation of the URP programmes. This structure has provided for a process of continuous programme improvement in response to different issues arising. Units may be added / omitted from a programme after extensive consultation with the members of the Visiting Board / CAC, such consultation being in addition to the generic institutional course amendment process. The CAC consultation process provides increased value to achieving a course that addresses immediate institutional requirements and student expectations, while maintaining medium and longer-term focus on planning employment and broader social outcomes.

In the last 2 years the CAC has met with unit co-ordinators for all units taught into the undergraduate and post-graduate planning courses. This has led to changes in units offered into the programme so as to address current and future needs of the programmes, with equal regard to institutional processes, professional accreditation and student feedback. Informal discussions with students about the proposed changes were undertaken by the planning academics in similar manner to those suggested by Lizzio, *et al.* (2002).

Discussion

The use of student course satisfaction surveys by the Commonwealth Government is intended to provide potential students with information about which courses and institutions. As James *et al.* (1999) point out this assumes that the information is adequate and that students will act as rational consumers.

Information used by the Commonwealth in determining the allocation of funds under the LTPF includes elements from the Course Experience Questionnaire (CEQ) and the Graduate Destination Survey (GDS).

First year retention rates are used as a measure of the overall improvement in an institution's teaching, learning and support provided to students (DEEWR³, 2009). DWEER acknowledges there are many reasons other than the quality of teaching, learning and support that results in a student leaving a university. DEEWR also notes that a discontinuing student may transfer to another course / institution or come back to university at some future time. Non-the-less the Commonwealth considers it imperative that institutions implement strategies to retain students so as to meet targets agreed to between the Commonwealth and universities.

It is noted that by focusing on the outputs the Commonwealth focuses institutions' attention on the inputs. As Harris and James (2006) point out, university management tends to focus on the Commonwealth's concept of good teaching and learning. This is not to say that feedback such as this should be ignored. On the contrary, these data provide valuable information to add to review and reflection. Student responses alone, though, must not be allowed to be the sole driver of content, assessment and learning outcomes, otherwise there could be overall degradation of quality in such matters as learning depth, skills acquisition and application and problem-solving.

To appropriately measure quality teaching a system that incorporates other measures is required, otherwise there may merely be a race to deliver courses of a type and in a manner that students and university management deem to be appropriate. Student satisfaction and graduate destination surveys have a place, but must be used contextually.

Institutions are concerned about student numbers, as this is largely the measure upon which Federal funding is allocated. Year-on-year changes in course numbers are largely the measure of a course's growth or decline (longer term trends appear largely ignored by institutions) and growth in student numbers is usually the desired outcome (not necessarily supported by commensurate teaching resource allocations).

As noted by the Geography & Planning staff during the 2011 staff retreat (Division of Geography and Planning, 2011, unpublished) there has been an increasingly rapid adoption of technology into delivery of courses. For an institution that relies heavily on delivery of courses by distance this has benefits and disbenefits.

Of benefit, technology offers greater opportunities to engage with students in real-time, virtual space; to clarify misunderstandings of content and tasks; to provide assessment tasks that utilise the different technologies in ways not previously possible. Academic staff can respond to student needs immediately by making alterations and additions to their on-line material in real time. In addition, the feedback can be taken as part of a continuous and on-going revision process so that the unit is continually being improved for future offerings.

Conversely, it has become apparent that the greater the range of choice the students are provided with, the greater the expectation they have that this will be the norm. Indeed in the consumer-led post-modern society there is an expectation that the institution and academic staff can respond to each individual want. Increasingly staff are experiencing more explicit expressions of entitlement are being made in relation to expectations of course content and service (Division of Geography and Planning, 2011, unpublished).

Gurran *et al.* (2008:42) note that planning is now to be found in larger discipline groups. Such is the case for planning at UNE. Although always located with Human and Physical Geography, since 2009 it has also become part of a broader grouping of disparate disciplines comprising psychology, linguistics and social sciences in a school known as Behavioural, Cognitive and Social Sciences. Just as Gurran *et al.* (*ibid.*) also note, planning is often in a difficult position when competing with these other disciplines for increasingly scarce financial resources. This is where the Course Advisory Committee provides one of its significant roles. The CAC helps articulate to the university planning's particular resource needs.

Financial pressures affect staffing. Gurran *et al.* (2006:42) note that there has been a 'long run decline in staff: student ratios. This became an issue in 2011 for UNE when a planning staff member left. Without support of the CAC it is unlikely that approval would have been obtained for a permanent staff replacement. Failure to replace the staff member would have jeopardised the quality of the courses, their reputation and, potentially, course accreditation. It was the Chair of the CAC that helped bring these issues most forcefully, but diplomatically, to the attention of senior management.

It is appropriate, and even imperative, in this time of increased performance monitoring, evaluation reports, student feedback, technological innovation and revised institutional frameworks that there is continual review

and, where necessary, changes to course structure and content. Some need for caution arises from a response to these challenges that responds only to these in the immediate, particularly for a professionally accredited courses such as URP. This is what Harris and James (2006:9) refer to as the de-professionalization of teaching and learning 'in that top-down management requirements tend to dominate the bottom-up initiatives of the academic community itself'.

UNE has been particularly willing to adopt change where appropriate. Student-feedback reports through individual unit evaluations have led to some changes in content and assessment. Additionally, the CAC also provides a significant role through objective feedback and commentary on the current courses and content and suggest course improvement for the immediate and longer-term future. For example, recent CAC review has led to technically-oriented units in GIS and EIA being replaced with units in regional planning and retail geography. In making these changes the Committee noted that the necessary competencies for planners in relation to GIS and EIA were obtained in other units in the courses, providing the opportunity for more appropriate and necessary units to be included as core.

A top-down management approach to teaching and learning in response to the Commonwealths use of quantitative data as the proxy for teaching and learning quality is understandable in these financially competitive times. To solely rely on a student-led model for measuring quality is, however, considered flawed. None-the-less, it is the model and practice we have to deal with. The solution appears to rely on the teaching staff continuing to take the initiative to ensure that UNE's planning programs meet the standards required by the institution's management, industry, government, students and the community. After all, as Harris and James (2006:13) say 'it is the teaching staff who ultimately make the day-to-day decisions and actions that lead to quality improvement'. Necessary strategies include:

- Engaging with students in regular dialogue to provide course and unit level feedback within the discipline, based on Kinchin and Miller's 'Double Kolb Cycle' (Figure 1);
- Ensuring courses and units remain structured and delivery at a level and in a manner understood by academic staff to be the level required of a university education. This includes engaging with students in a discussion about the meaning and purpose of academic standards (Beck, 2008) and assessment criteria and processes (as suggested by Rust *et al.*, 2003).
- Maintaining close engagement with the Urban and Regional Planning Course Advisory Committee and the Planning Institute of Australia to ensure the courses reflect industry requirements and expectations and to ensure necessary support when required;
- Continuing engagement with industry through attendance at conferences and other professional functions, to share knowledge of research and practice and to remove perceptions of separation between academics and practitioners (as suggested by Gurran, *et al.*, 2008)

Conclusion

The UNE experience leads us to conclude that while there will always be a variety of different and immediate pressures and imperatives on professional course design, construction and delivery it is possible to address the multiplicity of immediate pressures so long as a focus is maintained on developing professional planners capable of meeting challenges that have yet to be.

UNE's approach is consistent with the view of Yigitcanlar *et al.* (2012, p.1) that:

In an era of rapidly changing economic, social and environmental conditions, planners must be resilient, innovative and able to deal with the complex political and socio-economic fabric of post-modern cities. As a consequence, planning education plays a fundamental role in educating and forming planning practitioners that will be able to tackle such complexity.

As always, responding to challenges is what planners do. Using an appropriate strategy of the type suggested in this paper UNE can continue to develop courses that will be resilient, as well as appropriate and enjoyable and engaging for both staff and students.

References

- ALTC (Australian Learning and Teaching Council) (2010) *Learning and Teaching Academic Standards (LTAS) Project: GEOGRAPHY Standards Statement*. Australian Learning and Teaching Council.
- AUQA (Australian Universities Quality Agency) (2009) *Setting and Monitoring Academic Standards in Higher Education: A Discussion Paper*, Canberra. May, 2009.
- Australian Government (2009) *Transforming Australia's Higher Education System*, Canberra.
- Australian Government (2008) *Review of Australian Higher Education (Bradley Report)*, Commonwealth of Australia, December. On-line at www.deewr.gov.au/he_review_final report
- Australian Government (n.d.) *My University*, online at <http://myuniversity.gov.au/>
- Australian Government (2011) *Higher Education Standards Framework (Threshold Standards)* Commonwealth of Australia.
- Beck, W. (Ed.) (2008) *By Degrees: Benchmarking Archaeology Degrees in Australian Universities*. Armidale: Teaching and Learning Centre, University of New England.
- Blaich, C. F., and Wise, K. S. (2010) Moving from assessment to institutional improvement, *New Directions for Institutional Research* S2: 67-78.
- CEDEFOP (2008) *The shift to learning outcomes: conceptual, political and practical developments in Europe*. Office for the Official Publications of the European Communities, Luxembourg.
- Department of Education, Employment and Workplace Relations³ (2009) *An Indicator Framework for Higher Education Performance Funding - Discussion Paper*. Australian Government, December, 2009.
- Department of Education, Employment and Workplace Relations¹ (2012) *Student centred funding system*, Online at http://www.deewr.gov.au/HigherEducation/Documents/PDF/Pages%20from%20A09-303%20Budget%20Fact%20Sheets-3_webaw.pdf
- Department of Education, Employment and Workplace Relations² (2012) *Higher education performance funding*. On line at http://www.deewr.gov.au/HigherEducation/Documents/PDF/Pages%20from%20A09-303%20Budget%20Fact%20Sheets-10_webaw.pdf
- Division of Geography and Planning (2011, unpublished) *Academic Retreat*, University of New England, Armidale, December, 2011.
- Feutrie, M. (2010) *Footsteps and pathways for the Lifelong Learner*, Final report, EQF Pro Project.
- Gurran, N., Norman, B. and Gleeson, B. (2008) *Planning Education Discussion Paper*, Planning Institute of Australia, January, 2008.
- Harris, K.-L. (2009) *International trends in establishing the standards of academic achievement in higher education ; An independent report and analysis*: AUQA.
- Harris, H. and Bretag, T. (2003) Reflective and Collaborative teaching Practice: working towards quality student outcomes, *Quality in Higher Education*, 9(2): 179-185.
- Harris, K.-L. and James R. (2006) The Course Experience Questionnaire, Graduate Destinations Survey and Learning and Teaching Performance Fund in Australian higher education, *Public Policy for Academic Quality Research Program*, Center for the Study of Higher Education, University of Melbourne.
- Houghton, W. (2002) Using QAA subject benchmarking information: An academic teacher's perspective, *Quality Assurance in Education*, 10(3): 172 – 181.
- James, R., Baldwin, G. and McInnis, C. (1999) *Which University? The factors affecting the choices of prospective undergraduates*. Australian Government Publishing Service, Canberra.
- Jones, M., Coiacetto, E., Jackson, J., Coote, M., Steele, W., Budge, T. and Gall, S. (2009) Generating academic standards and assessment practices in work integrated learning: a case study from urban and regional planning, *Asia-pacific Journal of Cooperative Education*, 10 (3): 203-215.
- Kinchin, I. and Miller, N. (2012) 'Structural transformation' as a threshold concept in university teaching, *Innovations in Education and teaching International*, 49:2, 207-222.
- Oliver, B. and Pegden, J. (2009) *External and Internal Indicators of Student and Graduate Satisfaction: Tensions and Synergies*, Proceeding of the Australian Universities Quality Framework meeting, Alice Springs, 1-3 July, 2009: 130-136.

Organisation for Economic Cooperation and Development (OECD), (2006) *Summary of Higher Education Learning Outcomes: Summary of the Second meeting of experts.*

Lizzio, A., Keithia, W. and Simmons, R. (2002) 'University Students' Perceptions of the Learning Environment and Academic Outcomes: implications for theory and practice', *Studies in Higher Education*, 27(1): 27-52.

Planning Institute of Australia (2010) *Accreditation Policy for the Recognition of Australian Planning Qualifications for the Urban and Regional Planning Chapter* (as amended August, 2011)

Quality Assurance Agency for Higher Education (QAA) (2003) *Handbook for enhancement-led institutional review* (Scotland, Gloucester).

Rust, C., Price, M. and O'Donovan, B. (2003) improving Students' Learning by Developing their Understanding of Assessment Criteria and Processes, *Assessment and Evaluation in Higher Education*, 28(2): 147-164.

Shah, M., Nair, S. and Wilson, M. (2011) Quality assurance in Australian higher education: historical and future development, *Asia Pacific Education Review*, Publ. Online 23 Feb 2011.

Spellings, M. (2006) *A test of Leadership: Charting the future of U.S. Higher Education*, US Department of Education, Washington, September, 2006.

Tuning, (und) *Quality Enhancement at Programme Level: The Tuning Approach.*

Tuning, (2010) *Tuning Sectoral Framework for Social sciences, Final Report, Public Part.*

Yigitcanlar, T., Mayere, S., McCartney, R. and Mohamed, M. (2009) *Providing innovative planning education experience: teaching regional planning in an international context.* In: Proceedings of the Australian New Zealand Association of Planning Schools Conference, 28-30 August 2009, Australia, Queensland, Brisbane.

The effectiveness of computer games for planning education: A SimCity case study

John Minnery and Glen Searle

The University of Queensland

Abstract

The range of considerations needed to effectively understand and plan for cities, including formulating structure and strategic plans, is a challenging process that is made more difficult in practice by public resource and budgetary constraints. The planning education task of teaching the necessary skills and insights is made even more challenging by the difficulties of setting up learning frameworks within course time constraints that replicate complex real world structure planning processes that require components to be balanced against each other to achieve the plan vision within budgetary limitations. The use of computer games offers an opportunity for students to develop the requisite skills. This paper reports on the effectiveness of using the computer game SimCity in student assignments to develop structure and strategic plans. One assignment required students to use SimCity to develop one of four classic types of city: Howard's Garden City, Le Corbusier's Contemporary City, Soria's Linear City and Wright's Broadacres. The other assignment required students to use the game to develop a low density city and a transit-oriented city. The paper evaluates the effectiveness of using SimCity to develop students' plan-making skills, and reports on students' assessment of whether and/or how the game's assumptions forced modifications away from preferred planning outcomes.

Keywords: Computer games; SimCity; structure planning, planning pedagogy, urban utopias

Introduction

A critical focus in all planning programs is the sustainability of the natural, social and economic environments of cities. In planning for sustainability, students need to understand both interactions amongst the systems that make up a city (including transport, economics, and natural systems) and policy trade-offs and conflicts in planning for the complexity of these interactions. Such an understanding is critical both for modern cities and for critically assessing past proposals for better cities. It is difficult to introduce students to these complex issues without overwhelming them.

This paper reports on the use of the well-established computer simulation, SimCity 4 in two planning courses at the University of Queensland in the first semester, 2012. The simulation was used to help students explore these critical interactions and trade-offs as well as to reflect on the practicalities of historical visions for cities. SimCity requires players to build elements of a city within budgetary and other constraints. It was intended that, through using the game in a structured way, students could explore these complexities in an engaging and innovative manner. The project built on the known pedagogical strengths of using computer simulations (Gaber 2007; Devisch 2008) in ways that went beyond the realm of mere game-playing into a critical analysis of governance and administrative structures as well as testing students' own ideas of improved human settlements.

The paper is divided into five sections following this brief introduction. The first fits the project within the ongoing pedagogical discussions about the use, effectiveness and problems of using computer simulations in planning education. The second explains something of the project itself. The third and fourth sections explore in more detail the way that SimCity was used in each of the two courses and the outcomes from the project for each. The concluding section tries to draw out general findings that are relevant both to the pedagogy of planning education and the use of SimCity as an educational tool.

Computer simulations and planning education

The use of computer simulations in planning education is no new thing (Thomas and Hollander 2010). As early as 1972 Kamnitzer (p. 315) (cited in Simpson 2001, p. 361) wrote about an 'observer-participant' inserting themselves into 'a dynamic, visual model of an urban environment by means of a visual simulation system'. By the late 1990s Adams (1998, p. 47) could suggest that computers are 'an attractive tool for teaching urban geography and planning concepts' and that the 'range of ways in which computers are being used for teaching ... is increasing constantly' (1998, p. 49). One such simulation that first became available in the late 1980s and is still gaining increasing attention is SimCity, a 'city-building/ urban planning simulation

computer game developed by Maxis, a subsidiary of Electronic Arts ... The game allows players to create a region of land by terraforming, and then to design and build a settlement that can grow into a city' (Wikipedia, SimCity 4). The game was developed by Will Wright, first marketed in 1989 and has proved to be highly successful (Lauwaert 2007). A Google search for the version released in 2003, "SimCity 4", shows about 847,000 hits, many of which are Youtube videos of instructions, hints and 'built' examples: SimCity 4 has a built in function allowing pictures of the built form to be captured or animations made into videos (See Figures 1 to 5). So this gaming simulation of building a city has proved to be highly popular and successful amongst the wider population. There are later versions of SimCity, such as SimCity Societies, released in 2007, but these have moved away from the physical planning focus of the earlier versions towards greater manipulation of social conditions. SimCity 4 was the last version where manipulation of the topography of the site of the city was possible. A new video-game version, which claims to return to the older values, was released in 2012 (Simcity).

Given planners' concerns for understanding and building cities there would seem to be the possibility of overlap between SimCity and planning education. In fact, there is a growing literature on its use in both planning and geographical education. It has even been suggested as a tool for assessing urban hydrology (D'Artista and Hellweger 2006). A range of reasons are given for supporting the use of game simulations in education, including SimCity. They include: making a connection between young people's extensive use of computer games in their everyday life and educational goals (Nilsson and Jakobsson 2011; Turkle 1997); 'learning about the multi-dimensional "systems" understanding of cities and the interconnected aspect of planning decisions, ... procedural knowledge in identifying and solving problems, and ... developing a sense of creative "craft" in plan making' (Gaber 2007, p. 113); and enhancing students' scientific reasoning skills (Nilsson and Jakobsson 2011). Nilsson and Jakobsson (2011, p. 36) summarise these various purposes into three: helping to develop a holistic understanding of the way that the components of a city interact; helping develop strategic knowledge, so that students understand how their decisions may have both immediate and longer term effects; and reinforcing adaptive critical reasoning, so that students can use critical thinking skills to solve problems. The case for incorporating computer learning applications such as SimCity into curricula is also strengthened by resonance with the trend to increased online delivery of post-secondary education (Allen and Seaman 2008; Ambient Insight Research 2009), and the potential of computer-based learning tools to support stretched teaching resources as class and cohort sizes steadily increase. More generally, there has been a steadily increasing use of simulation models in planning practice (Waddell 2000, 2002). The links between the practice of planning and the need for experiential learning in planning education are strong (Thomas & Hollander 2010) and there are now a number of teaching and research projects that explore the use of computer-based virtual worlds as a way to provide a form of experiential learning (e.g. Minocha & Reeves 2010). SimCity can provide an introduction to such experiential learning.

Most authors also, however, draw attention to the problems that arise with the use of SimCity in planning pedagogy and some are more specifically critical of its use. For example, Lobo (2004) argues that because a city is not a toy students gain a number of false impressions through their use of the game, and Lauwaert (2007) draws attention to wider concerns about the seductiveness of SimCity as a 'borderless playground' (p. 195) yet one whose assumptions are far from transparent.

Both the pedagogical advantages and problems were explored in part through the project described below.

The Project

The project reported here involved the integration of SimCity4 into the teaching of two courses at the University of Queensland in semester one, 2012. The project was supported by a Teaching and Learning Grant from the Faculty of Science, as well as by part-funding from the School of Geography Planning and Environmental Management.

One course was PLAN2001 Planning Theory, a second-year subject in the Bachelor of Regional and Town Planning in which 74 students were enrolled. The other was PLAN7124 Metropolitan Strategic Planning, a component of the Master of Urban and Regional Planning, with 26 students. For both classes a recently graduated student with expertise in SimCity produced a set of notes on the game's basics for the current students to use. Voluntary but separate tutorials were made available for both classes, run by student tutors with expertise in the simulation. The total extra costs thus involved in including a SimCity-based assessment item in both courses were \$1,738, including \$600 for licences to use the game in School computer labs. The game was set up on a number of machines in the school's computer laboratory to make sure it was accessible to everybody in both courses. The project was carried out in groups of about five people rather than individually.

Various authors have identified the technical difficulties that can arise in using virtual environments in teaching. The story told by Mallan et al. (2010) about using Second Life to engage a class of high school students in the planning and design of a real site is salutary. We faced a number of difficulties in using SimCity as well. Permission was needed from the distributors to use multiple copies in an educational

environment, although this was relatively easily obtained. Copies of the game could be downloaded but the school's technical officer faced a number of unnecessary complications in downloading, setting up and registering twenty copies of the game (and his experience was that the distributors/ developers were not helpful in responding to requests). The game is relatively inexpensive for the older version (\$A30) but nonetheless teaching budgets are constrained so only twenty copies were obtained. This forced the larger class to be based around groups rather than individuals.

SimCity and Metropolitan Forms

The SimCity task in the Metropolitan Strategic Planning course required each student group to use SimCity 4 to produce two city spatial strategies that incorporated the elements and assumptions of the SimCity game. The assignment was completed over a full semester, with the intention that increased student understanding of strategic strategy principles would be incorporated into increasingly refined inputs and outputs over the semester. The two strategies were required to contain the following features:

Strategy 1: Compact city strategy. Incorporate an integrated public transport network into a city which has residential densities that are significantly above those of contemporary Australian cities, large activity centres, and a relatively low level of land use and highway capacity designed to support car movement.

Strategy 2: Low density city strategy. The strategy should have an average residential density of 10 dwellings per residential hectare. Transport infrastructure and centre numbers and sizes could be chosen by each group.

The forecast period and city population were for each group to determine. A brief justification was required for the level and spatial distribution of the different elements making up the SimCity outcomes (this included justification of trade-offs between key elements, based on sound urban planning principles). An analysis was also required of what strategic issues were included in the SimCity spatial strategies, and what strategic issues that are normally part of a metropolitan strategy were not able to be included.

One of the key pedagogic aims of this exercise was to help students understand how governance and institutional settings set limits and influence how cities can be planned. SimCity was developed in the United States; the assumptions underpinning it are appropriate to the governance of American cities. In fact, Beckett (1996, cited in Lauwaert 2007) claims that SimCity's assumptions are based more specifically on the low tax, high property value and forceful police force realpolitik of 1980s California. An analysis of the extent to which the strategies would have been different if Australian institutional, planning and other conditions had applied instead of American ones was required from each group. By doing this, it was intended that students would better understand the importance of international and institutional contexts for strategic planning.

At the end of the exercise, each member of the group was asked to write a short assessment of how useful the assignment was in helping to (1) develop city spatial strategies, and (2) understand the different strategic planning contexts of US and Australian cities. In this assessment, each student was asked to indicate which particular aspects of strategy formation (1) were more easily understood, or (2) where there was little or no increase in understanding, through the SimCity game.

Outcomes

Each group was able to develop compact and low density SimCity structures to a generally satisfactory level. The most common approach adopted by each group was to sketch a spatial layout of key structure elements that would achieve the desired city outcome. This essentially consisted of plotting where major land uses would be located. At least one group developed a spatial layout that attempted to incorporate an integrated land use/transit plan from the outset. After the many iterations required to achieve the desired outcomes, the intended spatial structures were largely achieved.

Figure 1 shows an integrated land use/transport city structure that combines transit routes and higher density nodes as constructed in SimCity. As with most of the SimCity outcomes, however, some elements are not particularly realistic -- in this case, the presence of two main line rail routes through the centre within a few hundred metres of each other.

[Figure 1: SimCity integrated city – *see appendix for figures*]

Most groups simply worked from an initial structure layout of land uses, and then let the game develop the required transport infrastructure. A low density city example is shown in Figure 2. The group was able basically to obtain an outcome that delivered the intended zoning.

[Figure 2: Low density city]

SimCity's differentiation of heavy industry and high tech industry reflects an area of current American planning concern, and this enables game players to develop cities focusing on either sector. Several groups developed cities specifically based on high tech industries. In at least one case, the links between good education, parks, dense public transport, lower taxes, liveability and high tech employment were very well

argued, while in another there was a clear explanation of how the city was iterated toward high tech outcomes together with high transit outcomes.

The lack of transparency within SimCity about the precise parameters that governed relationships between planning elements meant that it was often difficult to assess the extent to which sub-optimal outcomes were the fault of the game or of student inputs. Nevertheless, some inputs were very questionable from a planning viewpoint:

- Some inputs were obviously unrealistic. One group adopted much higher densities than those that were present in the chosen comparator cities of Tokyo (compact city) and Phoenix (low density city), while another adopted 500 residences per hectare rather than the European level of 153 cited positively in the text of the assignment.
- Related to this were assumed population totals for the low density city that were far below the metropolitan city level that was intended by the exercise: 10,000 in one case and 20,000 in another. This produced problems when groups attempted to include services and facilities that in practice require much higher threshold populations, such as universities or multiple activity centres. In the case of this point and the previous one, a more interactive tutor-student context over the semester might have helped steer groups to more realistic inputs.
- The spatial treatment of open space was often rather piecemeal and haphazard, although one or two groups consciously incorporated sound open space planning principles. The planning of open space is a relatively neglected area of planning education, and the outcomes of this exercise suggest that it could be beneficially strengthened.

Student assessment

The main purpose of the project was to improve student understanding of the complexities involved in city strategic planning, and of how these might be addressed using a hypothetical planning situation. For this exercise students presented individual evaluations of the group's SimCity production. Table 1 summarizes students' own assessments of the efficacy of the SimCity strategic planning assignment.

Table 1. Student Assessment of SimCity for Developing Strategic Plans (number of times features mentioned)

Positive features	
Awareness of competing planning demands/trade-offs/relationships	13
Awareness of financial implications	1
Yields realistic transport outcomes from different land uses/densities; allows testing of land use/transport relationships	2
Helps understanding of urban renewal	1
Graphs & indicators useful in planning of parks, roads & indicating liveability	1
Ease of understanding & using SimCity's zoning logic	4
Negative features	
SimCity Mayor has unrealistic power/does not reflect competing institutional, political & stakeholder power structures	9
Too easy to redevelop/change land use	2
Some planning elements simplified/omitted	5
Does not allow mixed use zones/not 'organic'	6

Little extra understanding of density and transit issues	1
Unrealistic assumptions/outcomes, e.g. persons per household; scaling of streetscapes	3
No knowledge of formulae defining planning relationships/unsure of extent outcomes pre-determined by SimCity rules	2
No relationship between transit operating costs and frequency, line length	1
Budget constraints not easily understood	1
Implementation of utilities infrastructure to support development lacks coherence	2
Too neo-liberal	2

Overall, while students saw several positive pedagogic features from doing the assignment, these were somewhat outweighed by perceived negative features. Many of the perceived negative features could perhaps be seen as having a positive educational dimension, in that they reinforced student awareness of the complexity of factors involved in real life strategic planning.

The most important positive feature of SimCity seen by the students was that it reinforced an awareness of competing planning demands and associated trade-offs and relationships. This was intended as a key pedagogic outcome from the SimCity assignment. In SimCity this feature is central to the working of the game, and is largely controlled via budget constraints. As one student commented:

'At the beginning of the game, the team had a vision or plan for how the city should be laid out and how it should evolve. However, the reality became very different. Competing demands, limited finances and limited land availability resulted in decisions that were then not easily undone, hence trade-offs followed. The game enabled the application of decision-making in a quasi-planning style context.'

A second, though less important, positive feature was seen as the way that using the game allowed students to develop a basic understanding of the way that the zoning mechanism produced and controlled city planning outcomes. Related to this were comments that the game allowed testing of transport/land use scenarios, which is a basic strategic planning component. Only one student specifically commented on the understanding that the game gave in regard to the importance of financial constraints in shaping city outcomes, which in practice is a critical consideration and one that is central to the operation of SimCity. Conversely, one student commented that the budget constraints within the game were not easily understood.

The major negative feature of SimCity seen by students related to the lack of realism of the game regarding governance issues, especially the total power of the SimCity mayor to decide all planning. Students reflected that this ignored the real life situation in which various institutions and stakeholders competed to control planning decisions. As one student noted:

'One limitation is that the SimCity Mayor (the player) operates more like a politician than a planner. The Mayor occupies the space between a planner, an Australian Mayor, a Premier, a Prime Minister and a deity.'

Related to this were comments that it was too easy to redevelop areas or generally change land uses. In the words of one student:

'It was also far too easy to demolish land without repercussions, removing the complexity of urban consolidation.'

There were also a number of negative comments about the lack of realism in SimCity about various planning elements controlled by the Mayor. As one student commented:

'...some sophisticated factors occur in our real cities that are difficult to reflect in this game, in terms of community consultation, hierarchy of different levels of government, etc. In the real world, taxation systems are much more complicated than are represented in the game.'

Here, as well as general concerns about various planning elements that were either omitted or simplified, there was particular concern about the lack of mixed use zoning in SimCity and the associated lack of ability to develop the city in an 'organic' manner. One consequence was that groups had to replicate the reduced travel advantages of mixed use zones by putting different land use zones next to each other. This resulted in

a scattering of commercial areas in at least one case to a greater extent than a coherent activity centre strategy would have allowed. Sometimes the planning outcomes were seen as producing too high household densities (of 14 per household in one case) or unrealistic streetscapes. There were several criticisms of SimCity about the lack of transparency and understanding it gave about underlying planning relationships or infrastructure provision.

While there were only two comments about the neo-liberal ideology of the game, these were telling ones in that they addressed a wider critique of the game's basic tenets, and implicitly questioned whether SimCity could produce a 'fair' city or one in which ESD was central, for example. One student said:

'The economic rationalist, or neo-liberal mindset of SimCity is an incredibly powerful framework which already influences many aspects of political and planning frameworks. The implication [is] that everyone is the same, money production is the aim of cities, people's only purpose is to work or go to school...'

The objective of the exercise to give students a better understanding of governance differences between the assumed US basis of SimCity and those of Australia, as an extension of this dimension, was not generally achieved. Most students commented that SimCity's assumptions were sufficiently unrealistic as to negate any conflation of the game with actual US planning contexts. Thus the objective of using SimCity as a proxy for the planning of a real US city could not be achieved, and thus not allow it to be used as a vehicle for comparing US and Australian planning governance.

SimCity and Urban Utopias

The use of SimCity in the undergraduate class built on the experience reported by Gaber (2007). Gaber used the package to get students to simulate the development of three possible city forms, based on Ebenezer Howard's Garden City, Le Corbusier's Radiant City and Contemporary City, and Frank Lloyd Wright's Broadacres as described in Fishman's text on urban utopias (Fishman 1982). For this current exercise, the range of 'urban utopias' was extended to include Arturo Soria y Mata's Linear City (Boileau 1959; Collins 1959a, 1959b). The first half of the teaching semester in Planning Theory is devoted to an overview of the history of urbanisation and planning. The second session in the semester gave an overview of the four utopian visions. The assignment then asked groups of approximately five people to construct a SimCity version of one of the visions. In this class SimCity was used for five of the thirteen weeks but was implemented as an assignment outside of class time. The groups were selected so that, as far as possible, each group contained a student who had used SimCity previously, although surprisingly only six students in the class acknowledged earlier knowledge of the game. Each group could select the utopia they would deal with. The assignment asked for an explanation of the ideas behind the utopia, the construction of a SimCity version of the utopia, a judgement of the feasibility of the vision based on the SimCity experience, and an assessment of the effectiveness of SimCity in expressing the original author's vision. The project reports were produced by the groups rather than by individual students, but the course was evaluated through an individual 'Student Evaluation of Course and Teaching' (SECaT) through which a number of students took the opportunity to comment on the use of SimCity.

Output

From the point of view of teaching about the four urban utopias the project was an outstanding success. Students were required to describe the main ideas of the author they selected, and because they knew they were going to have to comprehend these ideas sufficiently to be able to 'build' a city based on them, as well as critique the outcome, they researched and thought more widely about Garden Cities, the Contemporary City, Broadacre City and the Linear City than had been the experience with students in the past. A good example was one group who created a Garden City. They found from their use of SimCity that:

'the most difficult flaw to overcome in the Garden City proposal is the lack of acknowledgement for the earth's finite resources. Howard seemingly had little respect for such limits, and this ignorance is highlighted in a quote from the original Garden City proposal 'Garden Cities of To-Morrow': "Those of us who believe that there is a grand purpose behind nature cannot believe that the career of this planet is likely to be speedily cut short now that better hopes are rising in the hearts of men, and that, having learned a few of its less obscure secrets, they are finding their way, through much toil and pain, to a more noble use of its infinite treasures. The earth for all practical purposes may be regarded as abiding forever." (Howard, 1965, p.135).'

Figure 3 shows a SimCity version of a ward in a Garden City, Figure 4 Corbusier's Contemporary City and Figure 5 Wright's Broadacre City.

[Figure 3: A Garden City Ward]

[Figure 4: Corbusier's Contemporary City]

[Figure 5: Wright's Broadacre City]

Likewise a number of groups drew attention to the obvious impacts of the different technologies underpinning early twentieth century cities when the utopias were created and the early twentyfirst century when this version of SimCity was developed. An obvious difference was in the preponderance of car traffic but also in the scale of air and rail traffic and the technologies for controlling traffic.

It was also heartening that most of the groups commented on the lack of community consultation in SimCity. Citizens have no say in how the city is designed and built, although they can react to worsening conditions. As was noted earlier, the Mayor has total decision control, within the limits of the economic trade-offs needed to maintain a positive budget balance. The project reinforced in many students' minds the need for involvement of citizens in shaping their own living environments.

Students were also introduced to one of the critical issues in thinking about urban utopias, namely their nature as fully-fledged completed cities. None of the four utopian ideals gives any serious consideration to the process of building the final city or how it will be implemented (except possibly Howard, who devotes much of his book to the private and then community funding of a Garden City). This shortcoming became starkly apparent with the use of SimCity because the simulation allocates players a limited amount of financing to start with and is built on an assumption of gradual expansion and growth, with this population and residential growth helping to fund gradual expansion of utility and social services. For this project the shortcoming was addressed by including known 'cheats' for the game in the explanatory notes given to students. One cheat allows virtually unlimited funding, although at only 1,000 'simoleons' (the SimCity currency) at a time. (Not including the cheats would have been unsuccessful as a classroom strategy anyway, as there are several SimCity forums on the web, many of which discuss cheats) There are also on-line discussions of game-playing strategies that lead to a build-up of substantial money resources, but the strategies are for games played over a long time period. As one student group noted about the problems in implementing the vision:

'It would seem Le Corbusier's design had little regard for the natural evolution of cities. 3 million residents and the enormous amount of infrastructure required to house and service these residents including education, jobs and cultural institutions would take years to complete. These services would need to exist before residents would move in.'

Student assessment

The assessments made by the undergraduate students tended not to be as nuanced and experience-based as those made by the post-graduate students. Nonetheless they provide interesting comment on the project, on utopian ideas and on the use of SimCity.

Each of the groups faced conceptual and practical difficulties in implementing a city design based on unusual and non-mainstream ideologies in a game based strongly on mainstream planning assumptions and techniques. For example, even though SimCity is based on a view of North American city development it could not deal with the extreme individuality and decentralisation which is central to Wright's Broadacre City. As a group creating Broadacre City noted,

'Wright proposed the notion of an organic lifestyle, particularly by ensuring that institutions are of a small-scale and dispersed throughout the *Broadacre City*. However, in the *SimCity* there was a generous provision of services and facilities, with many educational, health and commercial premises unable to be produced at a small-scale, to distort Wright's utopian ideology of individualism. Effectively, *Sims City* did not provide a comprehensive reflection of Wright's extremely decentralised city.'

For Le Corbusier's Contemporary City, the built-in SimCity mechanisms made it extremely difficult to specify high rise buildings in the appropriate places when the total town population was still small: 'Even after the population grew to a substantial level (over 100 000), it seemed many SimCity residents preferred houses over apartments. In-game, these simulated residents had freedom of choice, while in Corbusier's utopia he dictated housing form', noted one group.

Even when the students had created a full-blown Garden City the opinion of the simulated city residents, as noted in the status bars about education, safety, health and the environment, was nowhere near as elevated as would be expected for such a special city. The mainly economic focus of SimCity also drew students' attention, by the lack of concern for these in the simulated version, to the social goals of Howard's Garden City.

As was the case with the post-graduates, students also drew attention to the problems of financing development in SimCity. Corbusier's Contemporary City, for example, needed to have its road and zoning system constructed before the land was developed in order for the simulated city to match the architect's

design. But this created serious financial problems and the groups who dealt with this utopia had to constantly use the cheat to provide the necessary finance.

The difficulties in providing mixed uses mirrored the experience of the post-graduate students. In addition, as one group noted, 'it was impossible to fulfil Corbusier's 'streets in the sky' concept, as no mixed-use zoning or building types exist in-game. The "landmark" skyscrapers in the middle of the city appear to serve little purpose, and were placed in-game simply to fulfil the form seen in Corbusier's plans; residential, commercial and leisure all had to be separated in varying zones of the city.' The multi-modal transport hub in the centre of Le Corbusier's design could not be created, nor could the underground roads for carrying traffic.

The student assessments also drew attention to one interesting variant of the fundamentally neo-liberal assumptions underpinning SimCity. One group noted that infrastructure in SimCity was owned by the Mayor/Council so that if the budget became inadequate the train and bus stations were unattended and power and water ran down. But yet, 'The game limited us by not allowing us to sell off infrastructure to private enterprise, as would be the appropriate solution according to the Garden City theory, "If the municipal authorities do a good job they should keep doing it, otherwise it should be handed over to private enterprise" (Howard, 1965, p. 133).'

There were severe limitations in achieving the idealised city forms the project focused on through the use of SimCity. Whilst it is widely recognized that 'the underlying model is hidden' (Dearden and Wilson 2011, p. 277) as has already been noted the game's assumptions best fit a North American city and its political and social assumptions. These range from the role and power of the Mayor to the assumptions about the links between crime rates and wealth. The student group creating a Linear City was stymied by the fact that the catchments of schools, police and fire stations are circular and could not be amended to fit a transit-oriented linear movement system. As the group noted, 'This has hindered in the creation of the city by increasing the demand for education, hospital, and police facilities, thus artificially increasing the costs on the city.' Likewise the inbuilt game assumptions about the road patterns that accompanied the zoning of land for particular purposes hindered the creation of a city form that did not match that assumed by the creators of the game, such as the high rise form of the Contemporary City. A similar problem faced those constructing a Garden City for the simple reason that SimCity does not allow curved or circular roads, so Howard's plan of a circular city could not be realised (see Figure 3).

Individual student comments in the course evaluations varied from 'Simcity as an interesting and different methods of learning which proved to be fun' and 'the SimCity model was hands on and practical' to 'Did not like the SimCity assignment; did not feel I got anything out of it'. Some of the criticisms related to working in groups rather than working with SimCity per se: for example 'I was not the person in charge of creating the city, I had no idea how I could critique it'; 'I would have liked to pick my own group for the SimCity assignment', and 'the group sizes were too large for that type of assignment as some members were left with only minimal small tasks to complete'. On the other hand, one student noted that 'the SimCity exercise was good as it stimulated thought and encouraged teamwork'. The structure and selection of groups will need to be addressed if the project is run again.

Conclusions

City planning involves many factors. Some of these can be turned into gaming elements relatively easily. Others, especially those concerning social and political aspects, are less easily 'gamed'. That is not to say, however, that they cannot. Many video games use game theory, for example, or other frameworks to model less tangible social choices and some, such as Second Life, are flexible, open-ended and capable of application in a number of different ways. Thus any shortcomings of SimCity as a pedagogic planning aid do not necessarily mean that computer games per se all have the same shortcomings.

This said, the experience described here of using SimCity as a teaching and learning aid shows somewhat mixed results. The use of SimCity to develop a city structure plan is seen to have had certain benefits centring on the way the game forces players to make trade-offs between planning elements competing for a limited budget, which is a central feature of planning at a strategic level. Nevertheless, students considered that the simplifications and omissions within SimCity did not give players a sense that they were constructing a realistic structure, because of the absence of a real life context that incorporated competing decision makers and an over-simplification of potential planning outcomes. At the strategic level, then, it seems that the planning process involves too many complexities to make SimCity a useful proxy.

Conversely, where planning is limited to constructing a single spatial outcome virtually regardless of process, in the manner of much early modern planning, the game demonstrated much greater educational utility. If connected to requirements for reflection on the outputs from the game play as well as requiring a sound understanding of the origin and meaning of the city concepts being built, it supported more analytical and critical thinking about better city forms and their creation.

The more mixed outcomes of the structure planning exercise are in part a reflection of its use by both post-graduate and undergraduate students. The post-graduates had generally held planning-related jobs, and also brought a more mature consideration of wider political, social and economic influences on planning outcomes. Hence the shortcomings of SimCity in representing real world city development would have been more apparent to them. But this particular project did not allow a specific comparison of the use of SimCity at the two educational levels because two quite different exercises were carried out. A post-graduate/undergraduate comparison using the same SimCity assignment for both would make an interesting future educational research project.

We return to one of the some of the hoary questions about the early use of computer simulations in planning and other education. Turkle in 1997 raised issues that are still relevant. First do the experiences with simulation open up questions or close them down (p. 79)? And what is the level of real learning that follows, for playing SimCity might gain students more knowledge about city planning than would come from a textbook, but 'on another level they may not know how to think about what they are doing' (p. 82). Simulations help us to think about complex phenomena in dynamic evolving systems but we may not understand the simulation's core assumptions. In effect 'simulations enable us to abdicate authority to the simulation' (p. 81). This was partly the case in this project but because the simulation was clearly connected to a range of relevant contextual questions it supported the opening up of additional questions rather than closing them down. The project has shown that there is room for the use of SimCity as a computer simulation in planning education if it is clearly embedded within a wider but specific planning context (such as assessing different metropolitan forms, or exploring visions of urban utopias). The gaps between such virtual reality and real reality can also be used to explore common planning issues (such as community participation, or the financing of urban development) and thus can both stimulate and strengthen student learning.

References:

- Adams, Paul (1998) Teaching and learning with SimCity 2000, *Journal of Geography*, 97(2): 47-55.
- Allen, I. E. & Seaman, J. (2008) *Staying the Course: Online Education in the United States, 2008*. Sloan Consortium, Needham MA.
- Ambient Insight Research (2009) US Self-paced e-Learning Market. Ambient Insight Research, Monroe WA.
- Beckett, A. (1996) Revenge of the town planners, *The London Independent*, January 22. URL http://findarticles.com/p/articles/mi_qn4158/is_19960122/ai_n9639995
- Boileau, Ivan (1959) La Ciudad Lineal: A critical study of the Linear Suburb of Madrid, *The Town Planning Review*, 30(3): 230-238.
- Collins, George R. (1959a) Linear planning throughout the world, *Journal of the Society of Architectural Historians*, 18(3): 74-93.
- Collins, George R. (1959b) The Ciudad Lineal of Madrid, *Journal of the Society of Architectural Historians*, 18(2) 38-53.
- D'Artista, Benny R. & Hellweger, Ferdi L. (2007) Urban hydrology in a computer game, *Environmental Modelling and Software*, 22: 1679-1684.
- Dearden, Joel & Wilson, Alan (2011) Using participatory computer simulation to explore the process of urban evolution, *Transactions in GIS*, 15(3): 273-289.
- Devisch, Oswald (2008) Should planners start playing computer games? Arguments from SimCity and Second Life, *Planning Theory and Practice*, 9(2): 209-226.
- Fishman, Robert (1982) *Urban utopias in the twentieth century: Ebenezer Howard, Frank Lloyd Wright, Le Corbusier*, (2nd Ed), MIT Press, Boston, MA.
- Gaber, John (2007) Simulating planning: SimCity as a pedagogical tool, *Journal of Planning Education and Research*, 27: 113-121.
- Howard, E. (1965) *Garden Cities of To-morrow*, (Edited, F.J. Osborn), M.I.T Press, Cambridge, Mass.
- Kamnitzer, P. (1972) Computers and urban problems. In H. Sackman and H. Borko (Eds) *Computers and the Problems of Society*, AFIPS Press, NY.
- Lauwaert, Maaïke (2007) Challenge everything? Construction play in Will Wright's SIMCITY, *Games and Culture*, 2: 194-212.

- Lobo, Daniel G. (2005) *The city is not a toy: How SimCity plays with urbanism*, Discussion Paper 15/05, Cities Programme – Architecture and Engineering, London School of Economics and Political Science, London.
- Mallan, Kerry, Foth, Marcus, Greenaway, Ruth & Young, Greg T. (2010) Serious playground: Using Second Life to engage high school students in urban planning, *Learning, Media and Technology*, 35(2): 203-225
- Minocha, Shailey & Reeves, Ahmad John (2010) Design of learning spaces in 3D virtual worlds: An empirical investigation of Second Life, *Learning, Media and Technology*, 35(2): 111-137
- Nilsson, Elisabet M. & Jakobsson, Anders (2011) Simulated sustainable societies: Student's reflections on creating future cities in computer games, *Journal of Science Educational Technology*, 20: 33-50.
- Simcity Overview at http://www.simcity.com/en_US/game/overview (Accessed 27th June, 2012).
- Simpson, David M. (2001) Virtual reality and urban simulation in planning: A literature review and topical bibliography, *Journal of Planning Literature*, 15: 359-376.
- Tanes, Zeynep & Cemalcilar, Zeynep (2010) Learning from SimCity: An empirical study of Turkish adolescents, *Journal of Adolescence*, 33: 731-739
- Thomas, David & Hollander, Justin B. (2010) The city at play: Second Life and the virtual planning studio, *Learning, Media and Technology*, 35(2): 227-242.
- Turkle, Sherry (1997) Seeing through computers: Education in a culture of simulation, *The American Prospect*, March-April, 31: 76-82.
- Waddell, Paul (2000) A behavioural simulation model for metropolitan policy analysis and planning: residential location and housing market components of UrbanSim, *Environment and Planning B*, 27: 247-263.
- Waddell, Paul (2002). UrbanSim: modelling urban development for land use, transportation and environmental planning, *Journal of the American Planning Association*, 68: 297-314.
- Wikipedia entry SimCity 4 Available at en.wikipedia.org/wiki/SimCity_4 (accessed 17th October, 2010).



Figure 1: Poly-centric high density city



Figure 2: Low density city

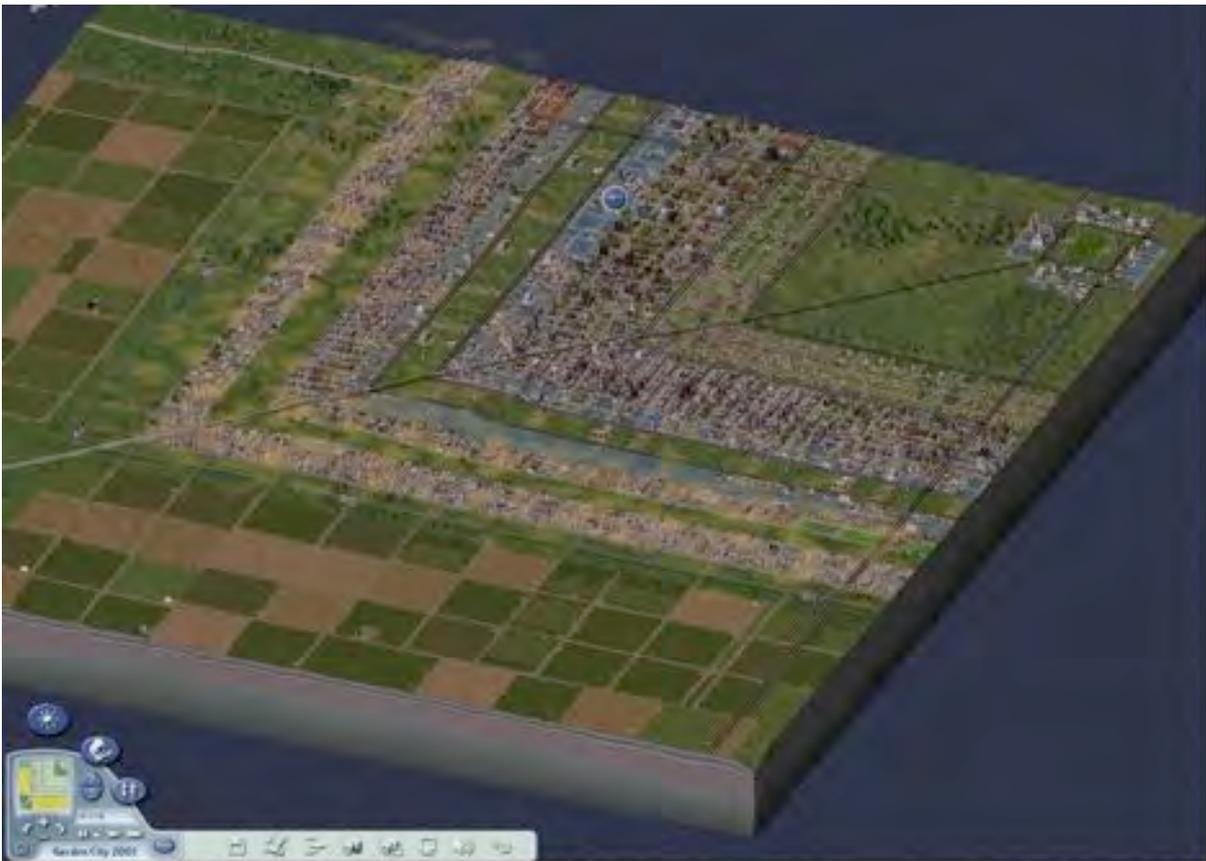


Figure 3: Ward in Howard's Garden City



Figure 4: Le Corbusier's Contemporary City



Figure 5: Wright's Broadacre City

Teaching Sustainable Urbanism Practice Via Collaborative Interdisciplinary Studios

Michael Neuman

Faculty of the Built Environment, University of New South Wales

Abstract

This article describes a collaborative interdisciplinary studio approach to teaching practice. These studios have engaged students, faculty, and in several cases, clients in real-world problem solving activities ranging from an integrated plan-design-build urban redevelopment projects to regional scale analyses and plans. We found that integrated service-based learning projects were of benefit to students and communities alike if a specified set of criteria were met at the outset. Lessons for future pedagogy and research are derived from the findings.

Keywords: City planning, urban design, studio teaching, interdisciplinary learning, collaboration, problem-based learning, sustainable urbanism, sustainability

Teaching Sustainable Urbanism Practice Via Collaborative Interdisciplinary Studios

This article describes a collaborative studio format tested in 1999, elaborated in 2001, and refined over a decade. These studios have engaged students, faculty, and in several cases, clients in real-world problem solving activities. The first two studios were integrated plan-design and plan-design-build urban redevelopment studios. Two other studios reported here were also urban redevelopment studios, and two others were regional scale, one on New Orleans and southern Louisiana, the other on the Texas Urban Triangle (Dallas-Fort Worth, Houston, San Antonio, and Austin). All were conceived/co-conceived and led/co-led by the author.

Studio teaching is perhaps the most challenging and most rewarding environment for actively engaging learners in the practice of place-based problem solving. Studio teaching is student-centered. This distinguishes it from traditional lecture and seminar teaching, which is typically teacher-centered. Studio teaching is problem-solving through design. Design is understood broadly beyond physical design of buildings, landscapes, and places; including that of organizations, processes, programs, media, etc. Collaborative studio teaching adds levels of complexity in at least three ways. First, by interacting among disciplines for both students and faculty. Second, by working with a community based client or constituency directly. Third, by engaging the community collaboratively in the interdisciplinary processes of learning and design. When done well, this results in co-learning and co-problem solving by all participants.

The challenges facing these types of collaborative, service-based urban planning and urban design studios are multiple. They include:

- Understanding complex, contemporary problems in real time
- Crafting multi-disciplinary analyses and solutions
- Gaining multi-scalar understanding of the contexts and conditions
- Instilling multi-cultural understandings of the social contexts and participants
- Team building and team work to solve problems
- Designing and managing this complexity in real time

Increasingly, planning and design schools are addressing these challenges with inter-, cross-, or multi-disciplinary studios. While some argue for a distinction among these three adjectives, for our purposes, the term “interdisciplinary” signifies different disciplines working together and individually on a design problem. Sometimes these disciplines meet at the same time in the same space, sometimes they approach the problem separately, and come together only at certain points, whether periodically and/or at mid-term and final reviews.

Scholarly discussion of service learning, community collaboration, and problem-based learning treats interdisciplinary collaboration among students and faculty, and with citizens and neighborhood or interest groups. A classic text is by Barrows and Tamblyn (1980). While it is in the medical field, some of its principles have broad applicability. Barrows’ follow-on article presents a taxonomy of problem-based learning that is useful for those who set or evaluate curricula as well as for individual instructors. The taxonomy illustrates the wide variations in quality and in the educational objectives that can be achieved through problem-based learning. “A taxonomy is proposed to facilitate an awareness of these differences

and to help teachers choose a problem-based learning method most appropriate for their students” (Barrows 1986, 481).

In urban planning, Shepherd and Cosgriff refer to problem-based learning as a “bridge between planning education and planning practice” (1998). Forsyth and her co-authors go as far as to highlight differences among planning, architecture, and landscape architecture (Forsyth, Lu, McGirr 2000). What we have found is that despite differences among disciplines and the notable challenges to interdisciplinary collaboration, the learning that took place and the quality of the product, as measured in client satisfaction and client use of the products, mitigated the costs. These costs can be largely but not exclusively considered as transaction costs as conceived in institutional theory. More importantly, the value added by a collaborative and interdisciplinary approach includes many intangibles stemming from local knowledge and special treatment, and is something that professional consultants sometimes cannot achieve, due to cost constraints.

As recently as two decades ago, in “Emerging Problems of Practice”, Robert Gutman identified six shifts in the professional practice of architecture, and in so doing scarcely mentioned interdisciplinary activity (Gutman, 1992). The shift to interdisciplinarity has taken place largely over the last twenty years, in part led by planning, an inherently interdisciplinary activity. Planning scholarship on and teaching of problem-based learning is increasingly robust, and here we report on advances in the integration of several factors.

The method of reporting is a variation of “N of one plus some” as described by Mukhija. The focus is on depth, not breadth (Mukhija 2010, 419), yet includes several vignettes to add breadth and informs which episodes to highlight – a selective focus. Two episodes from three different cases are analyzed using a composite conceptual framework based upon Schön (1983), Spain (1992), Zeisel (2006), Lang (1983), Sanoff (1978), and Freire (1970).

In so doing, this present work attempts to respond to Baum’s challenge: that few teachers describe what they do, how students responded, what students may have learned, and what the teacher may have learned (1997, 21).

The Beginnings of One Teacher’s Journey

The pedagogical approach of interdisciplinary collaboration in my own masters’ program studies and studios became the touchstone of all studios that I later taught. The limitations to this approach, as I saw them then, were what I sought to redress in my own work, not only in the studio, but in my own consulting practice, not described here. The advancements were four:

- Integrating ecology and sustainability into urban design
- Collaborating closely with community members and interests
- Intervening at a larger scale – urban, metropolitan, regional – than single projects
- Planning at multiple scales at the same time

A key example from this student’s journey was the one year long Chinatown Studio. Planners and historic preservationists working together and individually in the fall semester to analyze the situation, and presenting the analysis to the faculty, students, and client representatives participating in the spring semester. These faculty and students were drawn from city planning, historic preservation, architecture, and landscape architecture, with a total of about 45 students.

We interacted closely in the spring with the client, the Philadelphia Chinatown Development Corporation (PCDC), a viable community development corporation. The degree and quality of collaboration was conditioned by local, intra-community politics, as PCDC was largely Taiwanese membership. Approximately half of thirty neighborhood organizations in Chinatown were mostly populated by Taiwanese members, and the other half largely by mainland Chinese members. There was at that time (1986) a split between them that played out in local redevelopment, and to a minor extent in our studio. As Chinatown was close to campus, we interacted frequently, often in the neighborhood, individually, in small groups, and in large public meetings. The Philadelphia City Planning Commission followed our work, and in the decades since, a number of our specific and general proposals have been implemented.

The Integrative and Interactive Practitioner

Problem-based learning is integrative and interactive by definition. If done in active collaboration with a community, several levels of complexity are added to the integration and interaction. One level of complexity includes community participants: interest groups, community groups, municipal agencies, utilities, transport agencies, school districts, other entities, and individuals. Integrative, in the context of urban design and planning studios, refers to several types of simultaneous attempts at integration, which raises the level of complexity dramatically. Some curricula save this type of studio or project until the final semester of study, in order for students to learn one step at a time the individual “building blocks” of site planning, cities, infrastructure, ecosystems, collaboration, and so on. In essence, disciplinary as opposed to inter- or multi-

disciplinary approaches. Other curricula favor immersion into interdisciplinarity from the start. A valuable piece of research on learning performance outcomes would be to empirically test and comparatively assess, using common criteria, different curricular approaches to interdisciplinary studio learning.

Interactive, for urban design and planning studios, means not only interdisciplinary interaction, but also direct contact and interaction with the clientele at the grassroots level. This style of learning starts with problem-defining, a most critical step in problem-based studio learning. In place-based studios, learning from the place and its peoples is paramount. Ethnographic, demographic, and social statistical measures are among the methods here. The goal of community-learner interaction is a Freirian ideal, in which the community members become co-learners with the students and faculty (Freire 1970). An explicit and learned guiding principle for the students was to “listen to what the city and its citizens were telling them”. This mirrors the finding of Sletto, whose reported experience in service learning was that learner disposition is key: “learning to embrace the unexpected through service learning” (2010, 403). Furthermore, we found in several instances reported here (Chinatown Philadelphia, West Berkeley, and Palacios, Texas) paralleled Sletto in another respect, that of building client capacity (2010).

In all cases the studios used as a baseline for analytical data the McHargian “layer cake” method of ecological analysis, implemented using GIS and other imaging software, and expanded to include infrastructural, social, and other factors as conditions warranted. Gazvoda elaborates on the incorporation of this method into studio teaching, at least for ecological data (2002).

A Note on Project Selection

A good project makes for good learning, a great project makes for great learning, and a bad project makes for bad learning. What criteria can be applied at the outset when selecting projects for collaborative and interdisciplinary problem-based studio learning? In my case, I seek to expose the students and the community that they plan and design with to new ways of thinking and acting. To me, the more challenging the area, and the more open-minded and engaged the community is, the more profound the learning. So I sought for urban redevelopment studios the poorest and most diverse (West Berkeley, CA, Palacios, TX, Bryan, TX). In ecological regions, the most conflicted (Texas Gulf Coast, New Orleans and Southern Louisiana), and in urban mega-regions the most unique (Texas Urban Triangle).

These environs and conditions tended to be far outside the norm of the typical student, so that they had to stretch their horizons to understand what they came into contact with. I found that the greater the distance from their comfort zone, the more they learned, and the more they were able to cast their prejudices aside (after a while, in many cases) and craft interesting solutions. From student feedback, this occurred to the extent they were able to see the place “freshly”, putting aside as much as possible preconceived notions or standard solutions that they may have brought from their own backgrounds, including their own disciplines. Instructor intervention to expose innate biases and contextualized new situations was a constant vigilance.

Another key criterion was, in most cases, extremely strong commitment from the client / community. This commitment was expressed in two ways – financially and person-hours. We received in the majority of the cases reported between \$20,000 and \$50,000 for a one-semester project. In two cases, West Berkeley and Palacios, citizen and interest group participation was extraordinary, and will be sketched in the vignettes and case studies that follow. As a long-time grassroots activist-planner inspired and taught by Reiner, Meyerson, Davidoff, and Castells, and steeped in the cross-acceptance cauldron of the first New Jersey State Plan, I endeavored to profess what I practiced. In my experience as a student and as a teacher, intensive community participation in studio projects had by far the biggest impact on the students and their learning.

This suggests that the criteria for project selection are capital in the quality of the learning outcomes, whether self-assessed (end of semester course evaluations) or peer-reviewed (national and state awards). This was identified 25 years ago by William Alonso: “Current emphasis on studios with an actual client, such as a local agency or community group, both facilitate the incorporation of public service into the classroom and demand academic rigor” (1986, 69).

Two short vignettes – West Berkeley and Downtown Bryan

The prototype of the collaborative interdisciplinary studio was tested in 1999 for the West Berkeley Neighborhood Development Corporation (WBND) in northern California. This client engaged us to conduct a studio planning and design project to come up with solutions for a rapidly changing neighborhood, Berkeley’s poorest. Since World War Two the area had a significant black population, and since the 1960’s a significant Latino one, alongside the historic white base. In the 1990’s affluents, mostly whites, and high-end businesses moved in. The new development centered on Fourth Street, in what has since become a shopping magnet for the region. Social and land use conflicts ensued, and we were asked to use urban planning and design to resolve some of them.

Twenty students from twelve different disciplines from across campus enrolled: undergraduate, graduate, and doctoral. Students got media (video and web-design) training through an innovative technologies grant,

and applied these skills in delivering client products: a web site, a large-format graphical display of the neighborhood's history and visions, and two videos, one for the Berkeley Ecology Center. Proposals included a redesign of the railroad underpass for the Redevelopment Agency, multi-lingual marketing materials for WBND, a community organizing campaign for the Friends of the Parks; a "history walk" public art project, and a family-oriented recycling workshop for the Ecology Center.

Students worked in pairs or small groups, with no discipline being represented more than once in each. A few worked individually. Interdisciplinary collaboration was mixed, especially at the undergraduate level, as they had not enough time to get firmly grounded in a discipline. At the same time, undergraduates tended to exhibit a greater degree of openness to collaboration for the same reason. At semester's end, students reported a benefit from having such a wide spectrum engaged. The client also benefited from the variety of proposals produced, and perhaps made most use of the web site, then a novelty for a CDC, and the business plan. Their re-energized civic capacity as a result of the project was a gain that lasted several years. Later, a number of students completed other projects for more than a half dozen community groups.

Other implementation highlights included using the innovative technology grant from the university to teach community members website creation. The resulting website included the first fully searchable database online in the city created from business license data rather than self-selected advertisers. The WBND won one of the first Chancellor's Campus Community Partnership Awards shortly afterwards.

The students spent a good amount of time on site during the studio. In general, they improvised as best they could, an attitude that grew as the semester progressed. Younger students were more timid in this regard at the outset. Some were more receptive and exploratory, while others preferred more direction and how-to instruction. The mutual learning that came from community interaction and community presentations, especially the final, attended by approximately 100 persons, made a notable impact on the students and the community. The community had experienced other student projects, mostly surveys or studios without direct involvement. Our participative stance was appreciated to the extent that various community leaders and members routinely joined our thrice-weekly studio sessions. The final presentation in the neighborhood library in the evening (to maximize attendance) including two city councilpersons, the mayor, and representatives from community and government groups, along with businesses, citizens, and the press. As a result, students saw how a broad range of sustainability principles and practices were perceived and applied in the real world. They enhanced their understanding of how multi-disciplinary knowledge sets get used in the real world of community-level practice.

From a learning perspective, the instructors had no prior experience in directing such a large variety of students at differing stages in their careers. As a result, we improvised tenaciously throughout, working closely with students to help them select and craft their products. The twin pressures of a firm deadline and quality deliverables asserted themselves positively throughout. Having two instructors increased learning opportunities enormously. As a team we supported a greater variety of interests, and provided an option for whom to work with more closely.

We also spent a vast amount of time on site, averaging ten to twenty hours each per week, collaborating with the students, the client, and other community groups and interests. Furthermore, we stressed creativity and insisted that they address real problems, as related by the community, meaningfully. What kept the project flowing smoothly was 1) a strict 'survey before plan' method (gather data straight from the source, analyze data, create options, evaluate options (truncated), produce preferred proposal) and 2) a strict agenda (schedule) for the semester with set delivery dates, within which creativity, improvisation, and adaptation were relatively free to proliferate. Perhaps the greatest obstacle for the instructors, and as a result our greatest inventiveness, was to deal with, especially in group work, different learning stages (doctoral, masters, undergraduate) and discipline-bound learning styles (design, rational, historical/narrative, for example).

An advance to this prototype was elaborated in 2001. The client in this case was the City of Bryan, Texas, and the project was an integrated plan-design-build urban redevelopment studio for the north side of downtown, the poorest neighborhood where whites, blacks, and Latinos lived and worked. Forty students and three faculty members from five disciplines – architecture, urban planning, landscape architecture, construction science, and land development – worked on the project. The construction and architecture students, who comprised the bulk of the students, worked in different spaces at different meeting times, which was problematic for full collaboration. This project had the least amount of community participation of the local projects reported here, even as the design and planning students spent much time downtown.

The test to the faculty was coordinating the plan-design-build aspect. While design-build does exist in professional practice, it presumes advanced preparation and experience. Plan-design-build is normally done in sequence professionally, most often by separate firms or teams with separate contracts, leaving coordination to the developer. Our experiment to integrate the three was decidedly mixed. On the positive side, the architecture and construction professors were able after a few weeks to resolve schedules and to fit

the outputs of the design work as the input to the construction documentation in satisfactory fashion. On the downside, planning, landscape architecture, and land development work, more analytical in nature (especially in the first half of the semester), was too late to adequately inform design and construction. Nonetheless, the students got to sense the difficulty of interdisciplinary collaboration, especially the timing challenges.

Case Study Without Client:

Rebuilding a Sustainable Gulf Coast: A Regional Plan for New Orleans and Environs

Five disciplines were represented among the twenty students: urban planning, urban and regional science, architecture, civil engineering, and geography. The final products were a land suitability assessment, an urban and regional analysis, and an urban and regional design plan.

Genesis of the Project

In the spring semester of 2006, the Sustainable Urbanism graduate seminar (three credits, not a full studio) undertook as its class project a “Regional Plan and Design to Rebuild a Sustainable Louisiana Gulf Coast”. This project grew from the needs occasioned by the dramatic devastation of hurricanes Katrina and Rita in the late summer and early fall of 2005. There were no exams or papers, and only one assignment – the plan.

We settled on a point of view guiding our inquiry and designs based on a locally informed synthesis of ecology and social justice. Local knowledge was the beacon. Themes of appropriateness and sustainable development guided analysis and design. We endeavored to “listen to what the place was telling us”, as well as to respect the common wisdom offered by nature itself. The students' designs sought to balance a range of concerns that would support both local and visiting populations, that would respect human, ecological, and economic concerns, and that would benefit current and future generations. We received support from local experts at the Louisiana Universities Marine Consortium in Cocodrie, and New Orleans architect David Gregor.

The Project

Given the unique history and ecological situation of New Orleans, rebuilding for the future must be sustainable to avoid the disastrous consequences of another hurricane that is sure to come. The students engaged in analyses, prepared scenarios, assessed the scenarios, and prepared specific plans and designs at six different scales: the regional scale comprising the eastern half of the state's coastal region south of Interstate Highway 10, the New Orleans metropolitan area, the City of New Orleans, neighborhoods, blocks, and individual structures. The work was organized in two phases of equal length. Phase one concerned site analysis, documentation, and planning scenarios. Phase two consisted of detailed designs and plans.

Rebuilding a sustainable gulf coast: A regional plan for New Orleans and environs was presented by the students in May (Neuman 2006). The Regional Plan proposed revisions to the city plan, detailed urban designs for several neighborhoods in the city including the Ninth Ward, improvements along the waterfronts (river, levees, and canals), detailed housing designs for flood resistant shelter, a rewrite of the state building code, and numerous environmental and eco-remediation programs, including for the barrier islands and coastal wetlands.

An Overview of the Existing Situation

The Louisiana coast is an extensively developed and scarred coastline whose natural functions have been degraded over generations by well-intentioned but ill-conceived engineering proposals to tame the environment (McPhee 1989). These pre-existing conditions worsened the impacts of the storms. As a result of extensive readings and an eventful three-day site visit along the entire Louisiana Gulf Coast from Cameron on the west (which Hurricane Rita destroyed in September 2005) to New Orleans on the east, we quickly became convinced that the causes to the devastation were based principally in regional and environmental factors. This differed markedly from the usual culprits singled out by the media and emergency response officials – the levee breaks. Our recognition became a strong motivator to explore even further the intertwined ecological and cultural dynamics of the region, in order to produce a plans and designs that would serve both people and nature.

The students learned that the rich local heritage is a great reservoir to draw from as they prepared their analyses and plans to rebuild. Most significantly, they found as a direct consequence of the scope and scales of analysis, which many of the flooding problems were not only caused by engineering mistakes and faulty design and construction of flood protection infrastructure. They found that the erosion of the natural systems, such as the coastal wetlands and barrier islands, due to human development including oil and gas pipelines, shipping channels and canals, channeling the Mississippi River, and industrial and urban development has led to the worsening of the storms' impacts on the larger urban areas further inland, such as New Orleans. Because we undertook a regional analysis instead of the more common building or

neighborhood analyses conducted by most experts after the storms, we found regional causes to local consequences.

It became clear to the students, based on their analysis, that restoring the barrier islands and especially the coastal wetlands, so that they can resume many important ecosystem services to humans and other beings, not the least of which is dampening storm surge, is essential in order to achieve long term sustainability of New Orleans and its metropolitan area. Moreover, they used their newly learned sensitivities to the natural and cultural heritage to shape their proposals so as to protect and nurture them.

The Planning Process

Student visit to the Louisiana Coast and New Orleans

Twenty students and faculty took a three-day trip along the Louisiana Gulf Coast from Cameron near the Texas border to New Orleans near the Mississippi border, to inspect the impacts of Hurricanes Rita and Katrina. In between we hugged the coast, impressed by the total devastation and by the research conducted by the Louisiana Universities Marine Consortium (LUMCON), during a visit to its field station near Cocodrie. This field trip was invaluable for information gathering and motivation.

Intensive interdisciplinary interaction

Students and faculty from five disciplines collaborated. Visits to the class were made by coastal and sustainability experts such as Pliny Fisk of the Center for Maximum Potential Building Systems and Charles Pattison of the Thousand Friends of Florida. They stressed that single-discipline solutions of the past contributed to much of the devastation, and that multi- and inter-disciplinary collaboration is essential for sustainable remedies.

Five Goals of the Plan

- To restore the functioning and integrity of ecological habitats while maintaining coastal water quality and species diversity
- To rebuild New Orleans as a regional center for Southern Louisiana and beyond
- To build new flooding and storm surge defenses for the city and environs
- To enhance the safety, appearance, functioning, and sustainability of infrastructures critical to the rebuilding of the city and environs
- To rebuild viable neighborhoods using ecological planning methods and sustainable housing

Case Study With Client:

The City of Palacios Urban Design Plan

Five disciplines were represented among the 25 students, and three among faculty: urban planning, landscape architecture, architecture, recreation, parks and tourism, and nautical archeology. The products were: a land suitability assessment, a comprehensive urban analysis, an urban design plan, and a sustainable tourism assessment.

Overview of the Existing Situation

The City of Palacios is located on Tres Palacios Bay in Matagorda County, halfway between Houston and Corpus Christi. The city had a population of 5,000 inhabitants, about 15% Vietnamese, 35% white, and 50% Hispanic. Palacios was known as the Shrimp Capital of Texas until the recent economic downturn. It is a community rich in coastal resources from oyster beds, shrimp fisheries, and recreational fishing, to an extensive waterfront park system, a port with a large shrimp fleet, and a Marine Education Center.

Description of Project

The Urban Design Plan proposed detailed urban designs for four areas in the city: the waterfront, Main Street/downtown, the state highway 35 bypass, and the hike and bike trail. The four goals of the plan are:

- To improve the shoreline while maintaining water quality
- To improve Main Street as a center for shopping and entertainment
- To create a new hike and bike trail connecting all parts of town
- To enhance the safety, appearance, and traffic flow of Henderson Avenue/State Highway 35 bypass

The Planning Process

The planning process centered around intensive student-citizen grassroots collaboration. Over 150 Palacios residents collaborated with us over the course of the project. Eight residents of Palacios came to Texas A&M to review the students' proposals as they were being developed. Students and faculty spent a total of 140 days in Palacios, three hours by car from the university.

Five open public meetings were held at critical stages in five different venues: the Palacios High School, Recreation Center, Vietnamese Community Center (first general public meeting ever held there), Palacios Library, and Texas Baptist Encampment. Attendance ranged from 60 to 150 persons, and simultaneous interpretation was offered in Vietnamese and Spanish in two meetings. Seventeen other meetings were held among faculty, students, town leaders, and citizens.

The plans and designs were prepared collaboratively with the citizens of Palacios, led by the Beautification and Revitalization Committee and its four subcommittees established expressly to work on this plan: the Hike and Bike Trail Committee, the Main Street / Downtown Committee, the Waterfront committee, and the Henderson Avenue Bypass Committee. Each committee met numerous times during the semester long process, as well as before the student involvement began, and continued afterwards. These subcommittees were responsible for the continuation and institutionalization of the planning process begun by the students.

A total of 1,350 surveys about existing conditions and what should be done to improve the town in the future were completed and collected, in a town of 1,700 households. The survey, translated to Spanish and Vietnamese, was administered through public school students who took them home to their parents as a class assignment, as coordinated by the school district and the public schools. Palacios students also took part in class discussions about the future of Palacios, and attended public meetings.

Enhance the Civic and Planning Capacities of the City and Citizens of Palacios

In addition to the urban design plan and the tourism assessment, students also delivered separately a draft zoning code and a draft historic code. These codes were the city's first, and were adopted after a new city charter was passed shortly after (and partly inspired by) our studio. The project involved members of the community - the Vietnamese that comprise 15% of the city's population - that had never been engaged in public policy making or planning before. The project engaged public school students in city planning for the first time. It also made strides in bringing all cultural and age groups of the citizenry together.

Improve the Degree of Sustainability

For environmental sustainability, the students proposed a Wetlands Education Center, and proposed connecting an existing Wetlands Park by bike trail to the rest of the city. The bike trail is designed to permit school students to bike to school, relieving car commuting to school. The bike trail is to be designed of recycled materials. Recently the city was awarded a state transportation grant to build the bike trail. For social sustainability, the process brought together all cultural and age groups to the table to discuss and decide future options. The Henderson Avenue Bypass redesign is safer due to the addition of a landscaped median, installation of traffic signals, crosswalks, and sidewalks. For economic sustainability, the students proposed slow and gradual tourism development that does not change the small coastal town community character. The Main Street improvements of a new sidewalk, bike lane, continuous facades, continuous awnings, tree and other landscape plantings, benches, trash cans, street lighting, art murals, etc. are all designed to enhance the pedestrian experience and entice residents and visitors downtown.

Develop the Identity of Palacios during the Urban Design Plan Project

The overall process of intense citizen involvement, plus the survey responses, led to the growing definition of a unique community identity for Palacios. Known before as the "City by the Sea" and the "Shrimp Capital of Texas", residents now see themselves as a beautiful and laid back coastal town with a unique commercial fishing and tourism character. This emergent identity had much to do with the level and quality of citizen involvement in the planning process.

In the spirit of collaboration with a diverse and historic community, the students and faculty engaged in a semester-long journey of design inquiry (Zeisel 2006). This motif, inquiry by design, was among the theoretical underpinnings of this studio, as enhanced by intense collaboration with individuals and interest groups at both the grassroots and institutional levels (Castells 1983, Healey 2006). One example of the degree of professional and cultural interchange was that each student was lodged in the family home of a local leader, such as council member, NGO director, school board member, etc. during each visit.

Lessons for Teaching Collaborative Interdisciplinary Studios

Building institutional and civic capacity

The building of institutional and civic capacity is a critical contribution of community-based service learning. The planning academy would benefit immensely if this under-reported facet of problem-based service

learning were to be assessed rigorously in the future. Community benefits included establishing and strengthening strong and weak social ties, establishing and strengthening lines of communication, forming committees, and developing common bonds, values, identities, and language. These were among the key components in the evolution of civic and institutional capacity for the clients of the studios reported here. Building these capacities is a lasting value-added outcome of collaborative service learning. Some literatures call this organizational learning, as reviewed by Ebrahim and Ortolano (2001). Via positive-feedback, organizational and institutional practices change through learning (see also the work by Schon and Argyris, together and separately).

Using images to convey analyses and proposals that crystallize community thought and action

We found that the principles espoused by Al-Kodmany (2001) – to use Lynch's chief characteristics of *The Image of the City* (1960) together with GIS to bridge local and technical information with visualization – to be very effective. Thousands of student-generated illustrations and designs spurred debate and crystallized thinking about the current conditions that they analyzed and the future proposals that they presented. They were most effective when presented and discussed in public. The importance of using visualization in community planning was underscored by Sanoff (1978, 1991).

Start collaborating at the outset, continue collaborating throughout

When students were taught from the outset (better yet, shown with convincing examples) that collaboration is positive, necessary, and solves problems in inventive yet useful ways; then we found them to accept collaboration with different disciplines and community members and groups as normal. In several of the cases reported here, end of the semester public presentations, peer awards, and implementation by the client reinforced the value of collaboration.

Essential to this type of interaction is to ensure that students and faculty from different disciplines meet in regular studio and class sessions at the same time in the same place. This amounts to a scheduling issue that may require significant advance planning not only by the faculty members involved, but administrators as well. Furthermore, it requires more than conviction and attitude conveyed consistently by the faculty. It also necessitates specialized training for faculty to facilitate creative interdisciplinary collaboration, which when these four words are taken together represents a cohesive set of techniques that are integrated by the instructors and inculcated to the students.

Overall, we found that the more the following conditions pertained and were stressed by the studio masters, the greater the learning and satisfaction reported by the students and the clients.

- Multi-disciplinary – working together simultaneously in place and time
- Multi-scalar – dealing with multiple scales simultaneously
- Problem-based learning – addressing real problems of concern to the community while at the same time linking the problems to theory and methods
- Integrative – synthesizing scales, disciplines, theories, methods
- Sustainable – increasing value across the board in the long term
- Local knowledge – interacting with local people and places

In problematic political and economic times, justifying planning to our constituents becomes acute, as Spain observed nearly two decades ago (1992). Convincing accounts of community-based collaborative service learning that improves places, builds capacity, and expands the learning horizons of citizens, student, and teachers alike can provide a valuable tool to do so.

References

- Al-Kodmany, Kheir. 2001. Bridging the gap between technical and local knowledge: tools for promoting community-based planning and design. *Journal of Architecture and Planning Research*. 18 (2): 110-30.
- Alonso, William. 1986. The unplanned paths of planning schools. *The Public Interest*. 82;58-71.
- Anthony, Kathryn. 2011. *Design Studios*. In Banerjee, Tridib and Loukiatou-Sideris, Anastasia. *Companion to Urban Design*. London: Routledge, pages 223-237.
- Argyris, Chris, and Donald Schön. 1974. *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.
- Argyris, Chris, and Donald Schön. 1978. *Organizational learning*. Reading, MA: Addison-Wesley.

- Author. 2004. Palacios urban design plan. Publisher. <http://sustainableurbanism.tamu.edu/projects>
- Author. 2006. Rebuilding a sustainable gulf coast: A regional plan for New Orleans and environs. publisher. <http://sustainableurbanism.tamu.edu/projects>
- Author. 2008. Texas urban triangle: Framework for future growth. publisher. <http://texasurbantriangle.tamu.edu>
- Barrows, Howard. 1986. A taxonomy of problem-based learning methods. *Medical Education* 20 (6): 481-6
- Barrows, Howard, and Robyn Tamblyn. 1980. *Problem-based learning: An approach to medical education*. New York: Springer.
- Baum, Howell. 1997. Teaching Practice. *Journal of Planning Education and Research* 17 (1): 21-9.
- Benyus, Janine M. 1997. *Biomimicry*. New York: Quill
- Camazine, Scott, et al. 2001. *Self-Organization in biological systems*. Princeton: Princeton University Press.
- Capra, Fritjof. 2002. *The Hidden Connections: A Science for sustainable living*. New York: Anchor Books
- Castells, Manuel. 1982. Planning and social change: Introduction. *Journal of Planning Education and Research* 2 (1): 3-4.
- Castells, Manuel. 1983. *The city and the grassroots: A cross-cultural theory of urban social movements*. Berkeley: University of California Press.
- Chapin, III, F. Stuart, et al. 1997. Biotic control over the functioning of ecosystems *Science* 277: 500-504
- Daily, Gretchen. 1997. *Nature's services*. Washington DC: Island Press
- Davidoff, Paul. 1965. "Advocacy and Pluralism in Planning" *Journal of the American Institute of Planners*. 31:331-338.
- Ebrahim, Alnoor and Leonard Ortolano. 2001. Learning processes in development planning: A theoretical overview and case study *Journal of Planning Education and Research* 20 (4): 448-463.
- Forman, Richard T. T. 1997. *Land mosaics: The ecology of landscape and regions*. Cambridge: Cambridge University Press
- Forsyth, Ann, Henry Lu, and Patricia McGirr. 2000. Service learning in an urban context: Implications for planning and design professions. *Journal of Architectural and Planning Research* 17 (3): 236-259.
- Freire, Paulo. 1970. *Pedagogy of the oppressed*, translated by Myra Bergman Ramos. New York: Continuum.
- Gazvoda, Davorin. 2002. Characteristics of modern landscape architecture and its education. *Landscape and Urban Planning* 60: 117-133.
- Gutman, Robert. 1992. Emerging problems of practice. *Journal of Architectural Education* 45(4): 198-202.
- Hardin, M.C. and Zeisel, W. (eds.) 2005. *From the Studio to the Streets: Service Learning in Planning and Architecture*. Washington, DC: American Association for Higher Education.
- Healey, Patsy. 2006. *Collaborative planning: Shaping places in fragmented societies*. New York: Palgrave Macmillan.
- Heumann, Leonard, and Louis Wetmore. 1984. A partial history of planning workshops: The experience of ten schools from 1955 to 1984. *Journal of Planning Education and Research* 4 (2): 120-30.
- Kolb, David, 1984. *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Lang, Jon. 1983. Teaching planning to city planning students: An argument for the studio/workshop approach. *Journal of Planning Education and Research* 2 (2): 122-29.
- Kynch, Kevin. 1960. *The Image of the City*. Cambridge, MA: MIT Press.
- McHarg, Ian. 1969. *Design with nature*. New York: The Natural History Press
- McPhee, John. 1989. *The control of nature*. New York: Farrar, Straus and Giroux.
- Mostafavi, Mohsen. 2010. Why ecological urbanism? Why now? In *Ecological Urbanism*. ed. M. Mostafavi, G. Doherty. Baden, Switzerland: Lars Muller, pp. 12-51.
- Mukhija, Vinit. 2010. N of one plus some: An alternative strategy for conducting single case research. *Journal of Planning Education and Research* 29 (4): 416-26.

- Neuman, Michael. 2007. Multi-scalar large institutional networks in regional planning. *Planning Theory and Practice*. 8(3): 319–44.
- Sanoff, Henry. 1978. *Designing with community participation*. New York: McGraw-Hill.
- Sanoff, Henry. 1991. *Visual research methods in design*. New York: Van Nostrand Reinhold.
- Schön, Donald. 1983. *The reflective practitioner: How professionals think in action*. NY: Basic Books.
- Shepherd, Anne and Bryna Cosgriff. 1998. Problem-based learning: A bridge between planning education and planning practice. *Journal of Planning Education and Research* 17 (4): 348-357.
- Sletto, Bjorn. 2010. Educating reflective practitioners: Learning to embrace the unexpected through service learning. *Journal of Planning Education and Research* 29 (4): 403-15.
- Spain, Daphne. 1992. Creating and defending links between teaching, research, and public service. *Journal of Planning Education and Research* 12 (1): 77-79.
- Swyngedouw, Erik. 1996. Reconstructing citizenship, the re-scaling of the state and the new authoritarianism: Closing the Belgian mines. *Urban Studies*. 33(8): 1499-1521.
- Vakil, A., R. Marans, and A. Feldt. 1990. Integrative planning workshops: The Michigan experience. *Journal of Planning Education and Research* 10 (1): 61-9.
- Vitousek, Peter, et al. 1997. Human domination of earth's ecosystems *Science*, 277: 494-499.
- Wetmore, Louis, and Leonard Huemann. 1988. The changing role of the workshop course in educating planning professionals. *Journal of Planning Education and Research* 7 (3): 135-46.
- Wu, Weiping, and Michael Brooks. 2010. Report from the editors: Writing pedagogy articles. *Journal of Planning Education and Research* 29 (4): 401-2.
- Zeisel, John. 2006. *Inquiry by design: Environment/behavior/neuroscience in architecture, interiors, landscape, and planning*. New York: W.W. Norton & Company.

Fear of Crime in the Built Environment

Rangajeewa Ratnayake

Community Planning and Development Program, La Trobe University, Bendigo

Abstract

This study aims to explore environmental design and socio-cultural theoretical views in relation to fear of crime in urban spaces. This discussion is divided into four sections. Section one explores studies in relation to environmental design approaches and fear of crime. These comprise broken window theory, crime prevention through environmental design (CPTED), defensible space and 'eyes on street'. It explores how these perspectives shed light on the role of built environment as influencing fear of crime. Section two investigates prospect and refuge theory and its potential to provide a conceptual framework for the study of fear of crime in urban areas. In section three, I examine general socio-cultural explanations for fear of crime in urban spaces, including the influence of presence of people, gender, demographics, and media on fear of crime. Section four focuses how to extend prospect and refuge theory (environmental cues) by combining social variables (presence of other people, gender and social background of people). Primarily, this paper argues that planners and planning practice require a holistic understanding of fear of crime to be effective at policy development, implementation and evaluation. A more holistic understanding of fear of crime can be achieved by merging evolutionary biology (prospect & refuge theory) and socio-cultural theory with planning and urban design theory.

Key words: *fear of crime, environmental design, socio-cultural variables, prospect and refuge theory*

Introduction

Fear of crime is a vital concept to be studied because it affects the well-being of individuals and society as a whole. Fear of crime can have detrimental effects on individuals' psychology as it can limit people's freedom and choice, significantly influencing individual behaviour in space. Perception of crime restricts individual mobility; it impacts on individuals' health and well-being, hinders outdoor participation, leisure activities, and contributes to dissatisfaction with public spaces, neighbourhood and overall life (Wandersman & Nation, 1998). At the societal level, the fear of crime burden may be unfairly placed on those already socially and economically disadvantaged as they may not have sufficient resources to protect themselves or to move from high crime areas (Jackson, Farrall, & Emily, 2007). The intention of this paper is to explore theoretical models that explain the relationship between exterior site characteristics and feelings of fear in relation to crime. This paper argues that planners and planning practice will be more effective at policy development, implementation and evaluation if evolutionary biology (prospect & refuge theory) and socio-cultural theory are merged with current planning and urban design theory. The merging of these theoretical and conceptual models will create a more holistic understanding of fear of crime based on the dynamic relationship between people and their environments.

Towards a working definition for fear of crime

Many studies adopted Ferraro's (1995, p.4) definition of fear of crime. His definition is: 'Fear of crime is an emotional response of dread or anxiety to crime or symbols that a person associates with crime'. This paper also adopts a similar definition in its examination fear of crime in the built environment. Ferraro's definition is useful because it treats fear of crime as a psychological condition resulting from physical signs as well as the various meanings individuals have based on their differing socio-cultural characteristics. Thus, for the purpose of this study, the paper adopts a working definition that fear of crime is situational in that individuals' fear of crime can be understood as being afraid, anxious, or concerned about becoming the victim of a crime in public areas in relation to immediate environmental clues (Gabriel & Greve, 2003). Crimes in this sense can include physical assaults, threats, robbery, homicide, as well as crimes not impacting on the person directly such as the theft of a person's resources (such as money). It is believed that all situations ultimately represent a threat to physical wellbeing (Garafalo, 1981). It is also believed that fear could be elicited by events and conditions that have a potential of physical harm and threat (e.g., automobile accidents, uneven pavement edges, ditch on the foot path). Even though such events and conditions have a potential physical harm generally they are not perceived as crimes. It is evident in previous studies on fear of crime that these events or conditions are not viewed as crimes (Garafalo, 1981; Nasar, Fisher, & Grannis, 1993) Therefore, this paper also does not consider them as crimes.

Significance of fear of crime for planners and planning practice

A crucial influence on whether people will use or avoid urban public spaces is the degree to which they feel safe in them. The actual risk of becoming a victim of crime is usually less than the fear people feel, but it is the latter that can lead to avoidance (Kelly, 1986; Koskela & Pain, 2000). Ironically, the people who are least at risk (for example, older people) tend to be most fearful, while young men, who are those most at risk, are less fearful (Sundeem, 1984). In other words, demographic indicators of crime victims tend to be inversely proportional to the statistical likelihood of being a victim in public space. However, it needs to be emphasised that women and elders are more likely to be victims of violence within the home, rather than in public space.

One of the consequences of the demographic characteristics of fear of crime as enacted in public space is that certain public spaces become mono-culturally dominated. For example, Saturday nights in town centres or parts of parks in Australia may become dominated by groups of young men (Tulloch et al., 1998). This situation of nightlife turns into an ecology of fear of city centres (Davis, 1999) driven by those residual groups who use the city. Many researchers found that the majority of women and elderly did not use some spaces in the city centre at night due to fear of violence. Many young women face sexual harassment in public and this elevates their levels of fear considerably. This undermines the intention of public spaces to be democratic places for all (Shaftoe, 2008; Tulloch et al., 1998) At the same time if people avoid public spaces, particularly at night due to fear of crime, such spaces become less vibrant, visually unattractive and less stimulating for residents and visitors.

In the context of Australian metropolitan and regional cities, international and migrant population have increased dramatically over the last 10 years (Australian Education International, 2009) and the expectations that growth will continue. To ensure this growth, the safety issues of international students and citizens have become increasingly important. From the perspective of local authorities, the more that can be learned about issues of people, the better they can create a conducive living environment and reputation that will attract not only international students but also other people including skilled migrants and tourists.

In recent times, there has been considerable research focusing on safety in Australia. Research findings highlight that feeling of unsafe in public spaces particularly at night is a significant issue for many people in Australia. According to ABS Crime victimization survey in 2010, over four million adults, or 26% of those aged 18 years and over, reported feeling unsafe when walking at night alone in their neighbourhoods or taking public transport at night alone (Australian Bureau of Statistics, 2010). It has also been revealed that many international students have felt unsafe in public places in Melbourne metropolitan area (Andrews & Gatersleben, 2010). While there has been considerable research focusing the crime and general safety issues of international students in metropolitan areas in Australia, fear of crime in public spaces in regional cities has been neglected. At the same time the recent studies have not adequately studied the influence of features of the built environment on fear of crime in urban settings in Australia.

It is the primary responsibility of planners, urban designers, and local authorities to design and manage urban spaces. Decisions such as where public spaces will be located, how parks, open spaces, markets, and bus stations, look, and what features will be included, will be ultimately determined by these actors. Such planning decisions will facilitate create well-integrated or fragmented urban settings. Integrated spaces within the city centre that incorporate a wide range of day and night time activities is associated with reducing temporal activity gaps and thereby attracting a wide a range of social groups. Mixing of land uses, especially with residential redevelopments in commercial settings is likely to increase pedestrian activities in city centres and thereby increase informal natural surveillance. Furthermore, people are likely to use well-lit and accessible places in public settings. In contrast, separation of retail shops and entertainment facilities from bus stops and car parks will create less integrated city centres. This would result in under utilisation of some parts of city centre and low level of pedestrian activity across over a longer time-span especially at night-time. Gaining knowledge about how different environment settings and social variables act together to influence people's fear of crime, particularly at night in public space, and the experience of people in these spaces is integral for planners and planning practice in Australia because Australian planning education policy values cultural diversity and multiculturalism (Planning Institute of Australia, 2010)

Theories of fear of crime

Factors of fear of crime have been broadly discussed in relation to two main theoretical perspectives: theories related to environmental design and theories related to socio-cultural variables. Planners and the planning profession has been dominated by matters related to environmental design and changes to the physical environment; these planning approaches have been viewed as too environmentally deterministic (Talen, 1996). This is some evidence that there is a shift toward more socio-cultural approaches, however these are often focused on the subjective experience of fear of crime. Socio- cultural approaches may influence both perspectives on the periphery; however they are not explicitly interrogated or applied within the planning profession. To get beyond objective and subjective explanations of fear of crime in urban

spaces, environmental and social approaches need to be combined so planners and the planning profession can achieve a more holistic understanding of the dynamic between people and their environment.

Environmental approaches

Regarding the environmental design thesis, some researchers argue that physical characteristics of a setting can affect our perceptions and guide our behaviour in terms of how we use space. Lack of concealment, surveillance, area for refuge, escape routes for individuals and lack of maintenance may provoke fear in the minds of people (Marusic, 2010; Newman, 1972). Perception of crime can also be attributed to physical disorders of the neighbourhood such as deteriorated or abandoned buildings and graffiti.

The relationship between environmental clues and crime has been studied in city planning, urban design and architecture throughout the second half of the twentieth century. Ernest Burgess (1925) in his famous theory of concentric urban zones (Burgess, 1925 cited in: Basham, 1978), claimed there are zone of transitions that are physically disorganized and favour delinquency. He came to this conclusion by observing the tendency for most cities to spread outwards like ripples on a pond with each zone inhabited by a particular class of people. The city centre tends to be a central business district (CBD) surrounded by transition zones. As the population of the city grows, as industry expands by a process of invasion and succession, a new pattern of social segregation emerges from the suburbs of the middle class to the ghettos of the zone of transition.

Shaw and Mackay in their study of delinquent areas in Chicago attempted to correlate high crime rates with overcrowded central city poor neighbourhood immigrant groups (Shaw & McKay, 1942). Comparing the maps, Shaw and McKay recognized that the pattern of delinquency rates corresponded to the "natural urban areas" of Park and Burgess' concentric zone model. This evidenced the conclusion that delinquency rates always remained high for a certain region of the city (transition zone), no matter which immigrant group lived there. According to their study, it was the physical environment rather than the individual or group that lived in areas that caused crime and delinquency.

Shaw and MacKay's ideas and Burgess' concentric zone theory have been criticized as being environmentally deterministic. These theorists have downplayed the demographic and cultural factors in delinquency and criminal behavior. Many studies show that individual characteristics such as age and gender play a role in shaping the likelihood that a person will become involved in criminal activities (Kubrin & Weitzer, 2003). The above theories were not applied to all types of crime, but instead to street crime at the neighborhood level. The concentric theory zone has not been used to explain organized crime, corporate crime, or deviant behavior that takes place outside neighborhood settings (Kubrin & Weitzer, 2003). It has also been pointed out that research has not found that crime rates spatially disperse from the city center to the periphery (Snodgrass, 1976).

It also needs to be emphasised that the focus on neighbourhood level crime is about predicting people's likelihood to be involved with crime as perpetrator or victim rather than focusing on fear of crime. However, Wilson and Kelling (1982) introduced a theory known as 'Broken window theory' which has been used to explain many studies in fear of crime and physical environment (Carmona & Tiesdell, 2007; Loukaitou-Sideris, 1999; Loukaitou & Eck, 2007; J. Wilson & Kelling, 1982). Broken window theory predicts that if a building has a broken window and is left unrepaired, the other windows will be broken as people think that no one cares (Doran & Lees, 2005). The key idea of this theory is that if disorderly behaviour is unnoticed, it soon leads to further disorder and at last to serious crimes. Such disorderly places may create a sense fear among residents who may avoid such places.

Physical disorder and fear of crime hypothesis has been tested by many researchers. One study done in American neighbourhoods (Skogan, 1990) indeed found a link between fear of crime areas and neighbourhood physical character. Similarly, Borooah and Carcach's (1997) findings confirmed that neighbourhood lack of cohesion, neighbourhood incivility and relatively high neighbourhood crime level positively correlated with risk of victimization. Other studies have shown relatively less correlation between physical disorder and high levels of crime (Samson & Raudenbush, 1999), however they still support the notion of disorder and fear of crime hypotheses.

In terms of other studies and approaches on fear of crime and built environment, the Crime Prevention Through Environmental Design (CPTED) approach is important in creating built environments in such a way that fear of crime and opportunistic crime are reduced based on the influence of design. CPTED is also used in environment psychology to design and manage spaces to manipulate human behaviours (Jorgensen, 2007, p. 26). This concept was developed by Ray Jeffery (1971) and is explained as the "proper design and effective use of the built environment that can lead to a reduction in the fear of crime and incidents of crime" (Crowe, 2000, p. 1). This approach is used by planners to manage settings such as buildings, parks, open spaces, and streets to mitigate incidences of crime and fear of crime.

Informing the CPTED approach, there are other environmental design concepts that have been developed by Jacobs' "eyes on streets" (Jacobs, 1961), Newman's "defensible space" (Newman, 1972), and Poyner's "design against crime (Poyner, 1983)" which explain the features of the built environment and their relationship with the perceived safety of individuals. Jacob (1961) argued that modern architectural forms and spatial designs, particularly residential layouts in cities, abandoned the traditional relationship of houses and sidewalks. These traditional layouts and houses have been replaced with new high-rise buildings which have the ability to break down community cohesiveness and destabilize informal social control. She argued that destabilisation occurred because modern housing and layout designs lack the ability to provide surveillance (eyes on streets) over strangers on the road.

Newman (1972) and Poyner (1983) extended this idea by examining intricacies between housing design and criminal activity. They emphasized that architectural design (buildings heights, windows, staircases) and urban design features (streets, open spaces) could improve community cohesiveness and could create "defensible space" against criminal activity. For example, one way this could be done is by defining individual property through pathways and fencing. The essence of a defensible space program is to restructure the physical layout of communities to allow residents to control areas around their homes. This includes the streets and the grounds outside their buildings, and the lobbies and corridors within them. Newman believed that these environmental designs not only preserve individuals from criminal activity but also people can realize their commonly held values and life styles (Newman, 1996).

However, some argue that town planning (street design, layout planning, building designs, etc.) cannot build a sense of community by deterministically bringing people together (Crenshaw & John, 1989; Talen, 1996). In other words, they argue that there is no direct relationship between environment and behaviour (feeling of safety and avoidance behaviour), even though town planning may have a catalyst effect. They stress the other non-physical territorial variables in the promotion of sense of community sentiment such as shared values, class, life styles, and length of residence (Gans, 1962; Hunter, 1975). Nevertheless, all the above research supports the notion that town design may provide a setting for social interaction, and social interaction can build a sense of community, which in turn can contribute to feelings of safety (Jacobs, 1961; Talen, 1996).

Hence, work by Jacobs, Newman and Poyner is important in relation to environmental design and criminal activity. They provide insights into social relations in space and the need for defined territory that discourages criminal activity by changing the built fabric. Newman's and Jacob's findings assert that people feel and are more confident to behave in urban areas when they are not isolated from contact with the larger urban realm. When people are seen by others, it allows casual surveillance and those bystanders may provide assistance in unsafe situations.

Many urban planning studies have focused on crime hotspots and how to enhance safety through employing urban design principles in the design or redesign of that public spaces (Jeffery, 1971; Poyner, 1983). The term "hotspots" refers to existing high-crime locations that may impact on a nearby development (Maltz, Gordon, & Friedman, 1990). These can include areas of high car theft such as certain underground parking lots; sites of pick pocketing such as bus terminals; or locations of robberies such as dark enclosed spaces. In the context of urban design many interventions have been proposed to improve the safety of such settings such as lighting, mixing of land uses, landscaping, and building design (Crowe, 2000). Although this paper primarily focuses on fear of crime, the above ideas are important as they are related to fear of crime literature such as Appleton's theory of prospect and refuge. For example, importance of lighting and hiding spaces in urban settings has been discussed in CPTED approach.

As stressed earlier, the intention of this paper is to investigate feelings of fear in relation to crime. As shown above in this paper, previous studies focused on actual crime locations (hotspots), but this article focuses on "hotspots of fear" and how people experience fear of crime in relation to certain features of the built environment. Such places are not necessarily actual crime locations but those places where individuals' sense of fear restricts their behaviour in public space.

The search for environmental approaches into fear of crime and crime has been perused mainly by humanistic geographers, urban planners, urban designers, and phenomenologists. The essence of their argument is that visual aspect of the environment shapes people's preference of landscape. In terms of fear of crime, people evaluate characteristics of sites such as lighting, and physical and social conditions of the sites when they use such places and move through such sites. In other words, people make subjective interpretations based on their social context for visual objects (features of the built environments). In this context, visual landscape or environment features such as buildings, streets, vistas and parks act as signs which convey some meanings for people (Gottdiener, 2010). In this regard, Appleton's theory of prospect and refuge provides a valuable conceptual framework for understanding of individuals' perception of fear of crime. Due to Appleton's grounding in environmental psychology, it focuses particularly on feeling of fear of crime when walking in the built environment. The next section will discuss Appleton's theory of prospect and refuge and its applicability to fear of crime.

Fear of crime and prospect and refuge theor

Appleton's (1975) perspective has developed from a substantially different intellectual background compared to research programs that have been undertaken either to assess the connection between the organisation of the environment and the opportunity for crime or the influence of socio-cultural variables on fear of crime. This theory focuses on two environmental characteristics that are seen as the most important indicators of safety: refuge and prospect. Indeed the ability to see (prospect) without being seen (refuge) is basic to many biological needs. Therefore, this theory focuses on the primitive origins of contemporary environmental perception and preferences.

Prospect-refuge theory was first introduced to explain human environmental preferences. It was believed that the environment that afforded more prospect (open view) and refuge (protection) formed an advantage to humans. According to Appleton's prospect and refuge theory (Petherick, 2000), humans prefer places which offer both prospect (open view) and refuge (protection). Places that offer both prospect and protection help individuals and groups to observe potential animate hazards (offenders), to react and defend from potential dangers, as well as to find a protective space to keep oneself from being harmed. In this way, humans do not have to experience an area to determine its suitability. They could evaluate their surroundings and assume the amount of prospect and refuge afforded to decide whether it forms a suitable location. This theory became a basis for many research studies and theoretical models to explore the relationship between environmental clues and the fear of crime.

Fisher and Nasar (1992) applied and further developed Appleton's prospect and refuge theory to explain the effect of specific features in the built environment and the feeling of safety by researching campus students at Ohio University. They used prospect for the victim and refuge for the offender as a framework for understanding how different exterior design features affect perception of safety. Using Appleton's concepts, Fisher and Nasar (1992) developed a general typology for evaluating individuals' perception based on the amount of prospect and refuge afforded within the surrounding environment. Figure one shows this typology. The cell entries in Figure one show victims' perceptions of safety. Fisher & Nasar argued that areas characterised by large amounts of refuge and minimal prospect would evoke the highest degree of fear amongst individuals. These areas are known as 'blind spots'. Large amounts of refuge means large numbers of hiding places for potential offenders. Nasar and Fisher's model predicts that the highest degree of safety would be displayed in areas identified by minimal refuge for potential offenders and high prospect for victims. They argue that, if the surrounding area affords the victim a high degree of visibility/permeability and minimal hiding places for offenders, then the victim could evaluate the area and avoid the attack or opportunistic crime.

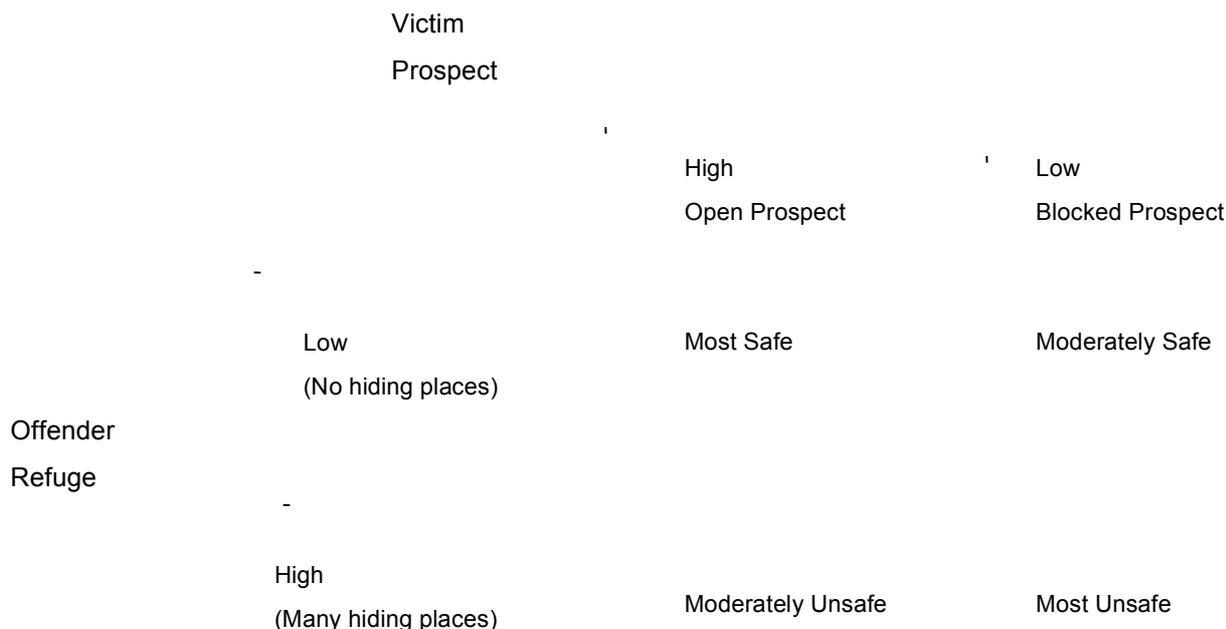


Figure 1: Typology of Perception of Safety (1992, p 61)

Apart from refuge and prospect, Fisher and Nasar argue that individuals' feelings of safety are influenced by the degree to which a space affords an opportunity for escape. They found that when possibilities for escape were low, fear of crime was higher (1992). Escape may provide either an exit route from a potential threat or a connection to others who could respond in case of an attack. Prospect and easy escape may go hand-in-hand as spaces which limit prospect may also cut off possibilities for escape. However, they would differ in some situations. For example, a long road across a lake may have high prospect and no refuge but limited options for escape.

In this context, prospect, refuge, and escape are relevant features in relation to fear of crime. Prospect and refuge theory and Fisher and Nasar's fear of crime model predict that perceived safety would improve with increases in prospect and escape for the victim and decreases in refuge for the offender.

Socio-Cultural Approaches

Some researches argue that fear of crime in the public realm is influenced by socio, psychological, demographic variables (Blobaum & Hunecke, 2005; Byrne & Wolch, 2009; Garafalo, 1981). Feelings of fear of crime may be dependent on individuals' sex. Many researchers confirm that females feel significantly less safe than males when they walk at night time (Australian Bureau of Statistics, 2010; Bonnie Fisher & Nasar, 1992; Kelly, 1986; Yavuz & Welch, 2010). This may result in females behaving differently in space at different times of the day. For example one of the reasons Asian women are under-represented in urban parks at night is due to fear of crimes (Cranz, 1982). As Hunecke and Blobaum (2005) noted, males and females sense of danger in public space is associated with different kind of incidents. Although males anticipate a fight, females will mainly fear rape or sexual assault when walking alone a park after dark. If they go to a park after dark, they will usually go there as a group, with friends or with family members (Blobaum & Hunecke, 2005).

Although many explanations exist in explaining women's low level of perceived safety in public areas such as parks, the most contemporary explanations of women's fear centres on gender differences in socialisation in which women are socialised to be more passive and dependent (Garafalo, 1981; Kelly, 1986; Lagrange, Ferraro, & Supancic, 1992; Lee & Farrall, 2009). However, some argue that explanations of women's fear in public spaces extend beyond socialisation arguments and need to demonstrate the importance of environment and experiential factors (MacMillan, Nierobisz, & Welsh, 2000). For example, many studies demonstrate the impact on women's safety due to experiences with stranger sexual harassment in public and semi-public environments (Gardner, 1995; MacMillan et al., 2000).

Many studies show that both women and elders are two similar social groups in terms of fear of crime and therefore they can be considered as two predictors of fear of crime which are linked to vulnerability (1996). Usually older persons and women have highest fear of crime (Australian Bureau of Statistics, 2010). However, in reality both these social groups have lower victimisation rates in public space. As elsewhere stated women often experience violence in the home. The reasons why women and older persons have high fear of crime in public space may be due to perception of sexual harassments, less control over potentially threatening, stressful, and dangerous situations due to their physical strength. The lower victimisation rates in older persons and women could be a consequence of fear of crime as more vulnerable persons are more conscious about crimes and take extra precautions against victimisation (Hale, 1996). For example they may be more vigilant by avoiding walking at night, ensuring they walk with friends, and carefully observing the environment, expecting a crime particularly when walking at night. Despite the fact that elderliness is associated with fear of crime, some studies show that it was not a powerful attribute in predicting fear of crime and compared with sex it was insignificant (Blobsaum & Hunecke, 2005; Mawby, 2004)

There has also been a considerable amount of research examined about race as an explanatory factor in fear of crime. However, evidence of past research indicates mixed findings. Some research has revealed that non-whites felt less safe than whites (Bet Fisher & Sloan, 1995; Lagrange et al., 1992). A study done in Sydney and Melbourne revealed that visible minorities such as Arabs, Asian, and Jewish communities have a special fear of racist violence (Human Rights and Equal Opportunity Commission, 1991). Similarly, when many races/ethnicities were examined in America, whites were more likely to be safer than Blacks and Hispanics (Kareem L & Gabbidon, 2010).

One main explanation provided to understand this correlation connects to the impoverished physical condition of their living environment. Studies have found that a disproportionate number of minorities live in impoverished communities (Davis, 2006; Kareem L & Gabbidon, 2010; Massey & Denton, 1993; W. J. Wilson, 1987). The conditions in such physical environments (e.g., graffiti, incivilities, dilapidated buildings, etc.) tend to signify a risk of victimisation among inhabitants. In contrast to the argument that non-whites feel more fear, some studies have found that whites felt more unsafe than non-whites in public settings (Rountree & Land, 1996). Rountree and Land's study on the effect of racial competition and minority status on fear of crime for black and white respondents in a white dominant area in the USA, show that the racial minority of blacks felt less fear of crime compared to whites.

Evans, Fraser, & Walklate's (1996) findings can be useful to explain the logic for this situation that concerns the level of social integration in a particular community. They concluded that a community may live in a physically disordered settlement, but if people trust each other it will feel safer than people who do not have others who they trust living around them. Another explanation for this involves the way minorities are constructed within the newspaper in discourses of criminality. When blacks or Aboriginal youths' faces are depicted as criminal faces, many white people accept this image of minority groups as criminals and then encountering them in public spaces evokes greater fear of being a crime victim.

The media representations of crime and its effect on fear of crime have been further discussed in fear of crime literature. Some argue that the media is one of the various stimuli that create 'geographies of fear' and affect people's use of public and private space (Pain & Shirlow, 2003; Valentine, 1992). The key argument forwarded was that media, dominated by television and newspapers, generates irrational fear through crime news and over-emphasis on crime threats. Television news primarily is seen as distorting the reality of crime issues. However, some have criticised this relationship between fear of crime and media. They argue that the conceived relationship is due to assumptions about the audience who are seen as passive recipients of ideological messages who do not scrutinise what they view (Lupton & Tulloch, 1999). A study of perception of fear among middle class families in Kent in the United Kingdom found no substantive correlation between fear of crime in the neighbourhood and exposure to crime on television (Banks, 2005). Others have found that television crime may stimulate a fear of other places (cities) from which the viewer is physically distant (Coleman, 1993). On the whole, the effect of media on perceived fear tends to be inconclusive, and media representations of crime may not alone make a considerable impact on perceived safety and people's behaviour in urban and rural settings. In fact, other socio-cultural variables such as social assurance, living conditions and real experiences have a profound effect on individuals' fear of crime discourse.

In this regard, Sundeem (1984) found that international university students' fear of crime was strongly correlated to number of months in U.S. The significance of this study in relation to fear of crime studies is that perception of one's neighbourhood environment and its dangerousness, as well as the assurance of assistance will be gained if required from the environment, continued to be important factors alone with other variables, such as age, gender, and living situation. This approach permits some comparability with other studies as it has been widely used and cited in similar studies to explain feeling of safety in public areas.

Presence of people and fear of crime

Individuals' fear of crime in public areas can be influenced by presence of other people. Goffman (1971) proposed that individuals constantly look for other social clues in the surrounding area when they are in threatening situations. For example, individuals can come across potentially reputable and disreputable people in urban settings. Disreputable people or dangerous-looking people can be a social incivility and thus evoke fear of crime (Lagrange et al., 1992). On the other hand, presence of reputable people can give a confidence to persons who use spaces particularly at (Nasar & Jones, 1997). Although many studies have focused on how fear of crime is related to potentially threatening individuals, not many studies researched how presence of others raises the sense of safety. In this regard, Warr (1990) and Whyte (1980) findings about urban parks and public spaces show that presence of people can encourage safe feelings or use. Whyte suggested that when people see other people who engage in expected and acceptable use (mutually acceptable use), they serve as a social clue or signify as a safe clue for others to use the spaces. In the same way, Nasar & John (1997) observed that students felt fearful in the absence of people when walking at night in a campus setting.

This indicates that although it has not been extensively researched, the handful of past studies suggest presence of appropriate others reassures the setting and gives people extra confidence to use the space. However, most of the studies that researched presence of people as a positive environmental clue focused on experimentally manipulated situations (Warr, 1990)(for an exception, see Nasar & Jones, 1997). At the same time, such past studies have often focused on the effect of the presence of people as an environmental clue alone that lower or increase the fear.

Merging fear of crime with environmental clues social variables

As stated above and overall, most of the past researches on fear of crime have focused either environmental variables (graffiti, dilapidated buildings, light, enclosures, hiding places, and disorderly areas) or social variables (gender, race, media, age, and presence of people) separately. However, in recent years, a few studies attempted to study whether the combination of environmental and social variables create low or high fear environments (Jorgensen, Ellis, & Ruddell, 2012; Nasar & Jones, 1997). The next section will discuss some limitations of Appleton's prospect and refuge theory and subsequent model developed by Nasar & Jones, and then it will identify ways to expand this model by incorporating a combination of environmental cues and social variables to study fear of crime

Appleton's theory of prospect and refuge and Nasar and Fisher's model provide strong evidence that there is a relationship between fear of crime and built environmental features. However, this theory has been criticized in many aspects. Appleton defined refuge as fixed elements in the environment that provide hiding features. Refuge can also be linked to non-fixed elements in the built environment. For example, humans can be a refuge. As discussed earlier, presence of humans when one walks along at night can increase or decrease a sense safety. A place in which non-threatening and potentially supportive people are present can offer a refuge for the victim. In previous studies (Newman, 1971) on fear of crime and environmental features, the presence of humans was excluded and human access was controlled at the time that the research was conducted. However, in one study (Nasar & Jones, 1997), fear of crime was correlated with prospect, hiding spaces and presence of humans as a refuge or a threatening element. They found places that were identified as having a high level of overview, a low level of hiding places and presence of groups people tended to be viewed as safer than places without people, low prospect and high level of hiding places. Similarly, a more recent study in a park setting showed that fear perception in parks is jointly influenced by environmental clues (concealment) and social variables : the presence of other people recreating in a park setting and the gender of individuals when recreating alone in a park setting (Jorgensen et al., 2012). However, little research has been conducted to validate the hypothesis that the presence of people influenced sense of safety and therefore further research is needed to support this argument. Nasar and Jones (1997) call for further studies to confirm the relationship between fear of crime, presence of people, level of overview and hiding spaces.

In the previous studies, the relationships between fear of crime and prospect and refuge theory and social variables has been tested more on experimentally manipulated social and physical settings or campus settings than other settings (Blobaum & Hunecke, 2005; Nasar et al., 1993). In some instances, such studies have been based on photographic representations of sites for respondents (Blobaum & Hunecke, 2005; Bonnie Fisher & Nasar, 1992; Loewen, Steel, & Suedfeld, 1993; Nasar et al., 1993). However, crime incidents occur in live and more interactive areas in the built environment and thus fear of crime is experienced in other settings such as city centres, parks and neighbourhood areas at night. In fact, researchers have begun to move away from photographic representation sites or manipulated sites to more interactive real life sites. Such studies suggest phenomenological research or real situations are required to assess validity of combined variables: prospects, refuge, and social clues.

When considering past research on fear of crime in public space in Australia, most studies tended to concentrate on Metropolitan areas (Collins, 2005); (Nyland, Forbes-Mewett, & Marginson, 2010); Tulloch, 1998; Western & Stimson, 2005). Less frequently, researchers studied fear of crime in regional settings. At the same time, we know little about how social groups with different ethnic backgrounds such as international students experience the built environmental features in terms of prospect and refuge theory. It is believed that a regional city context provides a unique contribution to existing research about the international Asian university students' experience of fear of crime in relation to environmental clues. An important aspect of that nature of research will be to merge socio-cultural theory and prospect theory.

Conclusion

In the past many studies focused on occurrence of crime and its relationship to the built environment. As has been previously discussed, fear of crime affects human behaviour in many ways. The previous studies on fear of crime have mainly focused on influence of social cultural variables on fear of crime in spatial contexts. There is certainly a level of inter-individual variance in evaluative responses to physical attributes of environments but socio-cultural theory alone tells little about site specific characteristics and fear of crime. Conversely, there seem to be places that evoke higher levels of fear than others do. However, prospect and refuge theory has been applied to test fear of crime and physical features in urban settings. This theory has been tested mainly in campus settings in North America. It has not been tested in other lived environments such as city centres and residential neighbourhood settings to test the validity of the theory. It is also needed to extend this theory to test influence of presence of people on fear of crime as another feature in the urban setting. It is also important to study this hypothesis with different social groups such as international Asian university students to examine applicability of the theory. In doing so, it will extend the current work on prospect and refuge in relation to subjective interpretation of environment safety as they are influenced by different cultural backgrounds. At last it needs to emphasise that urban planning needs a holistic approach to study fear of crime in cities which will merge prospect and refuge theory and socio-cultural theory.

References

- Andrews, M., & Gatersleben, B. (2010). Variations in perception of danger, fear and preference in a simulated natural environment *Journal of Environmental Psychology*, 30, 473-481.
- Appleton, J. (1975). *The experience of landscape*. London: John Wiley.
- Australian Bureau of Statistics. (2010). *Australian social trends: September 2010* (cat. no. 4102.0). Canberra, Australia.
- Australian Education International. (2009). *International student enrolment data*. Canberra: Australian Government Retrieved from <http://aei.gov.au/AEI/MIP/Statistics/>.
- Banks, M. (2005). Spaces of insecurity: Media and fear of crime in a local context *Crime Media Culture* 1(169), 169 -186.
- Basham, R. (1978). *Urban America*. Sydney: Mayfield Publishing Company.
- Blobaum, A., & Hunecke, M. (2005). Perceived danger in public space: The impacts of physical features and personal factors. *Environment and Behavior*, 37(4), 465 - 486.
- Borooh, V. K., & Carcach, C. A. (1997). Crime and fear: Evidence from Australia. *The British Journal of Criminology*, 37(4), 635-627.
- Byrne, J., & Wolch, J. (2009). Nature, race, and parks: Past research and future directions for geographic research. *Progress in Human Geography*, 33(6), 743-765.
- Carmona, M., & Tiesdell, S. (Eds.). (2007). *Urban design reader*. Oxford: Architectural Press.
- Coleman, C. (1993). The influence of mass media and interpersonal communication on societal and personal risk judgements. *Communication Research*, 20(4), 611-628.
- Collins, J. (2005). *Ethnic minorities and crime in Australia: Moral panic or meaningful policy responses*. Western Australia.
- Cranz, G. (1982). *Politics of park design*. Cambridge: MIT press.
- Crenshaw, E., & John, C. S. (1989). The organisationally dependent community: A comparative study of neighbourhood attachment. *Urban Affairs quarterly*, 24, 608-619.
- Crowe, T. (2000). *Crime Prevention Through Environmental Design* (2 ed.). Boston - Butterworth: Heinman.
- Davis, M. (1999). *Ecology of fear*. New York: Vintage Books.

- Davis, M. (2006). *Planet of slums*. London: Verso.
- Doran, B. J., & Lees, B. G. (2005). Investigating the spatiotemporal links between disorder, crime, and fear of crime. *The Professional Geographer*, 57(1), 1-12.
- Evans, K., Fraser, P., & Walklate, S. (1996). Whom can you trust. The politics of 'grassing' on an inner city housing estate. *Sociological Review*, 44(3), 359-380.
- Ferraro, K. F. (1995, p.4). *Fear of crime: Interpreting victimization risk*. New York: State University of New York Press.
- Fisher, B., & Nasar, J. L. (1992). Fear of crime in relation to three exterior site features: Prospect, refuge and escape. *Environment and Behavior*, 24(January), 35- 65.
- Fisher, B., & Sloan, J. J. (Eds.). (1995). *Campus crime*. Springfield IL: Charles C Thomas.
- Gabriel, U., & Greve, W. (2003). The Psychology of fear of crime. Conceptual and methodological perspectives. *The British Journal of Criminology*, 43(3), 600-614.
- Gans, H. (1962). *The urban villages :Group and class in the life of Italian Americans*. New York: The Free Press.
- Garafalo, J. (1981). The fear of crime: Causes and consequences *The Journal of Criminal Law and Criminology*, 72(1981), 839 - 857.
- Gardner, C. B. (1995). *Passing by: Gender and public harassments*. Berkeley: University of California Press.
- Goffman, E. (1971). *Relations in public*. New York: Basic Books.
- Gottdiener, M. (2010). *The new urban sociology* (4 ed.). New York: Westview Press.
- Hale, C. (1996). Fear of crime: A review of the literature *International Review of Victimology*, 1(4), 79-150.
- Human Rights and Equal Opportunity Commission. (1991). *Racist violence: Report of the national inquiry into racist violence in Australia*. Canberra: Australian Government Publishing Service.
- Hunter, A. (1975). The loss of community: An empirical test through replication. *American Sociological Review*, 40, 537- 552.
- Jackson, J., Farrall, S., & Emily, G. (2007). Theorising the fear of crime: The cultural and social significance of insecurities about crime, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1012393
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Vintage.
- Jeffery, R. (1971). *Crime Prevention Through Environmental* Beverly Hills: Sage Publications.
- Jorgensen, L. (2007). Crime prevention through environmental design. *Crime Prevention Through Environmental Design*, 63(3), 26-32.
- Jorgensen, L., Ellis, G. D., & Ruddell, E. (2012). Fear perceptions in public parks: Interactions of environmental concealment, the presence of people, and gender. *Environment and Behaviour*, xx(x). doi: 10.1177/001391651244466334
- Kareem L, & Gabbidon, S. L. (2010). Race ethnicity and perception of safety among a national sample of Americans. *Criminal Justice Review* 35(281).
- Kelly, E. (1986). What makes women safe? *Housing Review*, 35(6).
- Koskela, H., & Pain, R. (2000). Revisiting fear and place: Women's fear of attack and the built environment. *Geoforum*, 31, 269-280.
- Kubrin, C., & Weitzer, R. (2003). New directions in social disorganization theory *Journal of Research in Crime & Delinquency*, 40, 374-402.
- Lagrange, R. L., Ferraro, K. F., & Supancic, M. (1992). Perceived risk and fear of crime: Role of social and physical incivilities. *Crime and Delinquency* 29(3), 311-344.
- Lee, M., & Farrall, S. (Eds.). (2009). *Fear of crime*. New York: Routledge
- Loewen, L., Steel, G. D., & Suedfeld, P. (1993). Perceived safety from crime in the urban environment. *Environmental Psychology*, 13, 323-331.
- Loukaitou-Sideris, A. (1999). Hot spots of bus stop crime: The importance of environmental attributes. *Journal of American Planning Association*, 65(4), 395- 411.

- Loukaitou, A., & Eck, J. E. (2007). Crime prevention and active living. *American Journal of Health Promotion* 21(4), 380-389.
- Lupton, D., & Tulloch, J. (1999). Theorising fear of crime: Beyond the rational/irrational opposition. *British Journal of Sociology*, 50(3), 507-523.
- MacMillan, R., Nierobisz, A., & Welsh, S. (2000). Experiencing the streets: Harassment and perceptions of safety among Women. *Journal of Research in Crime and Delinquency* 37, 306-322.
- Maltz, M., Gordon, A., & Friedman, W. (1990). *Mapping crime in its community setting: Event geography analysis*. New York: Springer-Verlag.
- Marusic, B. G. (2010). Successful public spaces. *Annales-Anali Za Istrske in Mediteranske Studije-Series Historia Et Sociologia*, 20(1), 103-118.
- Massey, D. S., & Denton, N. A. (1993). *American apartheid*. Cambridge: Harvard University Press.
- Mawby, R. (2004). Reducing burglary and fear among older people: An evaluation of a help the aged and homesafe initiative in Plymouth. *Social Policy and Administration*, 38(01), 1-20.
- Nasar, J. L., Fisher, B., & Grannis, M. (1993). Proximate physical cues to fear of crime. *Landscape and Urban Planning*, 26, 161-178.
- Nasar, J. L., & Jones, K. M. (1997). Landscape of fear and stress ,1997,, 29,3,291. *Environment and Behaviour*, 29(3), 291-323.
- Newman, O. (1971). *Architectural defence for crime prevention*. Washington D.C.: National Institute for Law Enforcement and Criminal Justice.
- Newman, O. (1972). *Defensible space*. New York: The Macmillan Company
- Newman, O. (1996). *Creating defensible space*. New York: U. S. Department of Housing and Urban Development.
- Nyland, C., Forbes-Mewett, H., & Marginson, S. (2010). "The international student safety debate: Moving beyond denial. *Higher Education Research and Development*, 29(1), 89-101.
- Pain, R., & Shirlow, P. (2003). The 'geographies and politics of fear'. *capital and Class*, 80, 15-26.
- Petherick, N. (2000). Environmental design and fear. *Western Geography*, 10(11), 89-112.
- Planning Institute of Australia. (2010). *Accreditation policy for the recognition of Australian planning qualifications for the urban and regional planning chapter*. Planning Institute of Australia.
- Poyner, B. (1983). *Design against crime*. London: Butterworths.
- Rountree, P. W., & Land, K. C. (1996). Perceived risk versus fear of crime: Empirical evidence of fear of conceptually distinct reactions in survey data *Social Forces*, 74, 1353-1376.
- Samson, R., & Raudenbush, S. W. (1999). Systematic social observation of public spaces : A new look at disorder in urban neighbourhoods. *American Journal of Sociology* 105(3), 603-651.
- Shaftoe, H. (2008). *Convivial urban spaces*. London: Earthscan Publishes
- Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency in urban areas*. Chicago: University of Chicago Press.
- Skogan, W. (1990). *Disorder and decline: Crime and the spiral of decay in American Neighbourhoods*. Los Angeles: University of California Press.
- Snodgrass, J. (1976). Chicago Criminologist. *The British Journal of Criminology* 16(1), 1-19.
- Sundeem, R. A. (1984). Explaining the fear of crime among international students from developing countries: A revised model. *Criminal Justice Review*, 9(7), 7-13.
- Talen, E. (1996). Sense of community and neighbourhood form: An assessment of the social doctrine of new urbanism. *Urban Studies*, 36, 1361-1379.
- Tulloch, J., Lupton, D., Blood, W., Tulloch, M., Jennett, C., & Enders, M. (1998). *Fear of crime : Audit of literature and community programs*. Canberra: Commonwealth Australia.
- Valentine, G. (1992). Images of danger: Women's source of information about spatial distribution of male violence. *Area*, 24(1), 22-29.

- Wandersman, A., & Nation, M. (1998). Urban neighborhoods and mental health: Psychological contributions to understanding toxicity, resilience, and interventions. *American Psychologist*, 53(6), 648-656.
- Warr, M. (1990). Dangerous situations: Social context and fear of victimization. *Social Forces*, 68(3), 891-907.
- Whyte, W. H. (1980). *The social life of small urban spaces*. New York, NY: Project for Public Spaces.
- Wilson, J., & Kelling, G. L. (1982). The police and neighbourhood safety: Broken windows theory. *The Atlantic Monthly*, 29-38.
- Wilson, W. J. (1987). *The truly disadvantaged*. Chicago: University of Chicago Press.
- Yavuz, N., & Welch, E. W. (2010). Addressing fear of crime in public space: Gender differences in reaction to Safety measures in train transit. *Urban Studies* 47(12), 2491-2512.

Contemporary Planning Education and Indigenous Cultural Competency Agendas: Erasing Terra Nullius, Respect and Responsibility

Mark Rose & David Jones

Deakin University

Abstract

As noted in Universities Australia's (2011a, 2011b) investigations into Indigenous Cultural Competency, most universities have struggled with successfully devising and achieving a translation of Indigenous protocols into their curricula. Walliss & Grant (2000: 65) have also concluded that, given the nature of the built environment disciplines, including planning, and their professional practice activities, there is a "need for specific cultural awareness education" to service these disciplines and not just attempts to insert Indigenous perspectives into their curricula. Bradley's policy initiative at the University of South Australia (1997-2007), "has not achieved its goal of incorporation of Indigenous perspectives into all its undergraduate programs by 2010, it has achieved an incorporation rate of 61%" (Universities Australia 2011a: 9; <http://www.unisa.edu.au/ducier/icup/default.asp>).

Contextually, Bradley's strategic educational aim at University of South Australia led a social reformist agenda, which has been continued in Universities Australia's release of Indigenous Cultural Competency (2011a; 2011b) reports that has attracted mixed media criticism (Trounson 2012a: 5, 2012b: 5) and concerns that it represents "social engineering" rather than enhancing "criticism as a pedagogical tool ... as a means of advancing knowledge" (Melleuish 2012: 10). While the Planning Institute of Australia's (PIA) Indigenous Planning Policy Working Party has observed that fundamental changes are needed to the way Australian planning education addresses Indigenous perspectives and interests, it has concluded that planners "... perceptual limitations of their own discipline and the particular discourse of our own craft" were hindering enhanced learning outcomes (Wensing 2007: 2). Gurran (PIA 2007) has noted that the core curriculum in planning includes an expectation of "knowledge of ... Indigenous Australian cultures, including relationships between their physical environment and associated social and economic systems" but that it has not been addressed. This paper critiques these discourses and offers an Indigenous perspective of the debate.

Keywords: Indigenous cultural competency; Planning education; Professional accreditation policies

It seems that everywhere we look at the moment in Aboriginal affairs the term "cultural competency" is popping up.

Cultural competency is an area of study that is gaining prominence as we encounter more human diversity in our work and our lives (Valaskakis, Stout & Guimand, 2009: 237).

The concept, certainly in the Aboriginal and Torres Strait Islander spectrum, seems to have gained a life of its own without ever having gone through any semblance of a vigorous intellectual interrogation of what it is. Like many concepts that lay lifeless on the education policy landscape, cultural competency in the form that has recently surfaced does on closer examination present simply more than a number of half thought-out generalities. The greater danger of this discourse however is that in the pursuit of education policy reformation to address "cultural competency" that massive time, effort and focus are being distracted from real goals in Aboriginal affairs. Currently "cultural competency" has vicariously gathered gravitas in profile and status way beyond its means and certainly below any real substance. Simply put "cultural competency" in its current incarnation is not the panacea that it is being purported to be in universities, professions and in government who translate it into an ever-growing feeding frenzy for window-dressed training programs. This paper poses some critical questions around the inadequacies of the present intellectual architecture of "cultural competency" as it is currently being espoused and sends up something of a timely admonitory flare.

Indigenous Insights: There is a place

In 2005, having co-chaired *The Review Report: Victorian Implementation Review of the Recommendations from the Royal Commission into Aboriginal Deaths in Custody* (Victoria 2005) arising from the *Royal Commission into Aboriginal Deaths in Custody* (Australia 1991), Rose was privy to a whole range of services both general and those specifically targeting Indigenous people that from his perspective failed to achieve their service delivery aims and objectives. It was the original *Royal Commission* that referred to a notion of "underlying issues" which permeated service delivery that when translated referred to a general paradigm and mindset in the broader population that was fed by a chronic ignorance around Aboriginal and Torres Strait Islander issues.

This led Rose to express in *The Great Silent Apartheid* that “It [cultural awareness] can be quantified as a competency and immersed industrially as a requirement and an ongoing KPI (Key Performance Indicator) for systems, schools and teachers” (Rose 2006: 1). His reference was driven by the sheer frustration of what he had witnessed whilst co-chairing, over eighteen months, the Review where time and time again professional decisions and practice were inappropriately deployed from intellectually and conceptually stunted positions, driven from the core of the “silent apartheid”. His conclusion was that professional ineptitude can be measured in many ways but none as poignant as incarcerated Aboriginal and Torres Strait Islander people who found the surrealism of the criminal justice system more attractive than the realism of their life.

His frustration was furthered by the plethora of cultural awareness exercises or ‘workshops’ that take place on a daily basis around the nation. These are delivered by passionate people and attended by genuine people some albeit with a ‘cucumber sandwich’ dependency and who are entertained and taken on what is virtually a cultural-like ‘*Contiki*’ tour. Failures of the general education system render them palpably ignorant about the land that they live on. But, are they ever taken to the next step; challenged to translate their new found insights in viable workplace practise? The reason why cultural awareness exercises are necessary is because of the societal ramification of where Aboriginal and Torres Strait Islanders knowledge is positioned in the national consciousness.

Australian education systems and sectors placement of culture and tradition on the fringe has dispossessed and stunted the intellectual capacity and the national psyche of this country. For the field of education the Silent Apartheid and the range of by-products that it has developed has drastically impeded engagement and the ability of educators, schools and systems to deliver on their mandate to teach all. With this they as educators, schools and systems must seek to break the corrupted and jaundiced cycle of knowledge transfer. Aboriginal and Torres Strait Islanders should have more confidence if it were to become industrially prescribed as a competency as opposed to relying on the mere chance of cultural conversion through awareness training (Rose 2006: 3).

The need for breaking this cycle of knowledge transfer is as relevant now as it ever has been. There still exists, an abyss in the national psyche – rich in the Jungian tradition – is part of the great “collective unconsciousness”. This abyss, that is the “great silent apartheid”, he perceives represents a gaping hole in the Australia’s narrative that in the absence of reality is filled with half truths, mythologies and stereotypes that distort. Thus, “Unfortunately contemporary culture regards truth as a subject worthy of fiction rather than intellectual pursuit” (Furedi 2006: 8).

Evidence abounds just in social indicators alone for Aboriginal and Torres Strait Islander people and while it would be easy to mount a statistical ‘big picture’ account of the effect of the continuing ‘silent apartheid’ a seminal representation can just as easily be drawn in the specific.

Academic Insights: Struggling to Comprehend Colonisation and Decolonisation

Acknowledgement of traditional land owners

Deakin University would like to acknowledge that the present site of the Melbourne Burwood Campus is located on the land of the Wurundjeri people, the Geelong Waurin Ponds Campus and Geelong Waterfront Campus are located on the land of the Wathaurong people, and the Warrnambool Campus is located on the land of the Gunditjmara people. They are connected to these lands, have walked these lands, and continue to care for them and nurture them for future generations (Deakin <http://www.deakin.edu.au/about/distinctive-features.php>).

In articulating the above acknowledgement Deakin University, like, most Australian universities and Australian government bureaucracies express tacit recognition of the past nations and generations that occupied the Australian continent and associated archipelagos, prior to invasion and colonization. In the course of some 100 years of Western “advancement”, over 250–300 nations with their own languages possessing some 600 dialects, were dispossessed from the Australian landscape. Such erased some 60,000 year of environmental knowledge and appreciation of landscape and climate change.

In the wider setting of Australian tertiary provision, Indigenous Australians include many groups, languages and cultures that possess a diversity of languages, beliefs and customs. Every part of Australia belongs to Aboriginal or Torres Strait Islander people and these peoples speak of the lands and waters they have traditional affiliation and responsibility for as their ‘country’. Thus, Indigenous clans and family groups as well as individuals hold the responsibility to look after or ‘care for country’, as expressed by Rose (1996: 7):

People talk about country in the same way that they would talk about a person: they speak to country, sing to country, visit country, worry about country, feel sorry for country and long for country ... country knows, hears, smells, takes notice, takes care, is sorry or happy ... Because of this richness, country is home, and peace; nourishment for body, mind and spirit; heart’s ease” (Rose 1996: 7).

Academics Jacobs and Mulvihill (1995), in an invited opinion paper, charted a plea to instill a multi-cultural literacy ethos in the learning and practice of planning and landscape architecture in Canada and Australia. Their benchmark was the similar Indigenous cultures present in these two biospheres that offered new perspectives to better guide and inform Western professional practices. Core in their plea, rotating around joint stewardship, was the need to embrace this approach to enable “greater cultural and environmental literacy ... [including] building integrated knowledge systems, initiating sustainable and equitable management strategies, and [to encourage] adaptive institutions” to better inform and guide the future of these regions (Jacobs & Mulvihill 1995: 7).

Despite this plea little has occurred at the Australian tertiary institution level for built environment professional training. In contrast various researchers and authors have highlighted this flaw in Australian academia despite growing engagement in their respective practice realms. In the disciplines of architecture, landscape architecture and planning, that comprise the core built environment professions, only their respective professional institutes – the Australian Institute of Architects (AIA), the Australian Institute of Landscape Architects (AILA), and the Planning Institute of Australia (PIA) – have sought to formalize any engagement and to re-cast Indigenous perspectives into tertiary teaching through their education policies and criteria. Despite this philosophical response, its actual execution has been wanting. This has resulted in a serious engagement and embrace of protocols and knowledge system that offer longitudinal perspectives and “a vital part of building a new ethic” in these professional “that intuitively respects Indigenous culture and tradition” and its embodiment in practice (Wensing 2011: 16).

As evidenced in Universities Australia’s (2011a, 2011b) investigations, most universities have struggled with successfully crafting and achieving a translation of Indigenous protocols into their curricula. Bradley’s initiative, when she was Vice Chancellor of the University of South Australia (1997-2007), “has not achieved its goal of incorporation of Indigenous perspectives into all its undergraduate programs by 2010, it has achieved an incorporation rate of 61%” (UA 2011a: 9; <http://www.unisa.edu.au/ducier/icup/default.asp>). This initiative drew from the vision and goals for Indigenous higher education of the Indigenous Higher Education Advisory Committee (2007), the World Indigenous Nations Higher Education Consortium (2007), the Vision for 2020 of the *Review of Australian Higher Education* (2008) and were embodied into the *Bradley Review of Australian Higher Education* (2008).

These perspectives underpin Bradley *et al*’s (2008: 5) belief that “education is at the core of any national agenda for social and economic change” and by the “deepening understanding of health and social issues, and by providing access to higher levels of learning to people from all backgrounds, it can enhance social inclusion and reduce social and economic disadvantage.” Thus a social reformist aspiration, which has been continued in the release of the recent *Guiding Principles for Development Indigenous Cultural Competency in Australian Universities* (2011a) and the *National Best Framework for Indigenous Cultural Competency in Australian Universities* (2011b) that has been criticised in the media as perpetuating “social engineering” rather than enhancing “criticism as a pedagogical tool ... as a means of advancing knowledge” (Melleuish 2012: 10).

A definitional distinction needs to be expressed here about the scope of this type of “cultural competency”. The Universities Australia project approaches this realm as:

Indigenous cultural competency refers to the ability to understand and value Indigenous perspectives. It provides the basis upon which Indigenous and non-Indigenous Australians may engage positively in a spirit of mutual respect and reconciliation

and,

Student and staff knowledge and understanding of Indigenous Australian cultures, histories and contemporary realities and awareness of Indigenous protocols, combined with the proficiency to engage and work effectively in Indigenous contexts congruent to the expectations of Indigenous Australian peoples (Universities Australia 2011a: 3).

Academic Insights: Educating Planners

Within contemporary built environment literature there is a clear lack of discourse about the nexus between the built environment professionals and Indigenous protocols and knowledge systems. In contrast there is considerable rhetoric about aspirations but such has not been translated into tertiary-level execution less in fragmented instances.

In the academic realm, authors in the anthropology, geography and history disciplines have been perceptive and relevant in participating in much of this debate. But the planning discipline has been lax in its introspectively and ethical responsiveness, still deferring its appraisals to dates of colonization despite Native Title legislative responsibilities. Thus historic and contemporary planning interrogations continue to exclude and marginalize despite pleas “from the edges” of the discipline by authors and planning practitioners including Johnson (2010), Wensing (2007, 2011), Jackson (1997), Cosgrove & Klinger (1997), and Jones

(2005, 2010). These authors have both questioned this ethical accountability and offered case studies that demonstrate alternate planning approaches and outcomes that robustly express and fulfill Indigenous interests, aspirations and 'planning' strategies. Wensing summarizes it as:

This cultural blindness means that conventional land and property planning as well as management regimes have been, and Continue to be, instruments in sanctioning and reinforcing ABTSI [Aboriginal and Torres Strait Islander] people's dispossession of their land and culture, causing loss of physical, spiritual and cultural traditions and customs (Wensing 2007).

Wensing (2011) has recently expressed this as a major deficiency in the tuition and grounding of future planners. His thoughts reiterate conclusions and investigations by Gurran & Phibbs (2003, 2004) whom concluded that Indigenous knowledge systems and land management concepts were markedly lacking in planning education in Australia. Johnson (2010) has ventured that Western precepts of the very nature of 'planning', and Australian planning histories, assume incorrectly that no conscious planning of Australia's land resources occurred until colonisation. Low Choy *et al* (2009, 2011) have reinforced both conclusions but have also demonstrated the unique and valuable insights that Indigenous knowledge systems and their stakeholders can offer to conventional planning practice.

Similar concerns about the education of planners have been expressed about the education of landscape architects by Jones (2002), Lawson & Erickson (2002), Low Choy *et al* (2011a) about flaws in landscape architecture curricula. Sinatra & Murphy (1997, 1999) charted a now lapsed OutReach initiative that exposed landscape architecture student's to various north-western and central Australian Indigenous communities and their landscape planning, management, and shelter and health problems. Revell and Jones have continued this agenda in their respective teaching activities, in central and Western Australia and in south-eastern Australia respectively with Jones (*et al* 1997; 2005, 2010) pointing to the urgency to reappraise and incorporate Indigenous environmental knowledge systems in mainstream landscape architecture education curricula; a point reinforced in his research with the Wurundjeri and Kurna communities.

In Australian academic and practitioner architectural discourses the debates are about housing and representation/symbolism.

On the former, it is undeniable that the state of Indigenous housing in Australia is deplorable in comparison to non-Indigenous Australians housing conditions (Go-Sam 2011; Nganampa *et al* 1987; Pholeros 2003; Williams & Houston 1997). Such is often the result of the ongoing failure of critical house hardware that, when not maintained, severely impact everyday living practices demonstrating a clear lack of knowledge and comprehension of the problems. The plethora of confusing of national, state and local policies, government funding arrangements, medical research findings and bureaucratic machinations are also hindering a culturally relevant and appropriate response that recognises multiple issues and not that one generic answer fits all situations (Go-Sam 2011; Memmott 2003; Pholeros 2003; Tonkinson 2007; Ward 2011). Stallard (2011: 2) has concluded that "there is no clear way to approach an Indigenous housing project" because the "cross-disciplinary needs of Aboriginal housing still leaves the architect in doubt of where to begin" so offering a clear or generic 'answer' or avenue as a curricula conclusion to students is the incorrect teaching avenue to pursue. She reinforces the conclusion that cultural competency curricula strategies are ideal but in the built environment disciplines specific immersive and engagement learning and consultation needs to be entertained.

On the latter debate topic, public Indigenous architecture has been present in Australia since the late 20th century and has been used to highlight and inform the user about Australian Indigenous culture (Fantin 2003; Goad 2002; Lochert 1997; Mallie & Ostwald 2009; Memmott 1997; Memmott & Reser 2000; Muecke 2004; Palmer 2007). In order to express a sense of understanding for the user, architects have employed symbolism -- often abstracted references from Indigenous culture -- in a design as a technique to attach a greater level of significance to the building, resulting in AIA peer award winning assemblages such as the Bowali Visitor Information Centre (NT), Brambuk Cultural Centre (Vic) and Karijini Visitors Centre (WA). But realising these outcomes takes considerable patience, comprehension of Indigenous knowledge systems that are both community and 'country'-specific and which successfully respond to the distinct Indigenous culture of the area and communicate a message on the user. Sawyer (2011: 1, 26-27) has concluded that while "architecture has the ability to create a dialogue that will lead to improvements in understanding the culture, and thus a more harmonious relationship between Indigenous and non-Indigenous Australians," it cannot be achieved in cultural competency curricula strategies but only through built environment specific immersive and engagement learning and consultation.

Both discourses cannot be appreciated in normal "cultural competency" appreciation curricula nor can they be realised in offering an "Indigenous perspective" as they are far more complex in place and design theory and practice, and such is a conceptual level that AIA professional accreditation policy expects a graduate to possess upon completion.

Oberklaid (2008), in the only analytical survey of the built environment educational sector has concluded that there is a paucity of Aboriginal and Torres Strait Islander content in existing Australian planning courses, thereby substantiating the conclusions and concerns of Gurran & Phibbs (2003; 2004), Low Choy *et al* (2009; 2011), Jones (1997; 2005; 2010), Margerum *et al* (2003), and Wensing (2011). The same conclusion can be drawn of Australian architecture and landscape architecture programs, whereby there is no statistical analysis of what is transpiring for the former and a preliminary statistical review of the latter reviews a fragmented and highly disproportionate response largely driven by 2 programs at University of Western Australia and Deakin.

Oberklaid (2008), supported by Wensing (2011), expressed these findings as representing a major concern because, planning courses:

- were failing to keep abreast of changes in the native title and land rights determinations and approaches to Australia despite the major impositions they have upon statutory and strategic planning practice;
- were failing to incorporate Indigenous peoples as integral stakeholder in any consultation process especially given the extensive 'country' acknowledgement statements articulated throughout Australia;
- were failing to delve into property and land law, including Indigenous rights and interests as part of their translation of the Australian planning process;
- were failing to grapple with and translate the implications of native title rights and determinations into statutory and strategic planning processes and instruments for students and practitioners alike;
- were failing to address their moral obligations, and increasingly ethical obligations via PIA policy, to improve planners' appropriation of Indigenous culture, rights and interests and the institutional frameworks thereto; and
- were failing to cultivate any research inquiry or discourse to assist the 're-tooling' of planning education.

The same conclusions can be drawn of architecture and landscape architecture courses *albeit* the distinct lack of analytical research on this topic. Instead, as in the case of the planning courses surveyed by Oberklaid, most courses offered fragment of this knowledge, knowledge systems, protocols and cultural codes. This is of increasingly concern as being able to synthesis, distil, and craft environmental knowledge and patterns in design and text is so integral to the planning and landscape architecture disciplines; why are they not opening this 'book'?

Institutional Insights: Trying to Craft Learning Outcomes

For each of the architecture, landscape architecture and planning disciplines there is a professional institute whom devise an Education Policy and undertake regular detailed professional accreditation evaluations of the pedagogy and academic content and exist performance of courses. Each has similar accreditation structures and policy contexts that are discussed below.

Architectural education is underpinned by the Architects Institute of Australia (AIA) and its Education Policy. Despite this the AIA has no formal Indigenous or Reconciliation Policy, less an Indigenous Housing Development Policy. While the AIA's *Tertiary Education of Architects Policy* (2008a) does not mention Indigenous cultural literacy, its *Standards for Programs in Architecture* (2009) requires "an understanding of the history and theory of Western, non-western, regional and indigenous architecture" and "an awareness of the broader cultural context in which architecture is practised" together with "an awareness of social and cultural dimensions of place" alluding to cultural literacy (AIA 2009: Clauses 3.3.1ii, 3.5.1i, 3.6.1i; <http://www.architecture.com.au/i-cms?page=13404>; <http://www.architecture.com.au/i-cms?page=1.13262.13312.13441>).

Similarly, the Australian Institute of Landscape Architects (AILA) contains no reference to Indigenous knowledge empowerment in its broad *Education Policy* (AILA 2011) but does require a demonstration of "Indigenous people's cultural and spiritual relationships to country, landscape, and place" in landscape architecture courses via their *University Accreditation Standards* (AILA 2011: C24a; <http://www.aila.org.au/education/policy.htm>).

The Planning Institute of Australia (PIA) in contrast has been more active in this realm approving an *Indigenous Development Policy* (2007) that reaffirms PIA's commitment "to reconciliation between Indigenous and non-Indigenous Australians." It has also established an Indigenous Planning Policy Working Party chaired by Wensing, that has framed several discussion papers about 'country' protocols,

terminologies, possible education reforms, and a Reconciliation Action Plan (<http://www.planning.org.au/policy/indigenous-planning-working-group#improving>). This Working Party has concluded that fundamental changes are needed to the way Australian planning education addresses Indigenous perspectives and interests, and in particular to alert planners to the:

... perceptual limitations of their own discipline and the particular discourse of our own craft. The rational technocratic focus of much land use planning ... often precludes appropriate and meaningful consultation with Aboriginal and Torres Strait Islander people. Planners also need to be aware of the norms of Anglo-Australian culture with its emphasis on liberalist ideas of individual property ownership, the rights of the individual, materialism, free enterprise, competition, nuclear families and written sources of history and law. These are in stark contrast to the non-competitive, communal and extended families, and a dependency on oral traditions and customary laws of Aboriginal and Torres Strait Islander societies (Wensing 1999, quoted in Wensing 2007: 2; <http://www.planning.org.au/documents/item/67>).

Gurran (2008) has noted in a *Planning Education Discussion Paper* commissioned by PIA that the core curriculum in planning includes an expectation of “knowledge of ... Indigenous Australian cultures, including relationships between their physical environment and associated social and economic systems” (<http://www.planning.org.au/documents/item/67>). This observation was drawn from the former PIA Education Policy (2002) that has since been replaced by one that dilutes this specific expectation into:

Performance Outcomes

1. Knowledge of the diversity of populations served, including indigenous cultures, minority and special needs groups, and different age groups including children and older people, and a capacity to engage meaningfully with diverse groups, including ‘hard to reach’ populations (PIA 2010: 10)

The Lone Ranger Complex

Compounding the challenge of the ignominious existence of how Indigenous Australian’s reside on its paradigmatic landscape, driven by two centuries of societal marginalisation, Aboriginal and Torres Strait Islanders are in almost every representation – from the arts to economics – on the fringe. This scenario has seeped into the national psyche fuelled by the great silent apartheid. As Rose (2006: 3) has concluded:

The silent apartheid as a detrimental phenomenon is bolstered not by the vacuum that it creates through the sustenance of ignorance, but by the raft of inappropriate by-products it produces in order to fill void. These by-products are themselves often covert and present not as racism but as an ‘ignorance’ that elicits professional practise that is derisive and harmful to both Aboriginal and Torres Strait Islanders and the general population.

Donnelly (2007: 40) has similarly expressed this conclusion as:

How we view humanity really matters. If we insist on seeing humans as morally degraded parasites then every significant technical problem from the millennium bug to the avian flu will be feared as a potential catastrophe beyond our control. Today’s intellectual persuasion and cultural distortion distracts all humans from confronting challenges that lie ahead.

The image used at the start of this paper is that of the iconic and enigmatic personality of the Lone Ranger. As one of Americas earliest fabled super heroes donning a tight fitting body suit, a mask and an obsequious Indigenous sidekick was all he needed to assume legendary status of a bygone era. The series migrated from radio to television with very few fans ever knowing the real significance of his sidekick called Tonto. Tonto always took a subservient role. The only expertise that he offered the Lone Ranger was the mysterious and exotic peripheral “native” wisdom all the time supporting the Western dominance and reinforcing stereotypes. A deeper understanding and greater transparency lies however in Tonto’s name, Tonto is a Spanish word that translated into English roughly means “stupid or dim witted”.

Since the 1960’s dedicated Lone Ranger fans around the world were subliminally bombarded with negativity about Indigenous people. As subtle and remote as it may seem in this country it did feed along with both overt and covert inputs dating as far back as from Darwin’s measuring skulls to some of the more recent rhetoric surrounding notion of ‘closing the gap’ and insatiable appetite that is a deficit syndrome has been hard to satisfy.

The original *Royal Commission into Aboriginal Deaths in Custody* (1991) in its reference to “underlying issues” in service delivery fell short of naming the phenomena. Professionally it is reaching for the ill informed psychologically default button that is at arm’s length. The phenomenon which is the deficit syndrome can surface in a classroom numerous times a day. It is whenever in a classroom teacher inadvertently ethnically profiles a student by mistaking the soft bigotry of low expectation with meeting a

perceived need of the student. This is when a professional educator who sees an Aboriginal and Torres Strait Islander student would rather than invest in his/her dreams relegates their future to sport, art or a trade without investing in the child's dreams. Or when an Aboriginal or Torres Strait Islander person is incarcerated not because of criminal prowess but because every other option in their life has evaporated and the pathology of the criminal justice system was for them the option of last resort.

How then in terms of Aboriginal and Torres Strait Islander cultural competency programs will any program be so intrusive that it will crack the 'Lone Ranger Complex' and influence the 'attitude frame' that resides so deeply in both the personal and national psyche. True competency around culture will only be possible once the great collective unconsciousness is addressed and a new grand narrative falls in place. Rose personally struggles to see how the current offerings in cultural awareness or cultural competency alone will ever permeate it. Certainly very few offerings provide the potential to challenge the national deficit syndrome or the Lone Ranger Complex.

Conclusion

Aboriginal and Torres Strait Islander culture awareness is merely the trigger and not the end product. This aspect seems to be rarely evident in the current offerings of Aboriginal and Torres Strait Islander cultural offerings. Also within the mythological window frame of Aboriginal and Torres Strait Islander cultural competency is the proposition that "cultural competency" is a single competency. Therefore a significant danger exists if one presumes that at the conclusion of an Aboriginal and Torres Strait Islander cultural competency program that they are in fact competent runs the risk of a false expectation both on the part of the professional and the Aboriginal and Torres Strait Islander community. Compounding the danger further is the possibility that as a result of all the very best intentions the opposite result of the intention can result:

However under some circumstances, cultural contacts may also promote culturocentrism and intercultural animosity (Elliot 2005: 500).

As tomorrow dawns and across the nation literally thousands of people both Indigenous and non-Indigenous will partake in Aboriginal and Torres Strait Islander cultural awareness/cultural competency exercises. When the last cucumber sandwich has been consumed along with the last gulp of filtered conference coffee what will be taken back to the workplace the next day?

References:

- AILA (2011a), Education Policy. AILA: Canberra, ACT.
- AILA (2011b), University Accreditation Standards. AILA: Canberra, ACT.
- ALTC (2011), *Learning & Teaching Academic Standards Project: Architecture – Learning and Teaching Academic Standards Statement September 2011*. ALTC: Sydney, NSW.
- Australia 1991, Royal Commission into Aboriginal Deaths in Custody (RCIADIC) (1987-1991) <http://www.austlii.edu.au/au/other/IndigLRes/rciadic/>
- Cosgrove, L and Klinger, B 1997, "Planning with a Difference: A Reflection on Planning and Decision Making with Indigenous People in Broome, Western Australia", *Urban Policy and Research* 15 (3): 211- 217.
- Deakin University (2012), <http://www.deakin.edu.au/about/distinctive-features.php>; accessed 1/9/2012.
- Donnelly, K. (2007) *Dumbing Down: Outcome based and politically correct – the impact of the culture wars on our schools*. Hardie Grant Books: Prahran, Victoria.
- Elliot, A. (2005) *Handbook of Competence and Motivation*. Guilford Press: New York.
- Fantin, S. (2003), 'Aboriginal identities in architecture', *Architecture Australia*, Sept/Oct 2003: 84-87
- Furedi, F. (2006) *Where Have All the Intellectuals Gone? : Confronting 21st Century Philistinism*. Continuum Press. London.
- Go-Sam, C (2008) *Indigenous Design Paradigms: Working With and Against Indigenous Design Paradigms, Architecture Australia*: September/October.
- Gurran N & Phibbs P (2003), Reconciling Indigenous and non-Indigenous land management concepts in planning curricula. Refereed paper presented to the Australian and New Zealand Association of Planning Schools (ANZAPS) Conference, Auckland, 26–28 September. ANZAPS: Auckland, NZ.
- Gurran N & Phibbs P (2004) Indigenous interests and planning education: Models from Australia, New Zealand and North America. Refereed paper presented to the *Australian and New Zealand Association of Planning Schools (ANZAPS) Conference, Perth, 24–26 September*. ANZAPS: Perth, WA.

- Jackson, S 1997, 'A Disturbing Story; The fiction of rationality in land use planning in Aboriginal Australia', *Australian Planner*, Vol 34, No. 4 pp. 221-226
- Jacobs, P & P Mulvihill (1995), "Ancient lands: new perspectives," *Landscape & Urban Planning* 32: 7-17
- Johnson, L. (2010) Rewriting Australian planning from the margins, in Nichols, David; Hurlimann, Anna; Mouat, Clare and Pascoe, Stephen (eds), *UHPH 2010 : Proceedings of the 10th Australasian Urban History, Planning History Conference : Green Fields, Brown Fields, New Fields*, pp. 261-273, University Melbourne, Melbourne, Vic
- Jones, D (2002), "Time, Seasonality and Design," Australian Institute of Landscape Architects National Conference: People + Place – the Spirit of Design, Darwin, 22nd-24th August 2002.
- Lawson, G & M Erickson (2002), "Connecting Theory, Practice and Places in Today's Landscape: An Education Initiative," Australian Institute of Landscape Architects National Conference: People + Place – the Spirit of Design, Darwin, 22nd-24th August 2002.
- Low Choy, D, Wadsworth, J & Burns, D (2010), "Seeing the Landscape through New Eyes," *Australian Planner* 47: 178-190.
- Low Choy, D, J Wadsworth & D Burns (2011b), "Looking after Country: landscape planning across cultures," presented at the *Australian Institute of Landscape Architects National Conference: Transform, Brisbane, 11th-13th August 2011*, at <http://www.aila.org.au/lapapers/papers/transform/default.htm>
- Low Choy, D & A van der Valk (2011b), Inclusive Engagement: Informing planning education for Indigenous engagement in regional planning, refereed paper presented at the *3rd World Planning Schools Congress, Perth (WA), 4-8 July 2011*. UWA: Perth, WA
- Mabo v the State of Queensland (No. 2)* (1992) 175 CLR1
- Mallie, T. & M.J. Ostwald (2009), "Aboriginal Architecture: Merging Concepts from Architecture and Aboriginal Studies," *Cumulus Working Papers Melbourne* 24/09, Alvo Alto School of Design, p.28
- Margerum R, Har V & Lampert J (2003), "Native title and the planning profession: Perceptions, challenges and the role of professionals," *Australian Planner* 40: 46–54.
- Melleuish, G. (2012), 'Universities are not social engineering schools', *The Australian* January 17: 10.
- Memmott P. & J. Reser (2000), "Design concepts and processes for public Aboriginal architecture," *The Person- Environment & Cultural Heritage Journal of Australia and New Zealand*, Sydney, No. 55-56: 69-86.
- Memmott, P. (1997), 'Aboriginal Signs and Architectural Meaning' *Architectural Theory Review*, 210: 38-64.
- Memmott, P. (2003) (ed), *Take 2: Housing Design in Indigenous Australia*. ACT: RAIA.
- Muecke, S. (2004), *Ancient & modern: time, culture and Indigenous philosophy*. Sydney: UNSW Press.
- Native Title Act 1993* (Commonwealth)
- Nganampa et al. (1987), *Report of Uwankara Palyanyku Kanyintjaku: An Environmental and Public Health Review Within the Anangu Pitjantjatjara Lands, 1987*.
- Oberklaid S (2008) *Indigenous issues and planning education in Australia*, MArch thesis, Faculty of Architecture, Building and Planning, University of Melbourne.
- Palmer, L (2007), Interpreting 'nature': the politics of engaging with Kakadu as an Aboriginal place, *Cultural Geographies*, 2007, v.14, pp. 255-273
- Pholeros, P. (2003), *Housing for Health, or Designing to Get Water in and Shit Out*, in Memmott, P. (ed) *Take 2: Housing Design in Indigenous Australia*, Australia Capital Territory: RAIA.
- PIA (2002), *Education Policy for the Recognition of Australian Planning Qualifications*. PIA, Canberra.
- PIA (2007), *Indigenous Development Policy*. PIA: Canberra. <http://www.planning.org.au/documents/item/244>
- Rose, D.B. (1996) *Nourishing Terrains, Australian Aboriginal Views of Landscape and Wilderness*, Commonwealth of Australia: Canberra, p7.
- <http://www.environment.gov.au/heritage/ahc/publications/commission/books/nourishing-terrains.html>
- Rose, M. (2006), *The Great Silent Apartheid*. Centre for Strategic Education. Jolimont, Australia.
- Sawyer, A (2011), Revealing Identity: How Symbolism can be used in Public Indigenous Architecture to reflect Australian Indigenous Culture, MArch thesis, School of Architecture & Building, Deakin University, Geelong.

- Sinatra, J. & P. Murphy (1999), *Listen to the people, listen to the land*. Melbourne University Press: Carlton Vic
- Smith, LT (1999), *Decolonising Methodologies*. Dunedin, NZ: University of Otago Press.
- Stallard, K-E. (2011), Where to begin? An exploration of how architects approach Aboriginal housing in Australia, MArch thesis, School of Architecture & Building, Deakin University, Geelong.
- Tonkinson, R. (2007), "Aboriginal 'Difference' and 'Autonomy' Then and Now: Four Decades of Change in a Western Desert Society," *Anthropological Forum*, 17 (1): 48
- Trounson, A. (2012a), 'Aboriginal uni reform 'political but still justified'', *The Australian* January 18: 5.
- Trounson, A. (2012b), 'Concern at indigenous perspective', *The Australian* January 17: 5.
- Universities Australia [UA] (2011a), *Guiding Principles for Developing Indigenous Cultural Competency in Australian Universities*, Universities Australia, Canberra.
- Universities Australia [UA] (2011b), *National Best Practice Framework for Indigenous Cultural Competency in Australian Universities*. Universities Australia: Canberra.
- Valaskakis, G, Stout, M & Guimand, E. (2009) *Restoring the Balance- First Nations Women, Community and Culture*. University of Manitoba Press: Canada.
- Victoria 2005, *The Review Report: Victorian Implementation Review of the Recommendations from the Royal Commission into Aboriginal Deaths in Custody*, <http://www.indigenousjustice.gov.au/db/publications/270368.html>
- Walliss, J. & E. Grant (2000), 'Recognising the need for specific cultural awareness education for future design professionals', *Architectural Theory Review* 5 (1): 65-68.
- Ward, M. (2011), *It's Not About Buildings: an interview with Health Habitat's Paul Pholeros*, in *Architectural Review Australia*
- Wensing E (2007), "Aboriginal and Torres Strait Islander Australians," in Thompson S (ed.) *Planning Australia: An overview of Urban and Regional Planning*, Cambridge University Press, Melbourne.
- Wensing, E. (2011), "Improving Planners' Understanding of Aboriginal and Torres Strait Islander Australians and Reforming Planning Education in Australia," presented at the *3rd World Planning Schools Congress, Perth (WA), 4-8 July 2011*.
- Williams, P. & S. Houston (1997), "Environmental health conditions in remote and rural Aboriginal communities in Western Australia," *ANZ Journal of Public Health* 21(5): 511-518.

Using the Campus as a Living Laboratory for Research Projects

Joanna Ross & Christine Cheyne

Resource and Environmental Planning Programme, Massey University

Abstract

The notion of a living laboratory with its emphasis on experiential learning has considerable value for planner educators, and the potential to reduce the gap between planning theory and planning practice. It has strong resonance with the notion of the 'ecological university' (cited in Barnett, 2011, p25) .

This paper outlines what is meant by a living laboratory, and its synergies with a broader university initiative to 'practice what we preach' in relation to sustainability. In this paper, we discuss how the university campus can serve as a living laboratory to provide opportunities for final year undergraduate students undertaking their Honours Planning Project to gain real world experience of research in a supported way. Students at Massey University are connected with local authorities, businesses and other stakeholders. We argue that, as a large and influential institution, a university is well placed to 'embrace policies grounded in solutions to the ecological and social challenges of our times' (Uhl and Anderson, 2001), and through inter-departmental collaboration, there is a real opportunity for the students to research and learn from the activities of the university, as well as an opportunity for the university to implement their results.

Keywords: Living Laboratory, planning education, ecological university

Introduction

Reducing the gap between planning theory and planning practice has long been a goal for planning education (Kudva, 2008, Thompson, 2000). However, for higher education more generally, connecting research, teaching and scholarship has not always been given the precedence that it has in planning. Very recently, the need to strengthen the connectedness of the university with the world has been recognised in the notion of the 'ecological university' (Barnett, 2011). Building on this notion, Massey University has recently launched a 'living laboratory' to foster research and scholarship around the complex challenges of promoting sustainability. The living laboratory concept has particular resonance for planning academics and scholars, concerned as they are with sustainability and with development of practical skills for planning and managing the natural and built environment.

The aim of this paper is to undertake a critical analysis of the use of a 'living laboratory' approach that has recently been implemented at Massey University and is a feature of the Bachelor of Resource and Environmental Planning Honours Project, in order to develop a better understanding both the implications for student experience of research in planning as well as the opportunities that the ecological university has for planning scholarship and teaching. Drawing on the idea of the living laboratory, and using the campus, which have been described in literature as a rich educational resource which can help students to 'integrate and internalise the values, principles, theories, facts and skills for sustainable development' (Kelly as quoted in Mansfield, 1998, p25), this approach seeks to reduce the gap between planning theory and practice.

We argue that Planning students can obtain valuable experience looking at a planning problem in the context of the University's planning. This presents a rich opportunity for developing better connectedness between different parts of the university community (students, academic staff, operations staff, different disciplines) and between the university and external stakeholders (in particular, public and private sector planning organisations). In this way it is hoped they can avoid 'the lesson of hypocrisy', to which Orr (cited in Carmichael and Chameau, 1999, p1) refers, where students learn about topics such as 'injustice and ecological deterioration without having to do much about them'.

The paper begins with an outline of what is meant by the concept of an 'ecological university' and how this has influenced the development, in which the authors participated, of the Massey University Living Laboratory and also changes that have been implemented to the design of the curriculum for the Honours Planning project. The university campus has served as a living laboratory by providing opportunities for final year undergraduate students undertaking their Honours Planning Project to gain real world experience of research in a supported way. Second, we outline our methods which are to identify and review international experience of living laboratories and to gather data from Planning students and others about their experience of living lab projects. This data collection is still at an early stage so our purpose in this paper to invite feedback and to present what is, to date, exploratory research given the early stage that we are at in

undertaking living laboratory projects and adopting a living lab approach as part of the Planning curriculum. Having presented some of our initial findings, we return to discuss the concept of the 'ecological university'. We conclude by arguing that, as a large and influential institution, a university is well placed to "embrace policies grounded in solutions to the ecological and social challenges of our times" (Uhl and Anderson, 2001, p36), and through inter-departmental collaboration, there is an important opportunity for students to research and learn from the activities of the university, as well as an opportunity for the university to implement their results. Although this approach is in its initial stages for the Massey Honours Planning Project, it is intended that in time the approach will develop so that the students can be effective in stimulating changes on campus, and that in turn the campus can be used as a test bed for the students reflective of the problems and potential solutions that face the wider community.

The 'ecological university' and the Massey University Living Laboratory

Barnett (2011) argues that throughout its history the university has taken on different roles in society. He identifies four distinct types of university loosely associated with different chronological phases:

- Metaphysical university
- Research university
- Entrepreneurial university
- Ecological university.

The term 'metaphysical university' refers to institutions of higher education that assumed the purpose of learning and inquiry was to enable scholars to access a transcendental realm of truth, enlightenment or divine knowledge. The research university refers to institutions in which the central purpose is research and knowledge (as opposed to scholarship and learning). The entrepreneurial university refers to institutions which are concerned with their impact and especially their economic return. The ecological university is described by Barnett as "a university that takes seriously both the world's interconnectedness and the university's interconnectedness with the world" (Barnett, 2011, p451). For those of us in Planning schools and other professional programmes, connectedness has been critical to research and teaching which necessarily connects with planning practice. However, the value of connectedness has not always been emphasised or acknowledged in institutional reward systems such as promotion and research funding which have often placed greater priority in, for example, articles in scholarly journals rather than in practitioner publications or industry magazines. At a time when, in some places graduate employment opportunities may be more limited as a result of the global financial crisis, it is even more important for the university to be networked with the community and the range of employers, and for students to be graduating with a skill set and body of knowledge that includes familiarity with the nature of the workplace and the wider community and its planning activities, issues and challenges. Planning is uniquely placed to assist students to understand and work with the interconnectedness of the world – in particular, its ecological, economic and social dimensions.

Recognising the importance of interconnectedness, a new model of engagement with the community has been vigorously promoted at Massey University, culminating in the June 2012 launch of the Massey University Living Laboratory, a collaborative, research and innovation space where academics and research students work with external partners to co-create new sustainability-related knowledge and practices.¹

Underpinning the Living Laboratory is the Massey University Sustainability Framework which foreshadows the development of this mode of engagement. The Sustainability Framework contemplates the living laboratory as encompassing the campus and its stakeholders in the rural and urban communities and business where students and staff are engaged in defining, developing and demonstrating sustainable futures and resilient communities. A particular focus has been developing joint research projects with local government, often on topics that are central to planning such as understanding motivations of rural-residential landowners, changing land-use and emergence of new priorities such as urban agriculture.

In the Planning programme the importance of the university itself as a research site, in particular, given its strong strategic commitment to sustainability as outlined in the strategic plan, 'The Road to 2020' (Massey University, 2012c), has been recognised with students in 2012 carrying out research for their Honours Planning project on aspects of campus sustainability. In the following section we outline the methods used for this 'work-in-progress' research. As outlined in the introduction, our aim is to identify the salience of the living lab concept for Planning and the implications for the student learning experience, especially in relation to sustainability planning. We also reflect at a broader level on the opportunities that the ecological university offers for planning scholarship and teaching.

Methods

Our research to date following a literature review has been mainly desk-top (an electronic search for international examples of living laboratories) with some preliminary data collection from student evaluations. Because students are currently in the final stages of writing research reports and it is premature to undertake a systematic evaluation of the student experience, we accessed data about the experience of social science students who received summer scholarships for the 2011/12 summer to work on living lab projects. This data was collected as part of a 'satellite' living lab project that focused on students as researchers and how their experience of being engaged in sustainability research with real-world collaborators could be enhanced. Further data collection in the form of research on the student experience will be undertaken when the pressure of final semester coursework has eased.

Living laboratories internationally

The concept of a living laboratory and similar organisational structures connecting theoretical and knowledge is well-established in higher education and other learning institutions in Europe and North America, and is found in a range of disciplines not just those planning or those with a sustainability focus although they are often found in education for sustainable development (Haymaker and Chachere, 2006, Martin and Samels, 2012, Wright, 2007). It typically refers to an approach to research that is intentionally contrasted with conventional laboratory research. The latter takes place in a location removed from the real world, and even artificial. Research often is guided by the scientific method which makes a virtue of scientific objectivity and the researcher's detachment. The living laboratory instead utilises research sites in the real world and adopts a different approach to research design – research problems or questions are developed in conjunction with stakeholders. Rather than the usual principal-agent relationship between a council and researchers (typically external consultants), the living laboratory emphasises the co-creation of knowledge through innovative projects (Miskin, 2012). The aim is to use plural knowledge to build community resilience (which may be in relation to climate change, peak oil, the 'silver tsunami'/ageing society, rural depopulation, or a host of other sustainability challenges) by strengthening community-level actors' efforts to intervene in policy, to challenge dominant agendas and promote alternatives.

Students are at the centre of the living laboratory. For the Living Lab projects undertaken today, as well as being involved in designing research, data collection and report writing, students with design skills have assisted with website development and design of publications. In the following section we discuss how students enrolled in the Honours Planning Project have been engaged in research on aspects of sustainability in recent years.

The Honours Planning Project

From the first year of the four year Bachelor of Resource and Environment Planning (BRP) degree, in which students are required to complete a paper called Planning for Sustainable Development, sustainability is a theme in the curriculum of the Massey undergraduate planning degree. In 2011 and 2012 a strong emphasis has been placed on taking a more co-ordinated approach to student research. The conventional model of individual research on a planning problem did not ensure that all students produced research outputs (in particular, a Planning report) that added value to planning practice. In some cases this was because the project focused more on a topic that was of interest to an individual student and less on a current planning problem encountered by a council, or community organisation or other real-world entity. Often, the Honours Planning Projects of some students were more an 'ivory tower' exercise and a valuable opportunity was lost to build networks and link up university-based researchers with planning practitioners.

To counter this, a number of changes were made, one of which included specifying a structured topic. In 2011 the focus of this was campus transportation, a topic that provided wide scope for students to undertake research in a setting that reflected actual planning practice. Massey University had not long previously engaged a local planning consultancy to review its Manawatu campus transport plan. One of the main consultants, a young planner who was a relatively recent graduate gave a presentation to the students about engaging with the university as a client and undertaking data collection and analysis to inform the review of the campus transport plan. The review of the campus transport plan also connected students with the local authorities engaged in transport planning in the city and region where the university was located, and land transport planning processes undertaken by the city and regional councils. A key goal of the city council which had recently adopted a Sustainable City Strategy was to replace private transport trips with public transport. The regional council also sought to encourage workplace travel plans. The University Facilities Manager agreed to make the campus transport plan review survey data available to students to undertake further analysis and to use as a reference point for further research. Student projects were able to complement the high-level descriptive data on campus transport by undertaking more in-depth research on more specialist topics such as:

- How can urban design improve the safety of pedestrians and cyclists within the public realm of Palmerston North?
- How can cycling to become a more significant transport mode within Palmerston North's transport network and, more specifically, in student and lecturer transport to the university campus?
- How well do the public transport initiatives of the Palmerston North Sustainable City Strategy coordinate with the Massey University Transportation Review?

Prior to 2011, another BRP Honours Planning project was undertaken by a student who was invited by Horizons Regional Council transport planners to assist its on-going work developing a business case for council support of a long-distance commuter train service between Wellington and Palmerston North that was likely to be discontinued by the operator, KiwiRail, once new Wellington metropolitan train services were expanded. The student's project involved undertaking a literature review, document analysis (to identify relevant provisions in council policies and plans indicating support for public transport services, and collation of data on population projections, building consents and subdivisions to provide an indication of current and future commuting patterns. The student's report was subsequently presented to the Regional Transport Committee providing an invaluable opportunity for student research to be connected with the political decision-making process.

These examples of recent developments where student research has been directly connected with university and local authority transport planning processes illustrate that a living laboratory approach was embedded in the Planning programme prior to the formal establishment of the Massey University Living Laboratory (hereafter Living Lab) in June 2012.¹⁵

Coinciding with the naissance of the Living Lab at Massey, with its focus on collaborative research, looking at people and places, the structured topic for the Honours project in 2012 is campus 'sustainability'. The sub-topics within this broad umbrella topic were immense, and include changing travel behaviour to/from campus, reducing the e-waste stream, and energy conservation.

The idea of promoting campus sustainability, or a 'green' campus, is not a new one. Campuses have been described as being a microcosm of environmental problems and "overflowing with examples of ecologically irrational practices that are often economically and socially unsound as well" (Mansfield, 1998, p25). Writing more specifically about the reduction of GHG emissions on university campuses, St. Arnaud et al. (2009) describe campuses as 'small cities' and being an "ideal scale for exploring innovative approaches to the reduction of carbon footprints" (p16). Supporting this premise, Uhl and Anderson (2001) note that "not only do universities educate our citizenry with interdisciplinary knowledge, but they are large, prestigious, and influential institutions in their own right, capable of having large impacts on the environment as well as some influence on local and global communities" (p36). Use of the campus (and surrounding community) for learning about sustainability is strongly endorsed by Orr (2004) who writes:

The very institutions that purport to induct the young into responsible adulthood often behave like vandals. This need not be. Institutional waste streams offer a good place to begin to teach applied (as opposed to theoretical) responsibility. Solar aquatic waste systems and similar approaches offer us a way to teach the techniques of waste water purification, biology, and closed loop design. There are many reasons to regard resource use and waste flows as a useful part of the curriculum, not merely a nuisance (Orr, 2004, p58),

On this basis, Massey University's Manawatu (Turitea) campus is an ideal place to research and explore innovative approaches for a variety of sustainability issues, given its discrete location; connected to, but separate from the wider city. Taking the Living Lab concept and having the fourth years look at the University campus as a 'place', has meant they can research wicked planning problems at a scale that is both familiar to them yet representative of larger environments, and to consider solutions to those problems based on planning theory and precedent, as established through literature. This is an approach supported by the Campus Facilities Manager who acknowledges that achieving sustainable outcomes on campus can be as simple as asking the right questions. There is significant merit in identifying problems, recognising the barriers to changing behaviour in relation to those problems, and then asking the 'right' questions as to how to overcome those barriers – even when the answers to those questions may seem impossible to implement.

In thinking about solutions to planning problems, it's interesting to reflect on Barnett (2011) who, in defining 'the ecological university', refers to 'feasible utopias' as being 'rooted in the empirical world but yet imaginatively have an independence from it' (page 440). It is in essence a concept perhaps central also to

¹⁵ See www.livinglabnz.org.nz

Living Labs whereby the 'solutions' to various wicked planning problems experienced on campus as put forward by the students may be imaginative, and utopian in that they may not be realised, but yet they can be rooted in the empirical world. Drawing on urban design literature one student is looking imaginatively at how the main public transport terminal on campus can be improved to positively influence travel behaviour. She has reflected that:

how space is allocated determines priorities. For example, 38% of Massey Turitea students, which amounts to around 4,000 people, travel to university everyday via bus. Yet limited waiting space is provided for patrons and the bus stop is small compared to the space provided for the 30 car parks sharing that space. Bus patrons should be rewarded with more space and an inviting bus terminal that protects them from the elements. Studies have shown that improving amenities at transit facilities increases ridership and promotes a positive image for the city.

This potential solution, justified empirically, could well lead to improved amenities at this particular transit facility.

As well as the benefits of researching outside the 'ivory tower' on current planning issues, students engaged in Honours Planning projects on campus transport and other living lab projects gain significant insights from the links between their individual projects within an overarching research project and from the interactions they have with professionals and academic staff researchers. The sometimes 'messy' nature of real-world research, even if acknowledged in research methods textbooks is not necessarily understood until students experience it for themselves. This was commented on by one of the summer scholarship students:

What I found interesting is how little everybody knows and how much they do know. You have got this whole network of people who are quite good at what they do individually, but you talk to one person and they have no idea what the other person has done and that makes it difficult, I suppose, but it's interesting to see how the whole business kind of works.

They also learned first-hand the importance of building relationships, and the complexity of projects:

It's quite tricky to get your foot in the door... they don't know what you're up to and who you are and what your role is and what you're trying to achieve.

It's stressful because it's a big job.... So much of this is new... it's a different language. It's been really daunting, it's been hard; [but] because it's challenging it's... fun.

The benefits and challenges ahead

Inherent within the concept of an ecological university and key to the Living Lab approach to research is the element of 'connectedness'. An ecological university is one 'that takes seriously both the world's interconnectedness and the university's interconnectedness with the world' (Barnett, 2011, p451). It moves from the idea of a single expert to multiple experts and the co-construction of knowledge (Barnett, 2011). For the Living Lab approach, this element of connectedness is reflected through 'real' connections – working with stakeholders external to the University, and inclusion of human participants in the research design. The applicability of applying this to the fourth year projects is limited to the extent that they are required to be an independent piece of work. However, an element of connectedness can be achieved through critical consideration of the University's policies within the wider planning framework, or through consideration of the effects of activities on campus and making inferences on these in light of the bigger picture. As one student notes 'once you look harder into the University [policy] frameworks you can see how legislation works in real life', reflecting comprehension of the how the University is a microcosm of the 'real' world. Making this connection between the campus and the wider planning framework is a key characteristic of Living Lab approach which seeks to strengthen community-level actors' efforts to intervene in policy, to challenge dominant agendas and promote alternatives.

Additionally, 'real' interpersonal connections are being made. With the support of the key staff, including the Facilities Manager and the Chair of the University's Sustainability Taskforce, the students are enabled to start a dialogue and to increase their own connectedness with the 'place' should their research design require it. The idea of research questions being developed in conjunction with 'stakeholders', central to the Living Labs premise, was partly achieved through key staff addressing the students at the start of Semester. Additional supported conversations with key staff members can further contribute to student learning.

Writing about 'conversation' as a medium for learning, Baker, Jensen and Kolb (1997) highlight its usefulness in debriefing sessions following experiential learning experiences in classrooms. Conversation could also be seen to be useful during the course of the research project and in connection to the Living Lab concept. Baker et al. (1997) make the point that 'through conversations, people share their points of connection and grapple with inevitable differences' (page 8). The Living Lab concept refers to inter-disciplinary connections being made, and using established relationships with key university staff in

operational departments, can create a receptive and hospitable conversational space that can enhance student learning, as promoted by Baker et al. (1997). They note that “with care, the conversational space can allow for the surfacing of differing perspective and the inevitable conflicts that move participants ‘toward the light, toward new, more complex understandings’” (Baker et al., 1997, p11). This is reflective of the intent of the element of connectedness within an ecological university. Although one student has commented that connecting with relevant staff was straight forward, especially with the help of their supervisor, the challenge for us, as educators, is to facilitate enhanced conversational spaces for learning within the Living Lab framework.

The Living Lab approach to research is akin to experiential learning, that is, learning through direct experience. In an experiential learning cycle, 'the observation of and reflection on concrete experience leads to the forming of abstract concepts, which are then tested in new situations, eventually resulting in the adaptation of existing practices (that is, concrete experience), in a continuous flow' (Straatemeier et al., 2010, p580).

In a fourth year research project there are time constraints that limit the degree to which experiential learning can occur, and the focus is largely on the early stages of this cycle – observing and reflecting on concrete experiences. As students take these experiences, such as they are, out into the workforce it is hoped that they can continue their reflections. As Kolb (1984) writes “the simple perception of experience alone is not sufficient for learning: something must be done with it ... we learn the meaning of our concrete immediate experiences by internally reflecting ... and / or by acting ... and thus extending it” (as cited in Baker et al., 1997, p417). The degree to which this learning takes place is largely then in the hands of the students themselves – *ex post facto*.

An area for ongoing future investigation for those involved delivery of the BRP Honours Planning project is the student experience. A key aim of adopting a structured approach to the Honours Planning project was to ensure that students gained familiarity with real-world planning processes, and, indeed developed connections with planners. We do have some anecdotal evidence, for example, a student was able to include their report undertaken for the Horizons Regional Council, including the council agenda with the attached student research, in their curriculum vitae and job application package. They could also utilise the regional council staff as referees for them. However, this anecdotal evidence this needs to be supplemented with more systematic evaluation of the approach now being taken – an approach that is being more deliberately and comprehensively embedded with the launch of the Living Lab.

Students involved in the Living Laboratory projects, reflected that in participating in ‘real world’ research felt they 'learnt 1000% more than in a normal paper' (Massey University, 2012a) and the project leader reflected that 'this project proved that innovative solutions emerge when we bring together local government and diverse university disciplines – designers and social scientists working with city planners and community members – to create a space where we can look at complicated, thorny issues afresh (Massey University, 2012b).

Straatemeier et al. (2010, p578) write that “planning is not just concerned with understanding the world, but also, and fundamentally, changing it”. They note that “by bringing the two worlds together in the production of knowledge it might be easier to strike a balance between rigour and relevance, between knowledge that is on the one hand theoretically and empirically sound and on the other hand also useful for and valued by the practitioners who have to use this type of knowledge” (Straatemeier et al., 2010, p587). This outcome is inherent in the purpose of the planning project in that students should undertake ‘useful’ research in a setting that reflects actual planning practice. In the longer term there is an expectation that solutions put forward by students could be implemented for the benefit of the University. By researching planning problems on campus it is an attempt to encourage new ways of looking at issues, and helping students to bridge the gap between theory and practice. Moving from the ideas presented in the student research to their implementation presents an opportunity to fundamentally change the campus. The challenge going forward will be engaging the wider campus community in the implementation of sustainable planning practices on campus, and using student research as a basis for this change.

Barnett (2011) writes that the 'ecological university' is not 'in-itself (the research university) nor for-itself (the entrepreneurial university) but for-others' (p.452), and as such there are 'external realms to which it has responsibilities, even while holding fast to its traditional interest in the emancipatory power of understanding for enlightenment' (p. 452). In the case of an accredited professional degree such as planning this could be said to be particularly so – with the New Zealand Planning Institute being one such external realm to whom we have responsibility, together with potential employers, and the general public. The NZPI's Education Policy 'acknowledges that an effective planning programme trains graduates who are creative, good problem solvers, solution-focused, and confident individuals who can work in a rapidly changing and dynamic, environment ... and work well alone and in teams, and they work effectively in multidisciplinary contexts and sensitively to a range of cultural contexts...' (New Zealand Planning Institute, 2011). The living lab is one approach to achieving this outcome. As Lang (1983) notes, planning students “need to develop their skills

in designing processes, policies and social and/or physical plans or courses of action” (p.128) and that this is best done by ‘doing’. Using the Living Lab approach, and the University campus as a ‘place’ in which wicked planning problems can be considered, the fourth year planning students can develop their skills in designing practical solutions in light of planning theory learnt during the course of their degree.

St. Arnaud et al. (2009), albeit writing about the reduction of GHGs, comment that ‘those of us in higher education have the opportunity to recommit ourselves to enabling societal transformation by using our campus ‘cities’ as proofs of concept for the green infrastructure revolution’ (page 32). In the case of the fourth year projects implementing the outcomes of student research is yet to be realised, but in the longer term has the potential to challenge the status quo and enhance on campus sustainability.

Conclusion

Our purpose in this paper has been to explore the use of a living lab approach, in order to develop a better understanding both the implications for student experience of research in planning as well as the opportunities that the ecological university has for planning scholarship and teaching. In seeking to be an ecological university which fosters better connectedness within the University and with external stakeholders, we argue that a living lab approach using the University as a setting for research on issues related to planning and sustainability provides considerable scope for Planning students to obtain first-hand experience looking at a planning problem in the context of the University thus avoiding ‘the lesson of hypocrisy’.

This approach, albeit in its infancy, has had immediate results in terms of better connectedness between current academic staff/students and the Facilities Management team. Through encouraging and realising ‘interconnectedness’ in the fourth year planning project the University can be one that is engaged, critical, and enquiring – “a university-for-development, acting to put its resources to good effect in promoting world well-being” (Barnett, 2011, p452). There is much more to be done including utilising tools to assess progress towards sustainability such as the Association for the Advancement of Sustainability in Higher Education’s Sustainability Tracking, Assessment & Rating (STARS) system widely adopted in North America¹⁶. For the Planning programme at Massey University, a priority is to harness opportunities for building connectedness between the Planning curriculum not just in the Honours project but throughout the degree) and campus planning and sustainability initiatives to enhance applied learning and to ensure the university’s public institutional commitments to sustainability are addressed on its own patch as well as in the world beyond the campus.

References

- BAKER, A. C., JENSEN, P. J. & KOLB, D. A. 1997. In Conversation: Transforming Experience into Learning. *Simulation Gaming*, 28, 6-12.
- BARNETT, R. 2011. The coming of the ecological university. *Oxford Review of Education*, 37, 439-455.
- CARMICHAEL, C. S. & CHAMEAU, J.-L. A. 1999. Avoiding the "Lesson of Hypocrisy": The Role of Campus Practice in Education for Sustainability. An essay by Carol S. Carmichael and Lean-Lou A. Chameau, Georgia Institute of Technology (May 31, 1999). Available: <http://www.cce.utk.edu/documents/lessons.pdf>.
- HAYMAKER, J. & CHACHERE, J. 2006. Coordinating Goals, Preferences, Options, and Analyses for the Stanford Living Laboratory Feasibility Study. In: SMITH, I. (ed.). Springer Berlin / Heidelberg.
- KUDVA, N. 2008. Teaching Planning, Constructing Theory. *Planning Theory & Practice*, 9, 363 - 376.
- LANG, J. 1983. Teaching Planning to City Planning Students. An Argument for the Studio/Workshop Approach. *Journal of Planning Education and Research*, 2, 122-129.
- MANSFIELD, W. H. 1998. Taking the university to task. *World Watch* 24-30.
- MARTIN, J. & SAMELS, J. E. 2012. *The sustainable university : green goals and new challenges for higher education leaders*, Baltimore, Md, Johns Hopkins University Press.
- MASSEY UNIVERSITY. 2012a. Available: <http://www.livinglabnz.org/> [Accessed 17.7.12].
- MASSEY UNIVERSITY. 2012b. *Living Lab takes a fresh look at sustainability* [Online]. Available: http://www.massey.ac.nz/massey/about-massey/news/article.cfm?marticle_uid=8044A469-07DB-155D-EAF3-CCBE8B69CDD9 [Accessed 17.7.12].

¹⁶ For further information see <https://stars.aashe.org/>

- MASSEY UNIVERSITY 2012c. The Road to 2020 - 2012 update. Massey University
- MISKEN, J. 2012. Summary of web-based investigation into Collaborative University-Municipal Partnerships - 'Living Labs'. Massey University.
- NEW ZEALAND PLANNING INSTITUTE. 2011. *NZPI Education Policy and Accreditation Procedures* [Online]. Available: http://www.planning.org.nz/Attachment?Action=View&Attachment_id=646 [Accessed 17.7.12].
- ORR, D. W. 2004. *Earth in Mind. On Education, Environment and the Human Prospect*, Washington, Island Press.
- ST. ARNAUD, B., SMARR, L., SHEEHAN, J. & DEFANTI, T. 2009. Campuses as Living Laboratories for the Greener Future. *EDUCAUSE Review*, November/December.
- STRAATEMEIER, T., BERTOLINI, L., TE BROMMELSTRÖET, M. & HOETJES, P. 2010. An experiential approach to research in planning. *Environment and Planning B: Planning and Design*, 37, 578-591.
- THOMPSON, R. 2000. Re-defining Planning: The Roles of Theory and Practice. *Planning Theory & Practice*, 1, 126-133.
- UHL, C. & ANDERSON, A. 2001. Green destiny: Universities leading the way to a sustainable future. *BioScience*, 51, 36-42.
- WRIGHT, T. S. A. 2007. Developing research priorities with a cohort of higher education for sustainability experts. *International Journal of Sustainability in Higher Education*, 8, 34-43.

Extending planning education into primary and secondary schools through research

Julie Rudner¹, Ichiro Omiya², Rikutarō Manabe³

¹Community Planning and Development Program, La Trobe University ²Graduate School of Horticulture, Chiba University ³Graduate School of Engineering, The University of Tokyo

Abstract

This paper explores how researchers, through their work, have a valuable role to play in providing and fostering planning education in primary and secondary schools. Using an international study conducted in Finland, Japan and Australia as the vehicle for discussion, the authors review how their research contributes explicitly and implicitly to planning education and school curricula. In particular, the authors focus on aspects of the research process that emulate, and enact participatory planning theory and practice. Framed by discussion about civics and citizenship in relation to space and place, the authors argue that researchers are well placed to work with primary and secondary students to introduce them to planning. The experience of participation provided through planning-related research enhances children's and young people's knowledge and skills as both future participants in planning processes and future planners.

Keywords: Children; Research; Education; Planning

Children need to be involved in meaningful projects with adults. It is unrealistic to expect them suddenly to become responsible, participating adult citizens at the age of 16, 18, or 21 without prior exposure to the skills and responsibilities involved. An understanding of democratic participation and the confidence and competence to participate can only be acquired gradually through practice; it cannot be taught as an abstraction. (Hart, 1997: 5)

Introduction

Researchers play a valuable role in extending planning education to children and young people attending primary and secondary schools. Through the act of conducting planning related studies, researchers can introduce and discuss the principles, processes and practices of planning, as well as provide experiences of participatory planning. Recent projects indicate that participation in research processes provides opportunities for teachers and students to ground their understanding of civics and citizenship curricula to the use, development and experience of urban spaces and social structures (Children's Research Reference Team and Adult Research Team 2011: 491; Frank 2006; Mallan et al. 2010; Rudner et al. 2012). Importantly, as one event within a broader scope of learning events, teachers and students gain knowledge and skills useful for future participation in planning processes as participants or as planners.

Many foundational concepts relevant to planning are already taught within primary and secondary schools. Voting, legal systems, participation, membership, social inclusion and political processes that influence our social and physical environments schools are taught through subjects in geography, humanities, and technology and design (Black et al. 2009; Cosmo and Patten 2006; Wood 2009). These concepts, while valuable on their own, may not have necessarily been brought together in such a way that they contribute to children's and young peoples' exposure to, and knowledge about planning, or their skills to participate in planning processes. Past situations experienced by the authors and their colleagues suggest many teachers do not have the time, interest or skills to focus their subject content on matters that are integral to planning and planning education. They require access to external 'experts', who can bring a more detailed understanding and practical examples into the classroom. As such, we argue that researchers are 'experts' who are well placed to work with primary and secondary students to explore the relationship between planning, civics and citizenships and what these concepts mean for children's and young peoples' physical and social environments.

In particular, this paper explores how researchers, who conduct research in primary and secondary schools, can extend planning education to children and young people using GIS based research, while contributing to civics and citizenship curricula. The softGIS program research has been undergoing development and refinement since 2005 at Aalto University in Finland. Conceptually, the softGIS program is based on ecological psychology. It applies a dynamic approach to human environment relationships that specifically facilitates joint examination of objectively measurable physical environment features as it relates to subjective assessments of the environment. Importantly, it is an advanced participatory planning tool that combines spatially based qualitative and quantitative data, helping planners negotiate different scales of

experience from individuals, small groups, and broader populations, across geographic scales. (For a more thorough explanation of the approach, please see Kyttä 2004; Kyttä et al. 2012).

The first aim of the project was to collect locality-based data that contributes to our understanding of children's experiences and opinions about their urban spaces, personal health, independent mobility and activities in relation to their urban environments. The second aim of the project was to assess the value of softGIS as a participatory planning tool in a cross-cultural context by comparing students' experiences and views in Helsinki Finland, Tokyo Japan and Bendigo Australia. The third aim, which was indirect and associated with our research process, was to help primary and secondary? students explore notions of citizenship, participation, and planning. Although this aim was incidental to the project, it was important for us as researchers to give something back to students by sharing some of our knowledge. It is also significant in terms of planning education.

Following on from this section, section two provides a brief review of the literature related to teaching civics and planning in relation to school curricula, and children's engagement in planning processes. Section three presents information about the project aims and methods in more detail. Section four presents the data from the online questionnaire results, and the feedback from students about their views of participating in the online questionnaire to make inferences about the role planning researchers and research can play in the classroom. Section five reviews the results in relation to the contribution of researchers to primary and secondary education. Specifically the role of researchers in teaching students about civics and planning, engaging students in planning and planning research process, and reflecting about the outcomes of participation in the planning activity from a cross-cultural perspective are addressed.

Teaching civics and planning, and facilitating engagement in planning

According to Scheerans (2011: 202), the goals of education for citizenship have been described as having three dimensions: a cognitive dimension with respect to knowledge about democratic institutions; a pragmatic dimension, in the sense of taking action and gaining experience; and an affective dimension, in terms of an attachment to the societies and communities to which one belong. Ironically, while children and young people can learn about the cognitive, pragmatic and affective dimensions in school through formal lessons, and participation in extra-curricular activities, these goals are not necessarily enacted in the public realm as children's status as citizens is murky. Researchers can provide a bridge between the school and the public realm, and between formal and informal citizenship status of children and young people and their ability to participate in planning decision-making.

Teaching civics

Cosmo and Patten (2006) have performed an interesting historical and comparative review of civics and citizenship in Australian curriculum development. They identify the progression of civics and citizenship from a formal, legalistic approach to government structure and process, and citizenship in an electoral democracy up to the 1950s, a waning of the civics program from the 1960s-1980s, and toward an inclusion of a broader understanding of social and economic power relationships on political processes in more recent years. According to Cosmo and Patten (2006: 459), there appears to be two current strands of civics education: radical democracy which emphasises equality by supporting political agency by marginalised groups, and neo-liberal democracy which emphasises electoral democracy and capacity building for the purposes of autonomy and self governance. Both forms support active citizenship, self-empowerment and community responsibility, albeit in different ways. Reflective of broader discourses, radical democracy is viewed as promoting politicized collective social understandings of citizenship through participation in social processes of cultural reproduction, while neo-liberal democracy is viewed as promoting citizenship as a-politicised choices of self-interest that are achieved through responsibility and economic participation.

Neo-liberal approaches dominate classroom learning and present civics and citizenship as abstract concepts (Cosmo and Patten 2006; Simpson 1997). In contrast, more radical democratic perspectives are promoted through extra-curricular activities (Black et al. 2009; Santo et al. 2010). Civics and citizenship activities are primarily enacted through specific committees and leadership groups, where few students are actively engaged, but they can extend to campaigns, other actions for change, and into community partnerships (Black et al. 2009). Therefore, within the school settings, students are receiving a broad, although often implicit, education about civics and citizenship. In some cases extra curricular or project specific activities may link civics and citizenship with the field of planning such as playground development and design or urban mapping (Black et al. 2009; Burke 2005; Santo et al. 2010). While extremely valuable, conducting planning and design projects is not common in schools.

Negotiating the tensions between neo-liberal and radical democratic approaches to civics and citizenship is a fundamental part of planning. To greater or lesser extent, depending on the nation, western industrialised countries are marked by neo-liberal economic and political structures that are weighted toward a consumer and lobby group interest approach to planning (Frank 2006; Healy 1997; Sandercock 1977). Yet, the principles, process and practice of planning have been significantly influenced by the emergence of

participatory methods of planning (Arnstein 1969; Forester 1999; Healey 1997; Sarkissian et al. 2003). In addition to civic engagement through voting, interest group representation and economic participation (neo-liberal), individuals and groups are gaining greater access to political processes through their own efforts, as well as through the efforts of planners and researchers who ensure social inclusion in a system comprised of power inequality (radical democracy) (Frank 2006; Santo et al. 2010). Researchers can potentially provide valuable expertise in planning to augment civics and citizenship programs in schools due to their depth of knowledge, skills and experience in this area.

Teaching planning

It is pleasing to see the growth in journal articles and reports about children's and young people's participation in planning related projects (Children's Research Reference Team and Adult Research Team 2011; Frank 2006; Freeman 2006; Lynch 1977; Malone and Rudner 2011; Rudner et al. 2012; Santo et al. 2010). The growth suggests there is an increasing number of children and professionals gaining skills for negotiating the 'why', 'when' and 'how' of planning and planning processes. Unfortunately, the gains made in research, policy and practice about children's and young peoples' citizenship as it relates to planning are not directly or explicitly reflected in school curriculums for the most part. Teachers cannot be expected to be experts in fields that are not core to the primary and secondary curriculum.

Civics and citizenship as it is enacted and experienced in school environments and the public realm often confers specific identities on children that can be contradictory and confusing. Traditionally one dimension of citizenship is associated with the cultural practices of belonging to a nation (or a school body) as expressed culturally, symbolically and economically (Halstead and Pike 2006). Another dimension of citizenship are the rights and duties of citizens as they apply to the civil, political and social spheres. In both dimensions, children and young people are 'lesser' citizens than adults (or teachers). Children and young people enjoy some rights such as having a passport, requirements to abide by laws and rules, and the privilege of being protected by laws and rules. However, children and young people cannot vote in elections or stand for public office until they are 18 years of age (although in school environments they can), and are often excluded from political, economic, environmental, and social decision-making about aspects that affect their daily lives.

By contributing to planning education within broader learning frameworks in formal education, researchers' can address a gap in the civics and citizenship curriculum through teaching planning principles, processes and practices to children and young people through a focus on space and place. By assisting teachers to address the school curriculum through clearly explaining planning matters, providing examples, and providing participatory learning experiences, researchers can link civics and citizenship to decision-making about urban spaces and places. Researchers, who are external experts to the school environment, can also legitimise the value of children's and young people's views.

Role of GIS in teaching and engagement

Re-conceptualising the role and identity of children and young people as citizens has gained strength over the past thirty years. In the early to mid 1970s and then again in the late 1980s the UNESCO Growing Up In Cities project investigated children and young people's use, views and experiences of their urban environments (Chawla 2002; Lynch 1977; Malone 1999). Important outcomes from these studies were the legitimisation of children's competence to participate in urban research and advocacy for children to participate more fully in decision-making that affects their lives. Children and young people's citizenship has received deeper support through policies that emerged since the 1990s – in particular, the United Nations Convention on the Rights of the Child 1989 (United Nations 1989) and UNICEF's Child Friendly Cities initiative (International Secretariat for Child Friendly Cities 2004). The Child Friendly Cities framework provides the structure for incorporating matters affecting young people into urban policy and planning. In accordance with the United Nations Convention, it operationalises children's citizenship by promoting children rights, which encompasses freedom of expression, access to information and ideas, freedom of association and assembly, right to recreation and play, the right to education, and the right to participate in decisions that affect their lives.

A great advancement for supporting children's citizenship and participation in planning and design processes is the rise of GIS technologies. Over the past 10 years, GIS has been used by community groups, NGOs, researchers and governments to extend opportunities for civic and community engagement (Kyttä et al. 2010, 2012; Mallan et al. 2010; Sieber 2006). It is a modern technology that enables the collection of quantitative and qualitative data in large volumes across space. Children and young people have a high level of technological knowledge; the presentation of information over the internet is familiar; and participation may be viewed as fun. In terms of engagement, as Sieber (2006: 491) compellingly states:

GIS has sparked interest for three main reasons. First, most information used in policymaking, whether with regard to crime, land-use planning, environmental health, habitat conservation, or

social service provision, contains a spatial component ...Second, extending the use of spatial information to all relevant stakeholders presumably leads to better policymaking. Third, ... policy-related information can be analyzed and visualized spatially, and the resulting output (mainly maps) can persuasively convey ideas and convince people of the importance of those ideas.

Methods

The method for eliciting students' experiences and views comprised of an on-line questionnaire using soft-GIS. The soft-GIS program is an interactive mapping program that uses areal images, mapping, drawing features and pop-up survey questions. In the first screen, students were asked about their demographic information: age, gender, number of cars in the family and if they own a bicycle, as well as the type of accommodation they live in. The students also selected their school from a list, and on the next screen the map was centered on this selected school. For the next screen, students were asked to locate their house on a Google Satellite© image, and identify their travel route to school. On subsequent screens, students were asked to indicate places they like and do not like on the Google Satellite© image, and answer a series of questions about their activities, opportunities for social interaction, and their feelings. In addition, students were asked to identify how they travelled to the places they marked on the image, and who accompanied them to these places. On the last set of screens, children were queried about their sense of wellbeing, level of activity (physical and social networking) as well as their experience of completing the questionnaire.

During development of the questionnaires, tensions between consistency for international comparison and cross-cultural considerations needed to be addressed. The original set of questions for use in the soft-GIS was developed by the Finnish researchers. These were then translated and edited for meaning and understanding in Japan and Australia. Once the base set of questions had been developed, additional questions for each locality were then developed and added to the soft-GIS program. In Australia, council staff were involved in this process as they commissioned the research with the intent of using the data for professional planning purposes.

Research was conducted in 2010 in Helsinki and Tokyo, and data is currently being collected in Bendigo. The process required researchers to invite school principals, teachers and students to provide permission to participate and participate in the project; in Japan, this also included negotiating with the superintendent of education of each subject city. This research was associated with social study, international understandings and ICT (Information and Communication Technology) literacy in Japan. In Finland, mainly Geography teachers were approached. In Australia, principals and teachers were informed that the research would be best situated in a class addressing civics and citizenship, humanities, or design creativity and technology. Once an agreement for participation was negotiated, a date and time for data collection was arranged.

In accordance with the literature on planning theory and practice (Alderson 2000; Burke 2005; Driskell 2002; Hart 1997), and conducting research with children and young people, the primary principles underlying the approach to the research and data collection process were to respect students' contribution. First, it was important for children and young people to understand the research and planning process so they could appreciate the purpose and value of their contribution. Second, children and young people were viewed as competent participants in planning related research and projects. Third, we saw this project as part of broader sustained education and exposure to participation processes through which children and young people learn civics and citizenship.

Within the sphere of the research project presented here, children and young people were full citizens. They had the right to determine whether or not they will participate in the research, to ask questions of the researchers, and to participate in the research as they saw fit within the general parameters of project. Notwithstanding that influence of the class setting, and children and young people themselves were able to seek direction or guidance, within the broader context of self-determination during participation processes.

To facilitate the research process and prepare students for participation, researchers sent the supervising teacher material about the questions to be asked of students to help prepare them for the session. In Japan the researchers gave the students printed manual that provided easy explanations about the research to support children who are not familiar with using computers. In Japan and Australia, an image that incorporated the options students could select about the activities, social atmosphere and feelings they might have about different places were provided. In Australia, a satellite image of the students' school was also provided along with advice that students should be set a task to find their home on Google Earth© to familiarise students with the mapping tool.

In the classroom, researchers introduced themselves and what they do, and ensured students understood the processes of the research and the process of the research in relation to planning decision-making. Discussion also included the other cities where the research was being conducted, the importance of children's and young people's participation in research and planning processes.

In Japan the researcher did a lecture about city planning, GIS and other subject countries. The researcher also discussed with the students about positive place and negative places around their living area. Students used Street view of Google Maps© to learn how to manipulate digital maps or to see landscape of other subject cities before they start to answer Soft-GIS questions.

In Australia, the researcher discussed with the students how cities were planned and designed, the types of jobs and activities professionals do to plan and design cities, and the notion of citizenship. It was highlighted to students that although they were citizens, they were not old enough to vote, so they often missed out on participating in decision-making about where they live. Students were asked to offer their views about why it is important for them to let researchers and professionals know what they think and feel about where they lived. This discussion was used to further emphasise the purpose of the research, and lead into the data collection phase.

During data collection, the researchers and the classroom teachers roamed the room and assisted students to negotiate the software and the survey, to ensure students' ability to effectively participate in the research. The results indicate that participation is affected by knowledge, skill and associated confidence to use computer and internet technology, and identify sites on Google Maps©. However, these complications were negotiated with help from the researchers and classroom teachers.

The survey took between 40 and 60 minutes to complete depending on students' knowledge of where they live and the route they travel to school, their mapping and internet skills, and their level of interest in providing information. The total participation rates are provided in Table 1. At the time of submitting this paper for review, six schools in Bendigo, Australia successfully participated in data collection with data collection to proceed at a further three schools.

Table 1 Participation rates by number of schools and students

Country	Primary Schools	Number Students	Secondary Schools	Number of Students
Helsinki, Finland	11	319	14	648
Tokyo, Japan	3	354	3	345
Bendigo, Australia*	5 – data collected 1 - data collection to be conducted	192 Estimated 160 more students	1 – data collected 2 – data collection to be conducted	21 estimated 300 more students

An important aspect of participatory planning processes, and for conducting research with students is feedback. Participation certificates were sent to the students who participated in the study. After the survey in Japan, the researcher sent the schools handouts that show the abstract of the results. This activity will also be conducted in Australia. At time of this conference, the Japanese co-authors of this paper will visit some of the Australian schools that participated in the research with the Australian researcher/author. The comparative data between the countries will be presented and discussed with students.

Results¹⁷

This section presents the research results from the study. Two processes were occurring simultaneously while collecting data, and two processes will simultaneously occur during dissemination of data. During data collection, students learned about civics and planning, as well as engaged in a participatory planning process. Reviewing of the report in Japan, and student discussion with the Japanese researchers in Bendigo provide lessons in learning about civics and planning as well as engaging in self and cross-cultural reflection. To link the outcomes of the research with civics and planning education, participatory planning processes, and cross cultural reflection, the data obtained during the research has been presented as learning opportunities for future discussions between teachers and students, and between researchers and students. Primarily the data highlights that children and young people have varying degrees of independent mobility and opportunity to participate in public space their communities.

Student mobility patterns

¹⁷ The data presented for Finland and Japan are from the current GIS project. Comparable data from other Australian sources has been presented as data collection is still being collected from Bendigo schools.

Figure 1 shows that the physical and social environments of Helsinki, Tokyo and Bendigo. The images of urban form and density provide a starting point for discussion about urban form, transport networks, housing density, and land use. Differences between environments and cultures and how they may interact with each other can be explored in addition to how these interactions may impact on children's environments.



Fig 1 Urban structures in same scale (from left: Tokyo, Japan; Helsinki, Finland; Bendigo, Australia)

The data about travel mode to school described below and provided in Figure 2 provides valuable information for discussion about civics and citizenship as it relates to children and young people's mobility. With reference to the data and the literature, teachers and researchers can explore with students, how children and young people are affected by policy, infrastructure, and cultural views about risk and independence, especially as it relates to transport (Rudner and Malone 2011).

For example, in Japan, school regulations prohibit students from using bicycles or cars to travel to and from school, in principle. As a result, most of them walked to school. In Finland, the percentage of students who walked to school was lower than Japan, as most of the students used bicycle or public transportation; only less than 10% of students travelled to school by car. In these two countries, students go to school independently. In stark contrast, the majority of students from Australia travelled to school by car, with few having independent mobility (1992: 5).

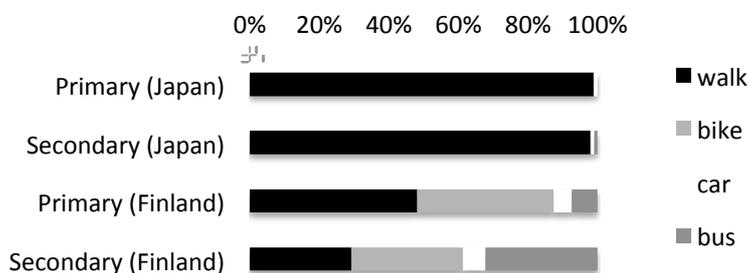


Figure 2 Travel mode to school in Finland and Japan

Using the data below and in Figure 3, students can consider different mobility levels between countries. Licensed mobilities is an important factor for assessing children's and young peoples, level of freedom to independently use public space and engage with their broader communities. Discussion about licenses granted to children and young people to go places by themselves can include critiques of the social and cultural expectations of children and young people, their right to use public space, adult responsibilities to care for children and young people in public space, and views about levels of safety in the urban realm (Rudner and Malone 2011).

Most (80%) of students in both primary and secondary school in Finland and Japan were allowed to "walk or ride to clubs or activities", "ride my bike", "walk or ride to my friends' home". The majority of secondary school students (almost more than 80%) and nearly half of primary school students were permitted to do activities such as "go to the city center or shopping malls" and "use public transportation". Few students in Australia were allowed to do many activities by themselves regardless of age (Driandra and Kinoshita 2011; Fyhri and Hjorthol 2009; Rudner 2012; Simpson 1997).

The influence of physical geography and climate on children's and young people's mobility can be interrogated as to how, why and when people use space as they do, and their perceptions of safety in relation to daylight and darkness. There is value in questioning the higher proportion of Finnish than Japanese students from both age groups were allowed to "be outside after dark". Very few Australian

students are allowed out after dark (Hillman et al. 1990; Malone and Rudner 2011; Valentine 2004). The difference between countries is likely due to the specific climate character of Finland in that it gets dark very early in winter.

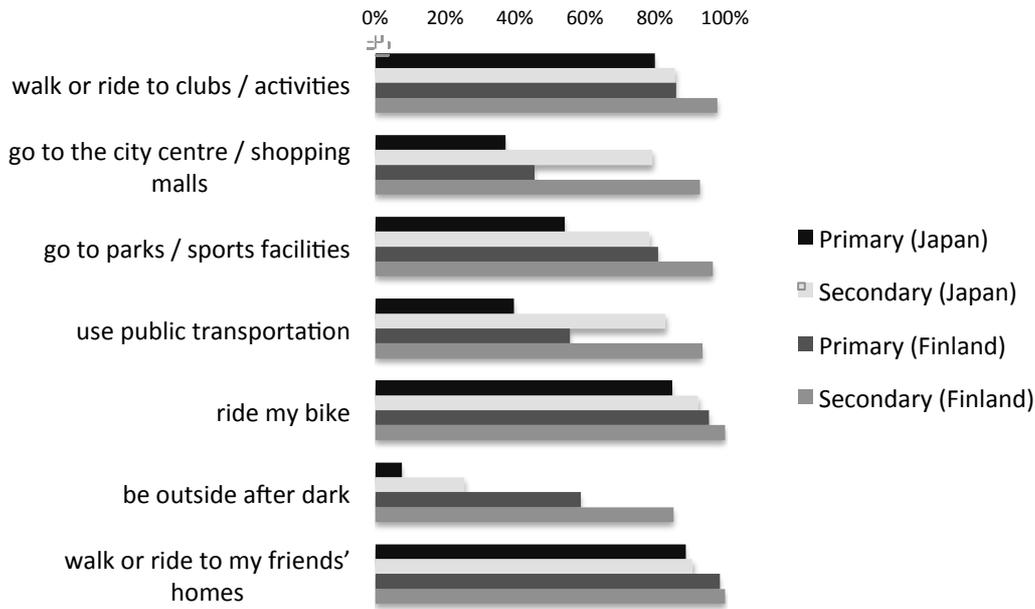


Figure 3 Mobilities children are allowed by their parents

Results presented in Figure 9 offer an opportunity to question the motivations for children’s and young people’s use of public space, such as desires to socialise, engage in activities, and concern about dangers. In addition, the effect of parental permission and public reaction to children and young people in public space can be queried (Rudner and Malone 2011). Factors affecting children and young people’s decisions to use public space and how they are received in public space provides opportunities to highlight urban theory in relation to participation, social inclusion, mental health, and the types of policies and programs developed to improve people’s wellbeing.

In the questionnaire, students were asked to mark places they liked and did not like on the Google Map© and identify the reasons for their decision; results are presented in Figure 4. On average, participants marked from 3.2 to 3.7 points in total and there was little difference between Finland and Japan. Both in Finland and Japan, older children marked more places than younger children. They marked more ‘good’ places than ‘bad’ places for feelings. Finnish children are more interested in places related to social atmosphere than Japanese children.

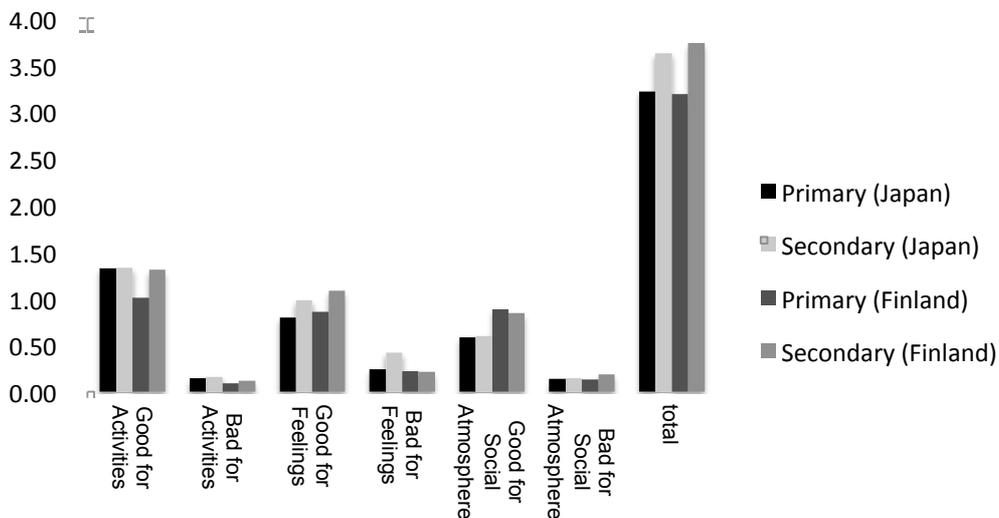


Figure 4 Number of marked places per a respondent

Student feedback about the questionnaire

Primary school students did not think the questionnaire was long compared with secondary school students, as presented in Figure 5. In Australia, some students completed the questionnaire quickly, while others were rushed to completion due to the length of time taken to identify their travel route to school. Researcher observations indicate this kind of survey may be recognized as a fun activity.

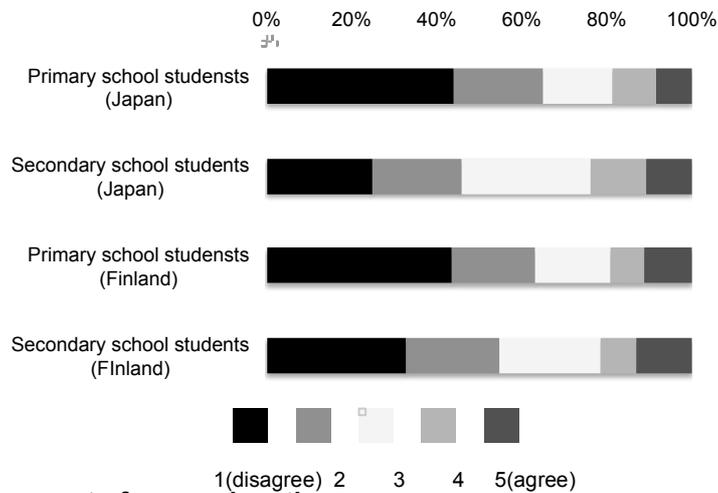


Figure 5 Student assessment of survey length

While students were likely influenced by the researchers, in the questionnaire, more Japanese than Finnish students answered that it is important to be asked their views about their environment, as the results in Figure 6 show. In Finland and Japan, primary school students had a greater tendency to note that it is important to be asked about their environment than secondary students. The reason for this is not clear, but it may be that discussion about urban planning or the regional environment was comparatively new for Japanese students or younger students, or older students may be more critical of the authenticity of the research experience, value of their contribution, or likelihood their contribution will effect change.

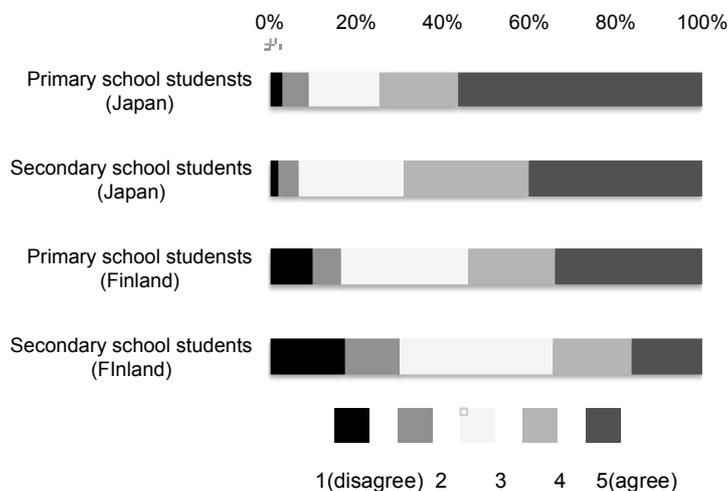


Figure 6 Student assessment about being asked their views about their environment

More Japanese students than Finnish participants, regardless of their age, thought reading the map was hard as shown in Figure 7. In Finland, orienteering is part of the school curriculum, which is likely to have facilitated map-reading. Students in Australia also found map reading was difficult as many did not pay attention to the landmarks, street names or route along which they were driven or bused to school; in addition, the amount of bushland surrounding the city makes it more difficult to identify roads and intersections. Some students were embarrassed by their lack of knowledge. Map reading ability is likely due the age of participants, map reading training, and the level density of information on the map.

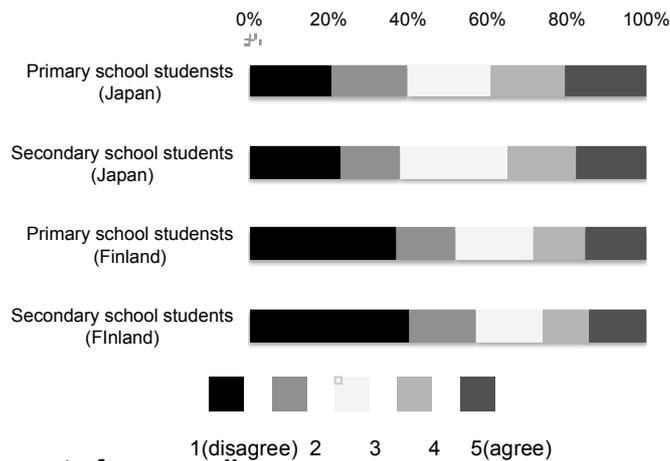


Figure 7 Student assessment of map reading

Difficulties with map reading may have affected students' level of nervousness when completing the survey. Results presented in Figure 8, indicate more Japanese children felt nervous than Finnish students. Researcher observation indicates that Australian students were not nervous during the exercise, however this will be confirmed once the data collection process is completed. Japanese students are not used to using computers in school curriculum, while Finnish and Australian students often use computers in the classroom.

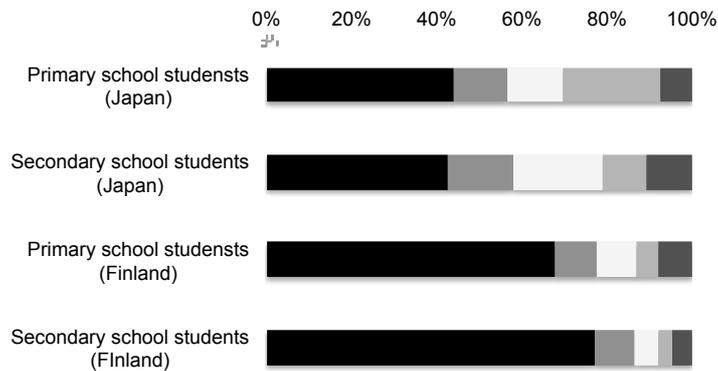


Figure 8 Student assessment of nervousness

The ease of using the Soft-GIS method and technology was also assessed by students. Researchers found Soft-GIS is usable even if participants are children, but adult support is required. Summarised in Figure 6, the results show for more than half of the students, marking a place on the map was easy (answered 4 or 5), except for Japanese primary students. In Australia, many students found it difficult to use the Soft-GIS method and/or needed time to adapt to maneuvering the Google Earth© screen. This was particularly true for students who travelled long distances from nearby towns or attended private schools on the other side of the city from their homes. This was due to the intersection of difference technological competencies, need for varying mapping scales and limited data from the aerial photos.

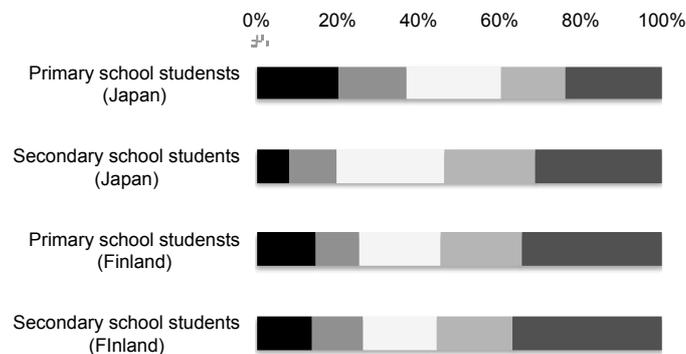


Figure 14 Student assessment of marking places

Discussion

Similar to observations elucidated in the participatory planning literature about adult abilities to contribute to planning processes, children and young people cannot be expected to contribute without some sort of training or knowledge and skills transfer. Studies such as the one presented here, help increase children and young people's knowledge and skills that help them examine their environment differently. In addition, students were introduced to emerging participatory planning methods that are likely to become more commonplace in future. By assisting students with map reading and negotiating the soft-GIS technology to actively engage in the study, researchers have provided a valuable experience upon which students can build in terms of technical and conceptual knowledge.

Through the research process, students were introduced to elements of radical democracy. This occurred by consciously inviting students to critically discuss children and young people's citizenship, development of urban spaces and places, and how children and young people can contribute to planning and urban design processes and outcomes. In particular, students learned about the importance of marginalized groups (children and young people) having and acting on their political agency. They also learned about the actions being undertaken by researchers and practitioners to change planning and urban design processes and outcomes to better reflect the views, experience and aspirations of children and young people.

The data obtained from students provides further avenues for discussion in future about the links between civics, citizenship, and planning research on a local and international scale. Active research in civics and citizenship education provides the opportunity for self and cross-cultural reflection on matters immediate to children's and young peoples' lives rather than distant case studies. Through classroom activities, they can discover how history, regulation and other socio-cultural factors affect children's and young people's relationships with their environments.

The claims made here are not romanticising the research project or the extent of influence. The authors are fully cognisant that this is just one small learning event in the lives of the students who participated. To be effective, reinforcing discussion, activities, and opportunities to participate in planning and urban design processes need to take place. However, if students are exposed to many similar or representative events over time, they will gain valuable cumulative knowledge, skills and experience. As noted above, by Hart (2002: 5), the ability to be active citizens is not going to suddenly occur, "competence to participate can only be acquired gradually through practice".

Researchers, teachers and professionals have a role in supporting and reinforcing student learning about civics and citizenship in relation to planning and urban design processes. Primarily, they can provide many experiences for children and young people to participate in planning and urban design processes. It is important for adults to increase their knowledge and skills in relation to working with, and advocating on behalf of children and young people about planning and urban design projects. Researchers can play a pivotal role in this agenda as conducting studies in schools contributes to researcher, teacher and practitioner ability to ground civics and citizenship education in everyday life in a way that children and young people can directly experience and observe. In addition, adult understandings of children's and young people's relationship to their environment can contribute to better educational, planning and urban design outcomes.

In the longer term, exposure creates future participation and educational pathways that may not have been previously considered (Prezza et al. 2001; Rudner 2012; Valentine 2004). It may inspire a student to contribute to decisions that affect their cities in future, or perhaps even study planning or urban design. The latter is important for educational outcomes and for the planning profession. Ultimately, an integral part of school, the curriculum, civics and citizenship is about providing knowledge, skills and exposure for further studies and careers. Conversely, children and young people want jobs in their future (Robertson 2008; Santo et al. 2010; Wheeler 2010). Research from the UK indicates that children and young people have often determined their educational intentions by 11 years old, which is predictive of their intentions at 16 years old (Robertson 2008; Santo et al. 2010; Wheeler 2010). That is, primary school students have already decided whether they intend to go to university or not. One of the most important reasons for children and young people deciding to go to university is the desire for a future job. While architecture and design was selected as a well-known profession, planning was not on the list provided for participants to select, nor was it voluntarily provided (Croll and Moses, 2005 in Croll et al. 2008: 16).

Conclusion

Since planning and urban design is an applied research field, researchers are well placed to introduce planning education through research projects at primary and secondary schools. Planning education provides a relevant and important focus for civics and citizenship curricula. Participation in the research not only facilitates discussion about planning and its relationship to civics and citizenship, but the act of

participating is an experiential form of planning education. Researchers who work with children and young people in planning-related research can provide an extended knowledge base and relevancy to school curriculums. Furthermore, researchers visiting a classroom to conduct planning studies introduce and reinforce the value of children's views, experiences and aspirations in planning processes now, and for the future. Researchers not only facilitate data collection that can be used for planning purposes, they also act as advocates for children and young people and support the legitimacy of children and young people's civic participation when presenting their results to the planning decision-makers, or publishing results in reports, professional and academic journals.

Acknowledgements

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References

- Alderson, Priscilla. 2000. "Children as researchers: The effects of participation rights on research methodology." In *Research with children: Perspectives and practices*, eds. Christensen P and A James.
- Arnstein, Sherry. 1969. "A ladder of citizen participation." *Journal of the American Institute of Planners* 35(4):216-224.
- Black, Rosalyn, Helen Stokes, Malcolm Turnbull, J. and Josh Levy. 2009. "Civic participation through the curriculum." *Youth Studies Australia* 28(3):13-20.
- Burke, Catherine. 2005. "'Play in focus': children researching their own spaces and places for play." *Children, Youth and Environments* 15(1):27-53.
- Chawla, Louise. 2002. *Growing up in an urbanising world*. London: Earthscan.
- Children's Research Reference Team and Adult Research Team. 2011. "Dapto dreaming: A child friendly report about Dapto." Dapto: Brooks Reach Horsley, University of Wollongong, Stockland.
- Cosmo, Howard and Steve Patten. 2006. "Valuing civics: Political commitment and the new citizenship education in Australia." *Canadian Journal of Education* 29(2):454-475.
- Croll, Paul, Gaynor Attwood and C Fuller. 2008. "Children's perspectives on the value of education: a study of early orientations to school: Full research report." Swindon: Economic and Social Research Council.
- Driandra, Riela Provi and Isami Kinoshita. 2011. "Danger from traffic to fear of monkeys: Children's independent mobility in four diverse sites in Japan." *Global Studies of Childhood* 1(3):224-240.
- Driskell, David. 2002. "Young people's participation." In *Creating better cities with children and youth: A manual for participation*. London: Earthscan.
- Forester, J. 1999. *The deliberative practitioner: Encouraging participatory planning processes*. Massachusetts: MIT Press.
- Frank, Kathryn I. 2006. "The potential of youth participation in planning." *Journal of Planning Literature* 20(4):351-371.
- Freeman, Claire. 2006. "Colliding worlds: Planning with children and young people for better cities." In *Creating child friendly Cities: Reinstating kids in the city*, eds. Brendan Gleeson and Neil Sipe. Oxon: Routledge.
- Fyhri, A and R Hjorthol. 2009. "Children's independent mobility to school, friends and leisure activities." *Journal of Transport Geography* 17(5):377-384.
- Halstead, J. Mark and Mark A Pike. 2006. *Citizenship and moral education: Values in action*. London and New York: Routledge.
- Hart, Roger. 1992. "Children's participation: From tokenism to citizenship." Italy: United Nations Children's Fund; UNICEF International Child Development Centre.

- Hart, Roger. 1997. *Children's participation: The theory and practice of involving young citizens in community development and environmental care*. London: UNICEF, Earthscan.
- Healey, Patsy. 1997. *Collaborative planning: Shaping places in fragmented societies*. London: MacMillan Press Ltd.
- Healy, Patsy. 1997. "Everyday life and local environments." In *Collaborative Planning: shaping places in fragmented societies*. London: MacMillan Press.
- Hillman, Mayer, John Adams and John Whitelegg. 1990. *One false move...A study of children's independent mobility*. London: Policy Studies Institute.
- International Secretariat for Child Friendly Cities. 2004. "Building Child Friendly Cities: A framework for action." Florence: Innocenti Research Centre.
- Kyttä, Marketta. 2004. "The extent of children's independent mobility and the number of actualized affordances as criteria for child-friendly environments." *Journal of Environmental Psychology* 24(2):179-198.
- Kyttä, Marketta, Anna Broberg and Maarit H. Kahila. 2010. "Place-based study of child-friendly, health promotive environment." In *Children's Health and the Environment*. London, Ontario: University of Western Ontario.
- Kyttä, Marketta, Anna Broberg and Maarit H. Kahila. 2012. "Urban environment and children's active lifestyle: SoftGIS revealing children's behavioural patterns and meaningful places." *American Journal of Health Promotion* 26(5):e137-e148.
- Lynch, Kevin. 1977. *Growing up in cities: Studies of spatial environment of adolescence in Cracow, Melbourne, Mexico City, Salta, Toluca, and Warszawa*. Paris: UNESCO, Massachusetts Institute of Technology.
- Mallan, Kerry, Marcus Foth, Ruth Greenaway and Greg Young, T. 2010. "Serious playground: Using Second Life to engage high school students in urban planning." *Learning, Media and Technology* 35(2):203-225.
- Malone, Karen. 1999. "Growing Up in Cities as a model of participatory planning and 'place-making' with young people." *Youth Studies Australia* 18(2):17-33.
- Malone, Karen and Julie Rudner. 2011. "Global perspectives on children's independent mobility: A socio-cultural comparison and theoretical discussion on children's lives in four countries in Asia and Africa. ." *Global Studies of Childhood*:241-257.
- Prezza, Miretta, Stefania Pilloni, Carmela Morabito, Cinzia Sersante, Francesca Romana Aparone and Maria Vittoria Guilliani. 2001. "The influence of psychosocial and environmental factors on children's independent mobility and relationship to peer frequentation." *Journal of Community & Applied Social Psychology* 11:435-450.
- Robertson, Margaret. 2008. "Geography breathes again! Can pragmatism energise the discipline?" *Geographical Education* 21.
- Rudner, Julie. 2012. "Public knowing of risk and children's independent mobility." *Progress in Planning* 78(1):1-53.
- Rudner, Julie, M. Kennedy, W. Holland, J. Wilks, J. Donovan, M. Shaw, Deanna Neville, T. Budge and A. Butt. 2012. *The place of our children in community building: Turning theory into practice. Children's and young people's engagement report*. Bendigo: City of Greater Bendigo, La Trobe University, Southern Cross University.
- Rudner, Julie and Karen Malone. 2011. "Childhood in the suburbs and the Australian dream: How has it impacted children's independent mobility?" *Global Studies of Childhood* 1(3):205-223.
- Sandercock, Leonie. 1977. *Cities for sale*. Carlton: Melbourne University Press.
- Santo, Charles A, Nathan Ferguson and Andrew Tripple. 2010. "Engaging urban youth through technology: The Youth Neighborhood Mapping Initiative." *Journal of Planning Education and Research* 30(1):52-65.
- Sarkissian, Wendy, Angela Hirst and Beauford Stenberg. 2003. "Reconceptualising community participation." In *Community participation in practice: New directions*. Perth: Murdoch University Institute for Sustainability and Technology Policy.
- Scheerens, Japp. 2011. "Indicators on informal learning for active citizenship at school." *Education Assessment Evaluation Accountability* 23:201-222.
- Sieber, Renee. 2006. "Public participation geographic information systems: A literature review and framework." *Annals of the Association of American Geographers* 96(3):491-507.

Simpson, Brian. 1997. "Towards the participation of children and young people in urban planning and design." *Urban Studies* 34(5-6):907-925.

United Nations. 1989. "Convention on the Rights of the Child." UN General Assembly.

Valentine, Gill. 2004. *Public space and the culture of childhood*. Aldershot: Ashgate Publishing Limited.

Wheeler, Andrea. 2010. "Children's participation in education projects and sustainable design - comparing the UK and Nicaraguan contexts: An interview with Harry Shier, 17th January 2009." *International journal of Children's Rights* 18:457-474.

Wood, Phil. 2009. "Locating place in school geography - experiences from the pilot GCSE." *International Research in Geographical and Environmental Education* 18(1):5-18.

A comparison of the motivations, rhetoric and controversy surrounding recent planning reforms in New South Wales, Australia and Ontario, Canada

Laura Schatz & Awais Piracha

University of Western Sydney

Abstract

In recent years, there has been a shift in the way that land use planning systems – and particularly the power structures that shape them – are organized. Both in Australia and internationally, planning legislation (which in most jurisdictions governs both plan making and development assessment) has been a target for reform as governments seek to achieve “efficiency” and “streamlining,” more often than not in the name of facilitating economic development. Particularly in New South Wales, the existing planning legislation is demonized as “the problem” and the reforms are presented as “the solution.” In this paper, we seek to compare and contrast recent planning legislation reforms in New South Wales, Australia and Ontario, Canada. In both jurisdictions, planning legislation has been the subject of successive rounds of reform, with the pace of reform increasing since the turn of the century. After discussing the historic context of how planning is perceived generally in New South Wales and Ontario, we unpack the nature of recent key planning legislation reforms in both jurisdictions. We then explore the similarities and differences in the motivations, rhetoric and controversy surrounding these reforms. We conclude with a discussion of lessons that can be learnt: a fitting pursuit at a time when the planning system in NSW is being overhauled and the state government is claiming it wishes to learn from international planning policy and practice.

Keywords: *planning reforms; planning legislation; international comparison*

Introduction

In recent years, there has been a shift in the way that land use planning systems – and particularly the power structures that shape them – are organized. Planning legislation – that is, the legal rules which, in general, govern the two key planning activities: land-use plan creation and development assessment – in many countries has been the target of successive rounds of reforms. Indeed, urban planning in New South Wales has acquired rock star status. It is constantly in news, it is very controversial and it is alleged it misbehaves, causing a significant amount of harm and public mayhem particularly by being a “barrier” to economic growth. It has been in and out of rehabilitation often in attempts to make it more “efficient” and “streamlined.”

At the time of writing of these words, this public spectre was continuing. Those in positions of power have for over a decade believed reforming urban planning will elevate the state’s spirits and alleviate all the malice with which it ails. The conviction of the decision-makers forces them to constantly tinker with the planning system. When planning system fails to perform according to their desires, politicians become more desperate and more frantic in their fiddling. Although not with the same level of urgency or highly charged rhetoric, officials in the provincial government of Ontario in Canada an administrative entity not very different from New South Wales, have over the years similarly tinkered with the planning system in an effort to cure the ills of the province. This paper is an attempt to explore the intriguing phenomenon of the vilification of, and constant efforts to “improve,” the planning system.

In particular, in this paper we seek to compare and contrast recent planning legislation reforms in New South Wales, Australia and Ontario, Canada. After discussing key historic planning reform exercises in New South Wales and Ontario, we unpack the nature of recent key planning legislation reforms in both jurisdictions. We then explore the similarities and differences in the motivations, rhetoric and controversy surrounding these reforms. We conclude with a discussion of issues for further consideration: a fitting pursuit at a time when the planning system in New South Wales is being overhauled and the state government is claiming it wishes to learn from international planning policy and practice.

AN OVERVIEW OF THE PLANNING SYSTEM IN EACH JURISDICTION

NEW SOUTH WALES

Modern urban planning in New South Wales has its origins in the legislative changes introduced in 1945 to the *Local Government Act 1919* (Park 2010). Many years later, and after a few years of deliberation, the *Environmental Planning and Assessment Act* (EPAA Act) – an Act devoted to planning – was introduced in 1979. In the early 1970s, it was generally felt that the planning system in New South Wales was overly

complex and was failing to ensure protection of the natural environment. This interestingly has been a continuous theme ever since. As a consequence, in 1974, the *Planning and Environment Commission Act* was introduced. The resulting Commission produced a report that formed the basis of the *Environmental Planning and Assessment Act (EPAA), 1979* (Pearson, 1994). The 1979 Act afforded greater importance to ecological considerations in land use planning, to public participation in the planning process, and to coordinating planning and development by public and private interests (Hort and Mobbs 1979).

The EPAA introduced a three-tiered system of Environmental Planning Instruments (EPIs) for strategic planning. The three tiers of the system were Local Environmental Plans (LEPs), Regional Environmental Plans (REPs) and State Environmental Planning Policies (SEPPs). The Act devolved matters of local planning to the local councils. The State Government was made responsible for planning issues of state and regional significance. Overall the EPAA was a significant move forward in the planning area, receiving accolades from various quarters within the state and outside. The Act and the planning system have, however, gone through a large number of reforms, abandonment of reforms and re-reforms. As Piracha (2010) points out, these reforms, enacted in the name of simplicity and efficiency, have made the system more complex and confusing. A detailed account of those reforms is given in section 3.

ONTARIO

In Canada, power over land-use planning falls to the provinces under sections 92 (10) and 92(13) of the Constitution. These sections grant to the provinces authority to pass legislation in the areas of “local works and undertakings” and “property and civil rights.” In Ontario, the *Planning Act* is the primary legislation that governs land use planning. Most importantly, the Act lays out the respective roles of municipalities and the Province in land use planning. It grants powers to municipalities to create Official Plans – which, similar to LEPs in NSW, set out general planning goals and policies to guide future land use – and zoning by-laws – which set the detailed rules and regulations that control development as it occurs. It also sets out the Province’s role in local land-use planning, which is primarily: (1) to establish “matters of provincial interest” – i.e. a list of areas of provincial concern set out in the Act, such as protecting farmland – to which all decision-makers must “have regard;” (2) to issue “provincial policy statements,” which give detailed direction on matters of provincial interest – for instance in the area of land use patterns, the management of natural resources, and transportation— with which land use decisions “must be consistent;” and (3) to prepare provincial plans, such as the Greenbelt Plan and Growth Plan (explained below), with which land use decisions “must conform.”

The first *Planning Act* was passed in Ontario in 1946 and it has been reformed many times up until the present day. The first substantial reforms to *Planning Act* occurred in 1983 when the Province introduced the provision for provincial policy statements to guide municipal planning. At that time, decision-makers were to “have regard to” this statement. These reforms also introduced the “natural environment” as a provincial interest that warranted protection. In the mid-1990s, under the reign of the left-leaning New Democratic Party, substantial reforms were again made to the *Planning Act*. These amendments closely followed many of the recommendations of the Royal Commission on Planning and Development Reform in Ontario (known as the Sewell Commission after its Chairperson, a former Mayor of Toronto). The amendments gave greater authority to municipalities in day-to-day decision-making because of the sense that “...municipal government in many parts of the province had come of age in terms of its ability to cope with the day to day administration of planning matters and no longer required and, indeed, resented the intrusive supervision of the province on official plan and subdivision matters” (Wood 1995, p.1). At the same time, the amendments also increased the overarching role of provincial policy by requiring that decision-making be “consistent with” provincial policy. However, in 1996, after the election of a particularly right-wing Conservative provincial government, many of the amendments were undone or revised. The Province sought to diminish its role in planning by reverting to the “have regard to” standard and watering down many provincial policies, the majority of which were geared towards increasing environmental sustainability. Until the mid-2000s and the institution of amendments made by the more centrist Liberal government, there was effectively little provincial involvement in planning in Ontario.

RECENT KEY PLANNING LEGISLATION REFORMS

NEW SOUTH WALES

The planning system in New South Wales, in particular the balance between state and local power and between development and the environment, has been constantly tinkered with in the past decade. When Piracha (2010) commented on the 2004/05 and 2007/08 changes, “planning reforms in NSW have gathered pace....they are becoming more urgent and more dramatic,” he was underestimating the pace of reforms to follow. Since that time, a number of new reforms have been introduced and some of the previous reforms have been abolished and then reintroduced.

The first set of amendments to the EPAA 1979 was introduced in the form of 1985 - *Environmental Planning and Assessment (Amendment) Act*. The main provisions of the amendment included:

- Greater ministerial power to determine Development Applications;
- Ministerial powers to direct local councils on development contributions (sec. 94A);
- Ministerial powers to nominate determining authority for Part 5 (infrastructure development) of the EPAA;
- Local councils forbidden to refuse or impose conditions on Crown Das.

In a similar vein, 1993 amendments to the EPAA enhanced the planning minister's role in approvals under Part 5 and excluded local councils from such decisions (Park 2010).

In the EPAA amendment history, the 1997 amendments are a major milestone. In these comprehensive reforms, the concept of state significant developments was introduced. Any developments declared state significant by an Environmental Planning Instrument (EPI) was to be determined by the New South Wales Planning Minister. In the same set of reforms, the concepts of exempt and complying development were introduced. Very small developments were to be exempt from seeking approvals and slightly larger complying developments were to face simpler standards based approval processes. The 1997 reforms also introduced private certifiers (Park 2010). The set of reforms introduced in 1997 formed the basis of the further, more drastic and very controversial reforms in the state that continue to this date.

In 2005 and 2008, huge changes were made to the planning system in NSW. Piracha (2009, p4) has summarized those changes as following:

Table 1. Summary of recent planning reforms in New South Wales

Planning Issue	Reform	Details
ESD	BASIX – building sustainability index	Internet based assessment for sustainability policy compliance
Major Development	Major projects assessment system	Centralization of powers in the hands of the state Planning Minister (and the Planning Department)
	Independent panels	Transfer of review and approval authority from local governments to independent panels
Land Use Planning	Standard Local Environmental Plan (LEP)	Prescription of standard template for strategic planning at local level
	LEP Review Panel	Withdrawal of all delegated powers from local councils
	Gateway review	Fast tracking and increased certainty in rezoning
Development Assessment	Development Control Plans	Minister empowered to direct councils
	Development Contributions	More flexibility and introduction of voluntary mechanisms
	Standard Codes (2007–08)	Dramatic expansion in exempt and complying development
	Private Certification	Privatization of development assessment planning function
DA Technology	Dispute Resolution	Reduced role of Land and Environment Court
	ePlanning	Online submission and tracking of development assessment

Source: Piracha (2009). Community wishes vs. developers' wants: ePlanning as an instrument of the neo-liberal planning reforms in NSW Australia, 11th International Conference on Computers in Urban Planning and Urban Management, HK

In March 2011, the Labor Party lost the New South Wales state election after sixteen years in power. The winning Liberal-National coalition ran their election campaign on the back of resentment for Labour's planning reforms. Of all the Labour reforms, Part 3A – Major Projects was the most controversial. The state Planning Minister had given himself powers to take any project assessment away from a local authority by declaring it a major project. The first act of the new state government after coming into power was to abolish the dreaded Part 3A. The Liberal government then embarked on the much-lauded path of writing the new planning law and designing a new planning system. What has happened since, however, is a convoluted mix of poor consultation processes, frequent reforms to the existing system that will be retained in the new system, developers bypassing the local governments and the Metro Strategy to propose Greenfield land, state government ignoring recommendations of their own appointed consultation team for the new planning system, etc. The following table lists some of the reforms that have been introduced in last year and a half by the NSW newly elected government.

Table 2. Post Labour NSW Planning Reforms 2011-12

Reform Title	Action	Source
<i>Scraping of Part 3A – Major Developments-</i>	No new Part 3A applications for private residential, commercial, retail or coastal development – powers back to communities Part 3A to be repealed from the Statute books permanently	MEDIA RELEASE, Office of Premier of NSW, Monday 4 April 2011
<i>Initiatives to Improve Housing Supply</i>	Changes in the following to make housing development, easier, cheaper and faster. <i>Riparian Corridors</i> <i>Bush Fire Planning</i> <i>Biodiversity</i> <i>Aboriginal Cultural Heritage</i>	Improve Housing Supply Circular –PS12-003 NSW Department of Planning and Infrastructure (D&PI)
<i>Rezoning blitz in push for housing</i>	The state government bypasses councils and rezone sites nominated by developers as suitable for tens of thousands of new houses in a radical attempt to increase home building in Sydney.	Matthew Moore, Sydney Morning Herald (SMH) January 30, 2012
NEW PLANNING LAW (SYSTEM) FOR NSW		
<i>Councils to lose approval rights over developments</i>	Local government councillors not to be involved in assessing individual developments. DAs to be assessed by independent panels	Matthew Moore, SMH, June 28, 2012 Planning Reforms Green Paper July 2012 (D&PI)
<i>Residents to lose objection rights in new Planning Law</i>	Under the new system, communities will decide in advance where and how growth will take place. Once such agreements are reached, developers will be able to get fast-tracked approval to build.	Matthew Moore, SMH, June 27, 2012 Planning Reforms Green Paper July 2012 (D&PI)
<i>Tax plan for new NSW housing</i>	Residential rates on all properties should rise to boost levies and spread the costs of urban development.	Planning Reforms Green Paper (D&PI 2012 b)

The above is not an exhaustive list of planning reforms the current government has introduced. There are many more and they continue to come. It is clear from Table 2 that planning in New South Wales is not taking a cohesive direction. It is hotchpotch and is being driven by the issue of the day. The perceived shortage of land supply for example seems to be driving a number of reforms measures. The planning reforms of the past decade have overwhelmingly preferred development over environment and the state level control over empowering local level.

Ontario

The most significant planning reforms in recent years in Ontario occurred in the mid-2000s under the current Liberal government. Like New South Wales, these reforms have affected the balance between provincial and local power as well as the relative importance afforded to protecting the environment versus facilitating development. Not only was the *Planning Act* substantially amended – first in 2004 with the *Strong Communities (Planning Amendment) Act* and then in 2006 with the *Planning and Conservation Land Statute Law Amendment Act* – but other legislation was introduced to guide land-use planning decision-making in the Greater Golden Horseshoe (GGH) – a densely populated sub-region of Ontario centred around Toronto (Canada's largest city) containing 68% of the province's population. Of particular importance was the creation of the *Greenbelt Act, 2005* and the corresponding Greenbelt Plan and the *Places to Grow Act, 2005* and the corresponding Growth Plan for the Greater Golden Horseshoe, all of which were intended to protect agricultural land and curb sprawl in the GGH.

As stated by the Environmental Commissioner of Ontario (2011a, p.2), “over the past decade, there have been dramatic changes in land use planning in Ontario, due to the shifting balance between provincial and municipal roles in land use decisions, the creation of regionally based land use plans such as the Greenbelt Plan, and the introduction of growth plans to encourage urban intensification.” Key components of the Liberal's reform “package” (called the “Strong Communities Initiative”) affected the power relationship between local municipalities and the provincial government, largely by increasing municipal control over certain land-use planning functions and over the development approvals process and decreasing the power of the independent appeal tribunal – the Ontario Municipal Board – to override municipal decisions. However, the reforms also increased provincial control over matters of provincial concern, including its desire to decrease urban sprawl in the Greater Golden Horseshoe region (Ministry of Municipal Affairs and Housing 2004 and 2007; Niagara Escarpment Commission n.d.; Stikeman Elliott 2007; Longo 2007; Moore 2011).

Reforms to the Planning Act

The amended *Planning Act* became law on January 1, 2007. The following key reforms, including reforms to the power of the OMB, reflect the shift of power from the Province to municipalities in the day-to-day business of planning and development assessment:

- Urban boundaries and changes to employment lands within an urban boundary can now only be modified by a municipality. Whilst previously there were no restrictions on appeals of municipal decisions to refuse conversion of designated employment lands to other uses or decisions regarding urban boundary changes, refusals now cannot be appealed to the OMB, making the municipal decision final.
- Site plan control – the tool through which municipalities approve developer's plans for particular sites – was changed so that now the municipality can impose regulations on aspects of development such as colour, texture, materials and design of buildings. Previously, these were specifically excluded from site plan control. Essentially, municipalities can now control external building design details where they could not before, thereby increasing their power to create land-use planning policies that meet their unique requirements.
- Municipalities were given the power to pass zoning by-laws with conditions, a power which did not previously exist. For example, municipalities can now set conditions related to energy efficiency or brownfields clean-up prior to approving a zoning application.
- Municipalities were given more time to review planning applications before they could be appealed to the OMB.
- Approval authorities and OMB must now explicitly “have regard for” municipal decisions. This was not an explicit requirement before, meaning that the OMB was not required to take into account the decision of municipal council on appeals.
- The OMB now will generally hear appeals based on the application that was presented to municipal council. If new information is determined to be significant, the OMB may send it back to the council for consideration. Previously, there was no restriction on the information that could be presented to the OMB.

On the other hand, amendments were also introduced which granted to the Province more “overarching” power in terms of using provincial plans and policies to guide land-use development in the province. In particular:

- It is now mandatory that all planning matters “conform to” Provincial Plans and Policies, “are consistent with” provincial policy statements; and “have regard to” matters of provincial interest.

- Municipalities are now given directions in the *Planning Act* as to the types of matters that must be addressed in official plans. They must also now update their official plans every five years to ensure conformity to provincial plans and consistency with provincial policy. Zoning by-laws must now be updated within 3 years of revising an official plan. There was no formal requirement to update prior to these amendments.
- The Minister is now able to advise the Ontario Municipal Board if a proposed official plan, zoning by-law or related amendment will, or are likely to, adversely affect matters of provincial interest. If that is the case, Provincial Cabinet will finally determine the issue, over-riding the OMB decision if necessary. Previously, the OMB decision was final.
- Section 2 (Matters of Provincial Interest) was revised to add a new provincial interest that identified authorities shall have regard to sustainable, transit-supportive and pedestrian-oriented development.

Another key set of amendments also affected the role of the public in planning decision-making. Whilst increasing opportunities to participate at the “front-end” of planning decision-making in the consultation phase, appeal rights to the OMB were severely restricted. The effect is to encourage resolution of issues sooner rather than later. For instance:

- On the “front end,” municipalities now have to hold an open house in addition to and prior to holding the required public meeting for most planning applications (e.g. particularly official plan amendment applications and zoning by-law changes). The open house must occur at least 7 days prior to the public meeting in order to allow public opportunity to review and ask questions about the information and material filed by the applicant. Open Houses were not a requirement previously.
- In terms of appeals, to have standing before the OMB, one must have made oral or written submissions to council on the matter. Previously, there was no restriction on parties and information/material at OMB hearings for appeals of planning decisions. To balance this, the OMB can allow new parties if there are reasonable grounds.

Thus, the suite of recent reforms to the *Planning Act* have, similar to the reforms of the mid-1990s, increased the role of the municipality in terms of the day-to-day task of planning, whilst increasing the role of provincial policy in shaping the nature of development in the province. Alongside these changes, the role of the public has increased at the “front-end” of strategic planning and development assessment and appeal rights to the Ontario Municipal Board have been severely limited.

Introduction of new legislation

In addition to these amendments to the *Planning Act*, and as part of the Strong Communities Initiative, the Province introduced new legislation in 2005 in an effort to affect land use patterns in southern Ontario, more particularly the GGH region. In response to the growing population in this area and perception that this growth was destroying large amounts of Southern Ontario’s natural areas and agricultural land, the *Greenbelt Act, 2005* provided the authority (carried out in the accompanying Greenbelt Plan) to establish a greenbelt of agricultural and environmentally sensitive land surrounding the GGH. According to this Act, all decisions relating to the Greenbelt (including those made under the *Planning Act* by municipal councils, provincial Ministers, or the OMB) must conform to the Greenbelt Plan, which essentially prohibits development in designated Specialty Crop Areas, Prime Agricultural Lands, and Rural Lands – together termed the Protected Countryside – within the Greenbelt. In particular, residential lot severances in these areas are strictly controlled and the expansion of settlement areas into the Protected Countryside is prohibited. Where there is a conflict with an Official Plan, Zoning By-Law, or the Provincial Policy Statement, the Greenbelt Plan prevails. Affected municipalities were required to bring their Official Plans in conformity with the Greenbelt Plan (Ministry of Municipal Affairs and Housing 2010; Environmental Commissioner of Ontario 2011a).

Complementing legislation outlining where growth could not happen, the Province introduced in 2005 the *Places to Grow Act, 2005* which provides the authority to create a Growth Plan to direct the projected exponential increase in population in the GGH. According to the Environmental Commissioner of Ontario (2011a, p.27), through detailing density targets and planning priorities for managing growth in the region, “the [*Places to Grow*] Act and the GGH [Growth] Plan were seen as critical to the success of the *Greenbelt Act* and Greenbelt Plan. The goal of preserving outlying natural, rural, and agricultural lands is inextricably linked to the need to formulate and implement plans to direct, control and transform the nature of urban growth in southern Ontario.” More specifically, the Growth Plan for the GGH (GGH Plan) directs growth to built up areas through the establishment of urban growth centres and intensification corridors, establishes an intensification target of 40% of all residential development occurring within built-up areas, and makes public transit the first priority for transportation infrastructure planning and major transportation investments

(Ministry of Infrastructure 2012; Environmental Commissioner of Ontario 2011a). Like the Greenbelt Plan, all land-use decisions in municipalities affected by the GGH Plan must conform to the Plan and where there is conflict with an Official Plan, Zoning By-Law or the Provincial Policy Statement, the GGH Plan prevails. In adopting the standard of “conformity,” the Province ensured that, in the GGH region, its policies prevail over local policies, thus taking a leadership role in directing growth and protecting agricultural land and natural areas in this region.

A COMPARISON OF MOTIVATIONS, RHETORIC, AND CONTROVERSY SURROUNDING PLANNING REFORMS

New South Wales

New South Wales planning reforms have been made under various guises. Under the neoliberal umbrella theme, flags of being (economically) left behind, interests of mom and dad developers, efficiency and speed have been raised. Discursive democracy has been another theme used to justify the reforms. The state planning ministers and apparatus by waving the magical wand seems to know what people want from planning (former Planning Minister Frank Sartor on numerous occasions justified planning reforms on the grounds of mom and dad developers). Developers’ lobbying and the state’s desire to centrally control planning have also been motivations for this reforms process. An intriguing aspect of the latest planning reforms of the coalition government is its insistence on new housing development to take place on the metro’s fringe. The state is averse to in-fill development in existing suburbs closer to the city centre. The affluent closer to city communities are ardent followers of NIMBYISM and are opposed to any new developments in their areas (overturning of the Ku Ring Gai Local Environmental Plan on minor technical grounds is the case in point. In New South Wales, people’s planning (for their future which has implications for the natural and built environment) and the state’s planning are headed in opposite directions. Let us ask ourselves this question, do planning policy tweaks matter? Or is it that societal norms are greater determinants of the shape of the natural and built environment? Perhaps law-making in planning should be informed by the socioeconomic and cultural directions of society. Peoples planning for their futures and the challenges it will throw at the planning system have to be understood. Asking them directly about planning elicits blank faces and confused responses. When people are invited to the consultative meetings on planning matters, only those with vested interests turn up. The planning legislation consultation meeting the authors went to was poorly attended. Those who attended were lobbyists either for developers or for green groups.

Indeed, many of the 2000 people consulted by the authors of the NSW planning reforms issue paper (released December 2011) were lobbying for one extreme view or the other (build anything anywhere and do not building anything). This transpired because those consulted were not randomly selected. Also no specific questions were asked from the consulted. In the consultative meetings, people were free to comment on any aspect of planning. The contents of the issues paper clearly demonstrate that people ended up responding to the elements of the current planning system such as which project should go to JRPP (Joint Regional Planning Panel), what should be the PAC (Planning and Assessment Commission) mandate and so on. JRPP and PAC are regional and state level independent and professional development assessment bodies. Pursuing this path for drafting of the new legislation can lead to the same as what we have now. That would be a shame because it would mean losing a historic opportunity to come up with a planning law powered with new thinking, avoiding the complexity of the past and meeting the challenges of the future.

While the society and lifestyles are rapidly evolving, the issues paper stresses consensus on the status quo. The paper repeats and reiterates what is in current legislation and what has been the rhetoric in planning circles. The paper seems to argue having a planning law in simpler language is one of the main issues. The paper also summarizes the two extreme views (one pro development and other environmental protectionist) and hints at difficulty of reconciling the two. The worry is, the paper will lead us to a system similar to what we currently have.

Also of concern to us are the profound changes to the planning arrangements being made while the new planning system is being discussed. Land release for residential development on recommendation of developers is the case in point. In this particular case, the government seems to be overly concerned about the greenfield housing starts on the fringe. This government needs to be mindful of the fact that it has come to power with a promise of empowering the local communities. This state government initiative gives the impression of by-passing the local governments and communities. We worry about development at the fringe for which there is no demand, expanding the motorways when people are losing interest in cars, and increasing the retail space when people are shopping online. The state planning policies may end up diametrically opposite to socio-cultural trends. The society has moved on. The planning system seems to be stuck in the past, vicious cycles and in the vested interests.

Ontario

Upon reviewing government documents and approximately 100 newspaper articles dealing with the “Ontario *Planning Act*” from the late 1980s to present, it is obvious that like New South Wales, rhetoric is ever-present in the area of land-use planning in Ontario. Also like New South Wales, the rhetoric changes with the reigning political party’s motivation for amending the planning legislation. However, unlike New South Wales, the rhetoric – with the exception of the right-wing Conservative government of the mid-1990s – has not been strongly “pro-development,” instead leaning, in many instances, towards characterizing developers as “out of control” and in need of regulation in the name of “good planning” and environmental protection. For instance, in the early-1990s, the New Democratic Party, amidst a deep recession in Ontario but also amidst concerns that the City of Greater Toronto was sprawling into prime agricultural land, undertook to change the *Planning Act* in order to shift the emphasis towards giving municipalities more authority in day-to-day planning matters while introducing strong provincial oversight (by requiring local decision-makers by “consistent with” provincial policy) aimed at protecting the environment. While the desire to “cut red tape” and “streamlining” was mentioned by government officials, the focus was on protecting and conserving the natural environment, prompting some to characterize the amendments as adopting a “...very negative attitude towards developers” (Canadian Press 1992, p.A8). The government, on the other hand, characterized the amendments as striking a balance between development and environmental protection, in particular the protection of prime agricultural land. Streamlining the approvals process was seen by many as a way of “appeasing” developers and by the government as a way of encouraging, in the words of the Municipal Affairs Minister of the time, “good development to take place a lot faster” (Crone 1994, p.A9).

When the Conservative Party took power in the mid-1990s, when the economy was just starting to come out of recession, the rhetoric shifted to the need to facilitate development and the need for the province to remove itself from local land-use decision-making, particularly in the area of environmental protection. Upon election, the Conservative government promised to speed up the development process and “correct costly red tape” that had grown over the years (Platiel 1995, p.A7). This led to the Conservative government quickly re-writing the *Planning Act*, eliminating many amendments introduced by the New Democratic Party barely a year earlier and watering down provincial environmental regulations and the province’s role in making and enforcing these regulations. Conservative government officials asserted that they were removing red tape in order to expedite the planning process because the previous government’s reforms were “killing development and jobs” (Brennan 1995, p.A11). In other words, the *Planning Act* stood in the way of development and economic growth.

The current Liberal government has swung the pendulum back towards provincial oversight of local development, largely in order to curb urban sprawl and limit environmental damage. When the Liberal government was elected in the wake of a booming economy, there was a sense that Conservative amendments to the *Act* were allowing development to get “out of control.” In particular, public outcry from proposed development in the environmentally-sensitive Oak Ridges Moraine area prompted the newly-elected Liberal government to take more of a leadership role in protecting the environment. According to the Ministry of Municipal Affairs and Housing (the provincial ministry which administers the *Planning Act*) (2007, p.1), the planning system was updated because

improved land use management contributes to the social, economic and environmental well-being of Ontario’s communities. To meet these goals, municipalities are being given the tools they need to influence and reshape our communities so they can develop in compact, integrated and more sustainable ways. Updating the planning system is necessary in order to meet challenges faced by this province’s changing and maturing communities, including:

- Managing growth and addressing the consequences of sprawl.
- Preserving valuable green space and natural resources.
- Promoting development where services and infrastructure are already available.

More specifically, the MMAH articulated in 2004 that the province faced a number of pressures that needed to be addressed through the planning system, including:

- Increasing gridlock as a result of urban sprawl;
- Unprecedented growth pressures in some parts of Ontario, such as the Golden Horseshoe region;
- Loss of prime agricultural land and other resources;
- The need for enhanced environmental protection; and
- The need for a strong economy.

Thus, the motivation for the recent set of *Planning Act* amendments (and the addition of the *Greenbelt Act* and *Places to Grow Act*) seems to have been placing more limits on development in order to curb sprawl and the loss of prime agricultural land. Indeed, in comparison to New South Wales, many of the recent reforms

have likely resulted in development assessment taking *longer* because of increased time to consider applications and the addition of issues that municipalities can require developers to include in applications. For instance, while previously municipalities had 90 days to consider applications before developers could appeal for a decision from the OMB, they now have 180 days. Also, according to Longo (2007, p.2), the added authority of municipalities to consider a structure's exterior in site plan control means that "...this may result in a slower processing of development applications as this added area of inquiry may be pursued by municipalities."

In comparison to New South Wales and its strong "pro-development" rhetoric, focus has clearly shifted back in Ontario towards controlling what developers can do in the name of curbing urban sprawl. The *Planning Act* has certainly not been as vilified as the *Environmental Planning and Assessment Act* in New South Wales: despite the Greater Toronto Area being one of the fastest growing metropolitan areas in North America, the land-use planning system has not been characterized by the current government as a "barrier" to development which must be knocked down. If anything, there is a strong undercurrent in Ontario in statements by government officials, by interest groups, and by the media that developers have had it "too easy" and they need to be controlled by a strong "provincial vision" of where and how growth should occur – a vision based on environmental sustainability.

This is not to say that there has not been controversy in the area of land use planning in Ontario. However, planning legislation reform in Ontario is much less the target of criticism and even attention – finding information on planning reforms in Ontario proved much more difficult than finding information on planning reforms in New South Wales – than in New South Wales. Certainly, aspects of the *Planning Act* amendments have been seen as troublesome by certain parties. There has been particular concern about the limiting of appeal rights to the Ontario Municipal Board through the requirement that only those who participated in the consultation phase can appeal to the OMB (Environmental Commissioner of Ontario 2011b; Pembina Institute 2006). This move to "front end" participation in the planning process has been seen as problematic as it may serve to limit the role that the public plays in challenging development approvals that might be environmentally damaging:

This loss of broad appeal rights for local residents is significant and unfortunate. In the past, public interest group appeals on natural heritage and development issues resulted in many important OMB decisions that have protected natural heritage and limited development on agricultural land." (Environmental Commissioner of Ontario 2011a, p.12)

However, rather than the *Planning Act* and its accompanying amendments directly being the focus of controversy, the proper role of the OMB has been more of the subject of debate. Indeed, as Moore (2011, p.1) states, "since the mid 1990s, residents and local politicians have vilified the Ontario Municipal Board" as being "pro-development." In 2007, the provincial government acknowledged that, in the case of the OMB, there is a "...perception that the concerns of ordinary citizens are not dealt with fairly or given the same attention as the interests of developers" (MMAH 2007 p.8). The government also acknowledged that a more general concern with the OMB is that it is undemocratic: "There are those who argue that allowing un-elected OMB members, appointed by the province, to substitute their own land-use planning opinions for those of elected councillors is undemocratic and has the effect of undermining the authority of elected councils" (MMAH 2007 p.9). Interest groups such as the Federation of North Toronto Residents and the Federation of Urban Neighbourhoods have echoed these concerns. In 2012, the Federation of Urban Neighbours stated that despite government reforms to the power of the OMB, a large number of municipal council decisions are being appealed and that the OMB is making decisions that favour developers "...at the expense of other, equally valid, planning concerns" (p.1). Concerns about the pro-development bias of the OMB and its undemocratic nature are also reflected in many of the newspaper articles reviewed for this research. According to Moore (2011, p.20), the proper role of the OMB is a major source of controversy in land-use planning in Ontario. Indeed, he argues that the OMB, in making unpopular decisions, has allowed politician to "...avoid real decision-making; real planning decisions are made mostly by City Planning and the OMB." Perhaps the vilification of the OMB has also served to divert the public's attention from the political issues surrounding planning legislation reform. The same does not appear to be true of the Land and Environment Court – the appellatant body for land-use planning issues in New South Wales.

CONCLUSION: KEY POINTS FOR FURTHER EXPLORATION

Planning reform is both in NSW and Ontario is politically-based. In both jurisdictions, depending on the government in power and economic context, the balance between facilitating development and protecting the environment changes, as does the division of responsibilities between the local and the state levels. We argue that the conceived balance between development and environment is different between NSW and Ontario. Ontario leans more toward environmental protection, while NSW leans more towards facilitating development. These leanings are reflected in policy, political rhetoric, the media, and citizen action.

It can be speculated that the difference between Ontario and NSW reflects different local cultures that are symbolised by the type of planning they have. That is, the focus of planning in Ontario tends towards protecting significant environmental areas and limiting development which the government responds to with a shift in focus even when it is right leaning. In comparison, in NSW the focus is on protecting private property and facilitating development to which the government, both left and right, responds. When the provincial government increases its power in Ontario, it does so in the name of environmental protection. In NSW, the motivation for either increasing or decreasing State power seems to be facilitating development.

Evidently, the urban planning systems in both New South Wales and Ontario have been easy targets for criticism by ruling politicians, resulting in constant processes of “planning reform.” Indeed, changes in ruling parties and economic conditions seem to constantly drive changes to land use-planning legislation. Particularly in New South Wales, planning is popular sports in media and is a “BBQ stopper” in political circles. It is an easy scapegoat and is an “easy to act” area. While also the target of criticisms and reforms, planning is not talked about (and certainly not vilified) to the same extent in Ontario. Rather, criticism is directed towards the seemingly un-democratic Ontario Municipal Board, an easy scapegoat for any ruling party. The roots of the curious phenomenon of planning itself being so controversial in New South Wales are intriguing and worth further exploration.

Also worth of further exploration, especially in New South Wales, is the impact that constant amendments and tinkering are having on the efficacy of long-term planning and on the public perception of the planning system. Constant amendments may be a problem given the trend in planning literature – and in the rhetoric at least of planning practice – towards encouraging policy-makers to develop plans and legislation with a long-term outlook. If planning systems and plans are not allowed to “find their feet,” then how do we know what works and what does not work? We risk having planning systems with foundations in unsound evidence and political conjecture. People will stop participating if they think things will just change with the next political party. Of course, policy change is legitimate when a new government takes office, but that change needs to be based on some kind of sound evidence, rather than the desires of vested interests.

References

Brennan, Richard. (1995, November 17). Environment taking back seat MPP charges: Unbridled development predicted for province. *The Hamilton Spectator*. p.A11.

Canadian Press. (1992, 30 December). Sewell’s plan called tough on developers. *The Toronto Star*, p.A8.

Crone, Greg. (1994, November 12). Bill 163 will smother development, critics say. *The Kitchener Waterloo Record*. P.A9.

Environmental Commissioner of Ontario. (2011a). Land use planning in Ontario: Recommendations of the Environmental Commissioner of Ontario from 2000-2010. Retrieved May 14, 2012 from <http://www.ecoon.ca>

Environmental Commissioner of Ontario. (2011b). Roundtable on land use planning. Retrieved June 1, 2012 from <http://www.eco.on.ca>

Federation of North Toronto Residents’ Associations (FONTRA). (2010). Planning reform: Strategies for 2010 Discussion Paper. Retrieved May 28, 2012 from <http://fontra.com/wp-content/uploads/2012/02/Planning-Reform-2010-2nd-slides.pdf>

Federation of Urban Neighbourhoods. (2012). Queen’s Park Update: Spring 2012. Retrieved May 14, 2012 from <http://www.urbanneighbourhoods.ca>

Hort, L. and Mobbs, M. (1979) Outline of NSW Environmental and Planning Law, Butterworths, Sydney.

Longo, Leo. (2007, February). Aird & Berlis LLP Municipal and Planning Law Bill 51 Update: OMB and Planning Act reforms. Retrieved May 21, 2012 from [http://www.airdberlis.com/templates/Newsletters/newsletterFiles/53/A&B%20municipal%20and%20planning%20law%20newsletter%20\(feb07\).pdf](http://www.airdberlis.com/templates/Newsletters/newsletterFiles/53/A&B%20municipal%20and%20planning%20law%20newsletter%20(feb07).pdf)

McClenaghan, Theresa. (1998). Ten recent trends in land use planning and their impacts. *Intervenor*, 24(4). [Newsletter of the Canadian Environmental Law Association available at www.cela.ca]

Ministry of Infrastructure, Ontario. (2012). Places to Grow initiative. Retrieved June 12, 2012 from <http://www.placestogrow.ca>

Ministry of Municipal Affairs and Housing. (2004). Planning reform: Ontario Municipal Board reform. Toronto, Ontario: Queen’s Printer for Ontario.

Ministry of Municipal Affairs and Housing. (2006). Planning and Conservation Land Statute Law Amendment Act, 2006: Bill 51. Retrieved June 26, 2012 from <http://www.mah.gov.on.ca/Asset234.aspx>

- Ministry of Municipal Affairs and Housing. (2007). *Building Better Communities: Highlights of what's new in the Planning Act*. Toronto, Ontario: Queen's Printer for Ontario.
- Ministry of Municipal Affairs and Housing. (2010). Fact sheet: The Greenbelt. Retrieved June 12, 2012 from <http://www.mah.gov.on.ca/AssetFactory.aspx?did=7275>
- Ministry of Municipal Affairs and Housing Provincial Planning Policy Branch. (2011). *Planning Act Approval Authority in Ontario*. Retrieved May 13, 2012 from <http://www.mah.gov.on.ca/AssetFactory.aspx?did=9081>
- Moore, Aaron A. (2011). Villain or Scapegoat? The Ontario Municipal Board and land use planning in Ontario. Presentation for the Institute of Municipal Finance and Governance. Retrieved June 14 from http://www.munkschool.utoronto.ca/imfg/uploads/177/villain_or_scapegoat_moore_final.pdf
- Niagara Escarpment Commission. (n.d.) Information Report: Ontario's *Planning Act* Reforms, 2006 – Bill 51. Retrieved June 10, 2012 from <http://www.elgar.ca/Ontario's%20New%20Planning%20Act.pdf>
- Park, H. (2010). NSW Planning Framework: History of Reforms, eBrief 10/2010, NSW Parliamentary Library Research Services, Sydney
- Pembina Institute. (2006). Bill 51: Big step forward for Ontario Environmental Planning. Retrieved June 1, 2012 from <http://www.pembina.org/media-release/1180>
- Pearson. L. (1994). *Local Government Law in NSW*, The Federation Press, Leichhardt.
- Piracha, A. (2010). 'The NSW (Australia) Planning Reforms and their Implications for Planning Education and Natural and Built Environment', *Local Economy*, 25: 3, 240-250
- Platiel, Rudy. (1995, August 25). Simplicity sought in law on planning: All parties involved need to adjust their attitudes, municipal official suggests. *The Globe and Mail*, p.A7.
- Stikeman Elliott Municipal and Land Use Law Group. (2007, February). Newsletter: Highlights of Recent Land Use Planning Reforms in Ontario. Retrieved May 13, 2012 from http://www.stikeman.com/en/pdf/Land_Use_Planning_Reforms.pdf
- Wood, D. (1995). *The Planning Act: A sourcebook*. (2nd ed). Toronto, ON: Thomson Carswell.

Facilitating First Year Students' Engagement with Planning Education: Utilising Student Affinity for Technology to Increase Cohort Cohesion and Decrease Attrition

Mellini Sloan, Severine Mayere and Robert Webb

Queensland University of Technology

ABSTRACT

First year students overwhelmingly indicate that a strong interest in a field of study prompts them to enrol in university (McInnis et al 2000), yet over a quarter indicate that they have seriously considered dropping out of studies during their first year, with boredom most frequently cited by those domestic students who do depart before graduation (Coates and Ransom 2011). While it may be comforting to write off such withdrawals to the presumed apathy of youth, student "disquiet (in) their first year on campus may be a result of courses and institutions that do not match their needs and objectives, rather than any uncertainty or lack of purpose on their part" (James et al 1999). Voting with their mouse clicks, the current research investigate two conceptualized types of student participation in online discussion forums to increase understanding of student affinity for technology and its potential for fostering social network development amongst first year students.

INTRODUCTION

Faced with the challenge of engaging ever increasing cohort of increasingly tech savvy students, many of whom, frustratingly, seem to stay the same age as those tasked with overseeing their education grow older – how do we, as educators, stay relevant? Research indicates that students enter university to study fields that they are really interested in – they overwhelmingly indicate that a strong interest in their chosen field of study has prompted them to enrol in university (McInnis et al 2000). First year students, and more particularly high school leavers¹⁸, enter university in a period of great transition. For the most part they leave a highly controlled environment where they are told what shirts, shoes, and socks they may wear five days a week, and enter a world where it is unlikely that their absence from a large lecture theatre will be noticed. In the absence of roll call, academic faculty must rely on students' continued interest in their chosen field of study to prompt them to turn up, much less undertake prescribed readings in advance of doing so. Over a quarter of students seriously contemplate withdrawal from studies in their first year, and although logically students who do so are not around to drop out again in subsequent years, there are stark differences in attrition between commencing and continuing students. Although those domestic students who do drop out before graduating cite boredom with studies as justification (Coates and Ransom 2011), allowing for the easy out of chalking up our losses to the fickle nature of the young, we are perhaps continuing to try to engage today's students under last decades (at best) paradigms.

The current research first looks at patterns of enrolment and attrition in the Queensland University of Technology's (QUT) undergraduate planning program to establish the case for *why* first year student attrition is troubling. The research also looks at how addressing engagement with specific types of students (e.g., school leavers versus non-school leavers, domestic versus international students) can help improving retention. The background section of the paper addresses these patterns and aids in crafting specific need for the literature review that follows. Mixed quantitative and qualitative methods are then used to evaluate active and passive engagement with other students and academic staff towards cohort cohesion and subsequent feelings of belonging.

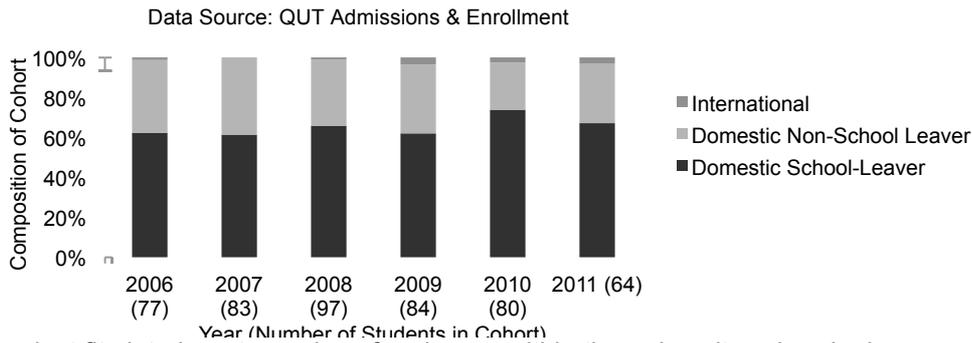
BACKGROUND

The Institutional Context

QUT regularly solicits expressions of interest for Learning and Teaching (L&T) projects aligning with university-wide objectives in support of strategic change. Such projects are intended to aid in curriculum renewal, embed and sustain improved student learning outcomes, and build academic staff capacity in learning and teaching. The current research is part of a project funded under the L&T grants scheme, and focuses on student retention and progression, particularly in the first year of studies, through the design of curricular and co-curricular activities to promote inclusion of students in discipline activities. As such the

¹⁸ High school leavers (school leavers) are generally those Australian students who enter university straight after completion of Year 12 of high school (Soutar and Turner 2002), while some universities, including QUT, include students who undertake a gap year, deferring enrolment for up to twelve months after admission, in this category. Non-school leavers are not necessarily older students - Queensland Tertiary Admissions Centre (QTAC) (n.d.) categorises applicants as school leavers only if they are an Australian citizen or permanent resident completing Year 12 in an Australian school in the current year. Mature aged students, by contrast, exist as the sub-set of non-school leavers over 21 years of age (Commonwealth of Australia 2008).

FIGURE 1: Changing Composition of Commencing Planning Cohorts



project fits into long-term plans for change within the university, whereby increased emphasis is placed upon development of more comprehensive approaches to strengthening student engagement with their learning and with the university.

The Course Context

QUT’s undergraduate planning program’s commencing cohorts are composed predominantly of domestic school leavers. These students, as shown in Figure 1, have generally constituted between sixty and seventy percent of the enrolling class over the past five years. Although international student enrolments have been increasing, they remain at comparatively miniscule levels in the undergraduate course. Domestic non-school leavers make up most of the remaining thirty to forty percent of commencing classes, with noticeably decreased representation in the 2010 commencing class. Interestingly, cohort size increased steadily from 2006 to 2008, with decreasing enrolments from 2009 to 2011. The authors believe that it is possible that the decrease in enrolments since 2009, along with the decreased representation of non-school leavers may be linked to the perceived decreased employment prospects following the Global Financial Crisis, but these ideas remain at a conversational level at this point. The cohort sizes have, however decreased despite increased pressure to expand access to tertiary education in Australia.

FIGURE 2: Attrition Rates for Planning Cohorts

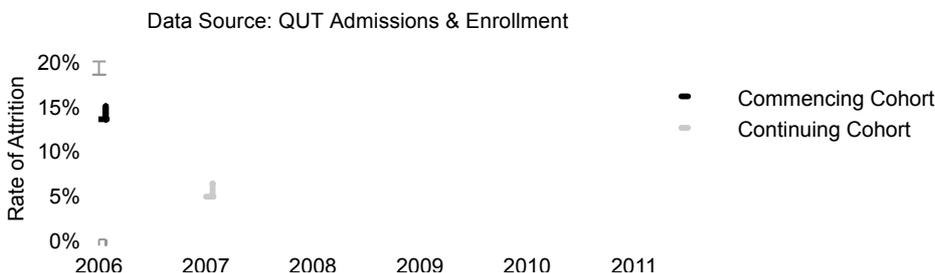


Figure 2 presents data on attrition rates for commencing (first year) and continuing (non-first year) planning students at QUT over a five year period. Attrition is tracked at QUT as students who exit the university, and does not capture numbers of students who change course (e.g., planning to architecture). In the years leading up to 2010, commencing cohort attrition rates increased, peaking in the same year in which the relative proportion of non-school leavers among the commencing cohort decreased. It is unclear what caused the increases, or what subsequently caused attrition to plummet in 2011. Interestingly in 2011 commencing cohort attrition dropped below continuing cohort attrition, inverting their previous relationship.

The Unit Context

This project builds upon initial, relatively naïve changes to a first year, first semester introductory unit (UDB161 Introduction to Planning & Design) which, while experiencing strong “success” in student reviews, lacked an efficient and effective way for addressing communications between students and teaching staff relative to queries about theory and connections between theory and the “real world”. The same coordinator has had responsibility for the unit since 2010. Prior to 2011, students lobbed emails at the unit coordinator en masse, often with questions that other students might well have been able to help answer. Consequently, students developed relationships of dependency upon academic staff, and did not seem to naturally form connections with their peers. Much of the connection between students was mediated by the teaching staff. Commuting in and out of campus, first year students seemed separate from their studies and isolated, with cohesive cohorts, beyond small group friendships, anecdotally noted by students as not really forming until their fourth and final year of studies.

LITERATURE REVIEW

Student Engagement & Retention

Determinants of student retention and, perhaps more importantly, progress to completion of university studies are widely studied, perhaps owing to levels of attrition and non-timely completion. Attewell (2011) and colleagues note, for example, that nearly 40% of American students commencing four year university degrees will not have completed them six years later. While university admissions criteria can select for previous academic performance as a proxy for academic preparedness for university studies, other factors, such as student engagement with their chosen university programs, bear heavily on attrition (McKenzie and Schweitzer, 2001). Student engagement has long been believed to be heavily influenced by “match,” or lack thereof, between student and university (Tinto, 1975), with engagement potentially being a stronger predictor of attrition, having greater influence than previous academic performance and personality (Terenzini and Pascarella, 1978). This is of particular importance for learners who are already at risk (Commonwealth of Australia, 2009), and is believed to “largely determine student success” at university, especially in the first year (Upcraft et al, 2005).

The Special Case of First Year Students

Performance of first year students, and consequent continuation of studies beyond first year (retention), is interlinked with notions of social and academic integration (engagement). First year students who do not feel integrated are more likely to drop out, however the determinants of first year attrition are complex, hinging upon a combination of factors. Individual student characteristics, institutional characteristics, and external pressures influence upon student performance and retention, with other interactions with both faculty and peers further shaping the first year experience (Harvey et al, 2006). Long and colleagues (2006) found that students self-identify a combination of personal and university-related factors as contributing to their own attrition. Frequently cited factors included perceived needs for personal breaks from study, difficulties with balancing study and work commitments, and changes in career goals (Long et al, 2006; Scott et al, 2008). Further studies reinforce these findings. For instance, in their 2010 study of First Year Experience in Australian Universities, James and colleagues find that students enrolled full time and working at the same time are at risk of withdrawing and potentially dropping out (James et al, 2010, 23).

Much research has been undertaken to further explore first year student engagement and retention, examining interrelationships between expected determinants of attrition. Factors existing prior to commencement of study, including student expectations, aspirations and characteristics, interact with their institutional experiences at university to consequently influence academic and social integration (Tinto, 2002; Heirdsfield et al, 2008). This interaction affects decisions such as discontinuing a degree by pushing students to re-consider their goals and intentions. Some of the determinants of first year attrition exist at the institutional level. Scott and colleagues (2008) investigated the inter-relationships between a range of institutional variables and retention. Their findings show a significant negative correlation between student-staff ratio and retention, and positive, significant correlations between the following variables and retention:

- mean and median university entry scores;
- enrolment as a descriptor for size of university;
- years since accreditation as a descriptor for age of university;
- proportions of school leavers amongst admitted students;
- proportions of full-time students;
- total revenue per equivalent full-time student load;
- proportion of self-generated income; and
- proportion of students in the architecture and building FOE.

An aggregate of median entry score, proportion of full time students and size of university was found to be the most successful predictor of retention rate (Scott et al, 2008). Other, more nuanced institutional factors have also been found to influence upon retention, including: commitment to student welfare, commitment to education of all students, and commitment to initiation of students into academic and social communities of an institution (Braxton et al, 1995).

Student interactions and relationships with peers also bear upon retention outcomes. Social expectations and the degree of student’s social integration have a direct and positive influence on the decision to stay or withdraw (Helland et al, 2001-2002), while feelings of isolation and disconnect have been found to negatively influence individual student retention (Tinto, 1995; Peel, 2000). Students’ social interactions, by promoting engagement, can aid in both retention and overall performance, underscoring the value of social capital within the university. Social capital can enhance students’ experience by providing benefits such as friendship, trust and self-confidence, information and guidance, and resources and opportunities (Thomas, 2002b). Students engaged in friendships, mutual support and social networks have access to support to

overcome difficulties, which plays a very important role in decision to stay or not at university (Thomas, 2002). Learning communities or small group learning can foster social networks and related social capital (Tinto, 2002; Thomas, 2002b), as can collaborative teaching and learning practices. Pedagogical methods, such as promotion of small group collaborative learning, can increase feelings of engagement, as can collaborative or socially oriented teaching and learning practices which promote social relations amongst students and between students and staff (Thomas, 2002a).

Given the recognised unique challenges faced by first year students, many universities have drafted specific policies and created programs aimed at improving the so-called *first year experience* to increase engagement and retention. Contemporary studies indicate levels of success, including James and colleagues (2010), who posit in their review of Australian universities that:

....good progress has been made in improving the transition to university and the quality of the educational experience for first year students. The investment in high quality transition programs and in monitoring and responding to the needs and experiences of first year students is yielding dividends ... During the next decade, the first year will be a critical time for retention and for establishing sound patterns of study and academic engagement, perhaps even more so than now. (James et al, 2010, 7)

University-level programs often identify key challenges for first year students, integrating existing research with local context. For example, the University of Queensland's (2004) working party report, *Creating a positive first year experience*, identifies six key issues noted in the research as raised by students as hindrances or modifiers to levels of involvement with their university studies. Issues include time management (juggling work and study leading), unease with studies (lack of challenging learning experience, uncertainty about program choice, course selection, and first preference), isolation (from others and from university life) and potentially consequent uncertainty about where to get help.

Shifts in Student Preferences for Interaction with Studies

Research on contemporary students indicates that they "think and process information fundamentally differently from their predecessors" as they were born into a world of ubiquitous technology (Prensky, 2001, p. 1). Today's students have near universal access to mobile communication technologies (Kennedy et al, 2006) and indeed see "the screen (as) a fundamental part of (their) daily routines" (Gilroy 1998, 5). They

exhibit a high level of interest in communicating with others, with "80% of students texting daily" (Kennedy et al, 2006) and distaste for traditional pedagogy, with "little patience for lectures, step-by-step logic, and 'tell-test' instruction" (Prensky 2001, 3). Instead they desire adaptive, highly interactive learning environments (Roberts, 2005) and expect faculty proficiency in "use of technology to better communicate expert knowledge" (Roberts 2005, 3.4).

Student preferences for where those interactions occur may vary, but how they would like them to occur can be inferred from their social interactions outside of studies. Bugeja (2006) anecdotally establishes the extent of students' preferences for online interaction, and academic staff's surprise at learning such:

Michael Tracey, a journalism professor at the University of Colorado, recounts a class discussion during which he asked how many people had seen the previous night's NewsHour on PBS or read that day's New York Times. "A couple of hands went up out of about 140 students who were present," he recalls. "One student chirped: 'Ask them how many use Facebook.' I did. Every hand in the room went up. She then said: 'Ask them how many used it today.' I did. Every hand in the room went up. I was amazed." (Bugeja, 2006, C1)

The impact of these preferences are contested. Kirschner and Karpinski (2010) negatively link student self-reported use of Facebook with both GPA and hours spent studying, hours spent studying, but did not find significant differences between Facebook users and non-users with regard to the number of hours spent online. More recently, Junco (2012) established the number of hours spent on Facebook as a strong negative predictor of university GPA, interestingly "half as strong of a predictor as the strongest single predictor of college Grade Point Average (GPA), high school GPA" (195). He introduces a more nuanced understanding of student use of the tool, however, in that student time spent in the behaviour he describes as "Facebook checking" (196) did not reduce time spent studying, offering the following clarification along with a call for additional research:

Put in different terms, time spent on the academic task of studying does not seem to be influenced by time spent on Facebook even though time spent on Facebook is negatively related to GPA (Junco, 2012, 196).

It is possible that in addition to helping students with "the formation of weak ties, which serve as the foundation of bridging social capital" (Ellison et al, 2007, 1146), participation in forums like Facebook helps reduce student perceptions of isolation.

Embracing Digital Communication in Unit Design to Decrease Attrition

Pedagogical models which simply transition traditionally delivered lectures to web-based presentations limit realization of the potential for university learning to build upon student preferences for use of digital communication. Indeed if mobile technologies are used solely for content delivery, they can perpetuate “a didactic, teacher-centred paradigm (which is)...pedagogically regressive” (Herrington and Herrington, 2007). However, the devices hold potential for increasing student engagement, particularly as they can foster dialogues amongst students as well as between students and academic staff. Soon and colleagues (2008) note that the effective incorporation of communication technologies into teaching practice can facilitate compilation, communication, and revision of shared knowledge. Further, such communications can function as “trigger(s) and platform(s)...(providing) guidance and support for learning methods and the learning process” (Silander et al, 2004, 1), potentially aiding in realization of a model of “cognitive apprenticeship (which) embed(s) learning in activity and make(s) deliberate use of the social and physical context” (Brown et al 1989, 32). The communications themselves enhance problem-based learning (Naismith et al, 2004) and have potential to extend learning into informal settings, using technology as a means to an end in response to “an increasingly mobile lifestyle” (Sharples et al, 2009, 236). More specifically, the use of blogs as learning spaces in university courses has been identified as a potential transformational technology that can provide students with a high level of autonomy while simultaneously providing opportunity for greater interaction with peers (Williams and Jacobs, 2004). This blurring of lines between campus and off-campus life may aid in realization of underlying university education goals, “support(ing) collaborative learning experiences that place the concepts learnt in their real setting” (McGreen and Sanchez, 2005, 213). Benefits for academic staff are manifold, as the burden of maintaining correspondence with individual students in growing cohorts is decreased. Further, such changes in pedagogy may potentially stimulate reflective teaching practice, resulting in “two steps forward for the pedagogy / technology, one step back for reflection and mindful planning of subsequent steps” (Mioduser et al, 2000, 74). Given increasing pressures for publication, innovative practice and the scholarship of such practice may allow for garnering three birds with one stone – improvements in student learning outcomes, teaching evaluations, and HERDC counts.

METHODOLOGY

The present research investigates first year students' engagement with university studies, formation of social networks, and challenges faced early in studies, examining levels of participation, and the products of such, in social media components of a first year first semester unit with a cohort of 93 students. The unit is an introduction to basic planning and design theories and principles. Frequency of participation data was drawn from records of comments posted in and visits to the limited access unit blog (shared amongst the unit) to determine levels of engagement by the cohort as a whole. Active participation levels were determined by the percent of students in the unit actively posting to the blog, while passive participation was defined by the number of overall visits to the site relative to the unit enrolment.

As a supplement to participation data on the weekly blog posts and visits, the researchers reviewed the content of student posts in a highly quantitative manner, looking for evidence of student formation of social networks over the course of the semester.

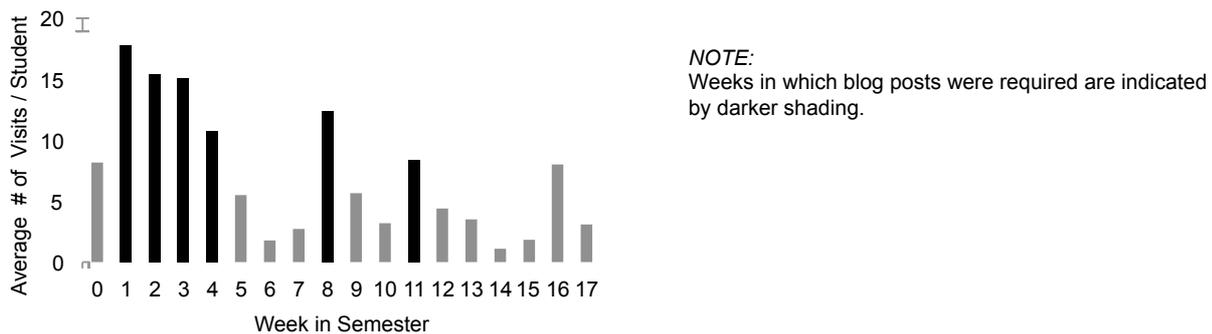
RESULTS OF ANALYSES

Students were required to post entries, and awarded marks for doing so, in six specified weeks throughout the semester, with initial active participation nearly universal (94%) in week 1 gradually declining to 75% after four repeated weeks of required postings, and dropping further to 67% and 63% after multi-week breaks from required posts to accommodate other assessments in the unit and in other units in the first year course.

Figure 3 shows levels of presumed passive engagement with the blog tool and consequently with other students and academic staff. It is important to note that the blog tool registers visits to each page in the tool as a separate visit, a frustrating reality of software. There were, however, a limited number of pages for students to visit, with only eighteen generated over the course of the semester, eight of which were part of initial content. What follows is a detailed analysis of interactions on the unit blog in Weeks 1-4, when students were regularly engaging in the use of the online tool while adjusting to other new experiences at university.

Students were invited to access the blog prior to the start of the semester, partially accounting for the relatively high average number of visits per student in Week 0, with academic staff's frequent bug-checking likely inflating visits in this week. Students receiving the electronic invite may, however, have been eager to “explore” the territory of their new course, seeking to engage with new colleagues and clear up possible unease through review of the initial eight pages on the site. Week 1, however, was a shock to those administering the blog, as over 1,600 hits were registered, which, even standardized relative to the number

FIGURE 3: Passive Engagement with Unit Social Media



of students in the unit yields an average of 18 visits, or potentially page views, per student at the start of semester. This data is less surprising though, given the noted high levels of active participation in Week 1. Presumably students returned to the blog to read others' posts – they were certainly encouraged to do so. While several students did comment in direct response to others' posts, finding similarities with other students (e.g., "You're from Gympie? So am I!"), observable interactions were initially limited. Students repeated themes (discussed at length below) from each others' posts but did not directly indicate that they were engaging with others. Passive participation declines somewhat over the next four weeks as did active participation, but remained at levels far in excess of what would be anticipated if students were only dropping in to post their own response and not return.

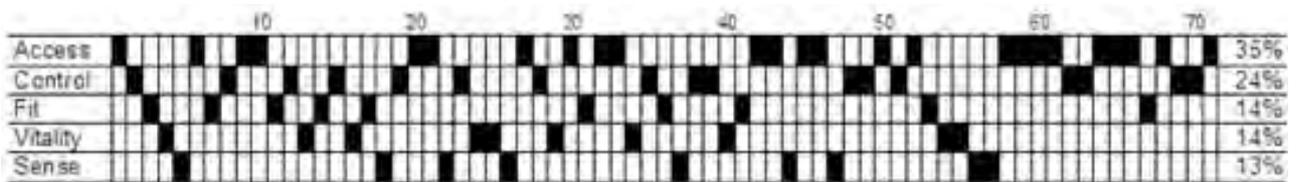
While week 1 questions focussed on introducing students to each other, Week 2 required that they begin to engage with unit content and activities. As part of the Week 2 unit meeting, students first heard from a guest lecturer involved in the planning and management of a nearby mixed-use development. Following upon the guest lecture, students travelled to the development in groups, undertaking informal exploration of the area with teaching staff. Week 2 blog questions prompted students to contemplate explore ideas of "what" makes a place while further engaging in construction of social networks. Initial reading of students posts indicates that they were reading others' writing, at least in advance of writing their own responses, using phrases like "I tend to agree with" another student's ideas. Some indicated formation of social networks and an increased level of comfort in querying colleagues, posing requests for help with posting photos they wanted to share – notably these requests were not directed solely at teaching staff but rather at the unit lecturer or "anybody else who might know". Frustratingly, however, responses to such requests, at least, came only from teaching staff – perhaps students were not yet comfortable taking on such roles.

In an effort to overcome some of the challenges noted in Weeks 1 and 2, in Week 3 the students were presented with a structured set of questions aimed at establishing each of them as someone with something to share. The first part of the question required that they advocate for or against master planned communities, encouraging interaction with the unit lecture and allowing for development of a positional discussion. They were also prompted to select a feature of campus to naively analyse relative to its use by other students, as we would cover methods of analysis in the subsequent week. Most interesting, however, were there responses to a request to list five resources for learning about urban planning. The unit coordinator indicated that she not only "hope(d) to learn which unit resources (students) found helpful, (but also) to find out about some new resources" – internet savvy students might ferret out gems, and in sharing resources build networks. Students were explicitly encouraged to read each others posts, but, in a lack of foresight on the part of teaching staff, were not directed to then comment on those posts. As such, students did not reply specifically to each others posts with the frequency anticipated. They did, however, seem to be reading posts, with a student responding to the unit coordinator's request to know how to embed a video posed to another student.

Although passive engagement rates remained somewhat stable over Weeks 2 and 3, they declined sharply in Week 4. During this week, students were beginning to engage with professional planning documents and underpinning theories, likely stepping out of their comfort zones and into the "dark matter" of the unit. Students were prompted to review the recent *Creating places for people: An urban design protocol for Australian cities*, comment upon its readability and offer elementary level critique ("what do you like or dislike about it?"). They were also directed to select one of Lynch's (1981) performance dimensions of urban space, being vitality, sense, fit, access, and control, to briefly discuss relative to the university's campus. Part of the directions of the post encouraged students to somewhat actively interact with others' responses, directing that "if you're not the first to post, please look at your colleagues' postings and consider selecting a dimension that has not yet been addressed, or not been addressed by as many people, so that we get coverage across all five". Wonderfully, in the fortieth response, a student indicates that she has not only read

others' posts to determine coverage, but also synthesises multiple students' responses before adding on her own ideas. Figure 4 shows patterns and frequencies of selection of dimensions considered by students in their posts. In the first five posts the students progressed through a linear cycle, demonstrating that they had read the previous posts at least quickly to determine topic choice. Continued progress through the post records indicates that students still looked at others posts, but not necessarily the full cycle. Interestingly, however, distributions remained relatively even across the five dimensions (29%, 23%, 16%, 18%, 14%) through the end of the pronounced cycle at response 57 when the deadline for posts neared. From this we

FIGURE 4: Patterns of Student Selection of Topic for Response



can perhaps infer that student passive engagement with other students' ideas declines precipitously as time pressure increases.

CONCLUSIONS

Incorporating social media into teaching requires more than just enabling options within Blackboard or signing up for a WordPress account. Productive student interactions in online forums requires faculty consideration of unit composition and continued attention to the dynamics of student posts. While engagement and retention have been found to be linked to "actions of the faculty, especially in the classroom" (Tinto 2006-7, p. 5), they are often not tied to faculty perceptions of our own work. Although we "publicly proclaim the importance of retaining each and every student, (we) typically do not see retaining students as (our) job", an idea reinforced by the absence of rewards for such in considerations of promotion and tenure (Tinto 2006-7, p. 9). Kift (2008b), reflecting on retention of first year students, proposes that improving reducing attrition requires cultural shifts among faculty so that it becomes "everybody's business." Clearly, though, embedding engagement with students requires that we *know* them a bit better, and adjust our pedagogical practice to meet their needs while preserving academic rigor. Blogging, as a form of micro-publishing, can be used as a communication tool to enhance student learning, participation, sense of belonging and retention.

REFERENCES

- Attewell, P, Heil, S, Reisel, L, (2011), 'Competing explanations of undergraduate noncompletion', *American Educational Research Journal* 48, 536-59.
- Belcheir, MJ, (2003), *Active learning in and out of the classroom: results from the National Survey of Student Engagement, research report 2003-02*, Boise: Boise State University Office of Institutional Assessment.
- Braxton, J, Vesper, N, Hossler, D, (1995), 'Expectations for college and student persistence', *Research in Higher Education* 36(5), 595-611.
- Brown, JS, Collins, A, Duguid, P, (1989), 'Situated cognition and the culture of learning', *Educational Researcher* 18(1), 32-42.
- Bugeja, MJ, (2006), 'Facing the Facebook', *Chronicle of Higher Education* 52(21), C1.
- Coates, H, Ransom, L, (2011), *Dropout DNA, and the genetics of effective support, Australasian survey of student engagement (AUSSE) research briefing*, Volume 11, Camberwell, VIC: Australian Council for Educational Research.
- Commonwealth of Australia, (2008), *Review of Australian higher education*, Canberra: Department of Education, Employment and Workplace Relations (DEEWR).
- Commonwealth of Australia, (2009), *Transforming Australia's higher education system*, Canberra: DEEWR.
- Ellison, NB, Steinfield, C, Lampe, C, (2007), 'The benefits of Facebook "friends:" social capital and college students' use of online social network sites', *Journal of Computer-Mediated Communication* 12(4), 1143-68.
- Gilroy, M, (1998), *Using technology to revitalize the lecture: a model for the future*, East Lansing, MI: National Center for Research on Teacher Learning.

- Harvey, L, Drew, S, Smith, M, (2006), *The first year experience: A review of literature for the Higher Education Academy*, Sheffield: Centre for Research and Evaluation, Sheffield Hallam University.
- Head, AJ, Eisenberg, MB, (2009), *How college students seek information in the digital age, Project Information Literacy progress report 'lessons learned'*, Eugene, OR: The University of Washington.
- Heirdsfield, A, Walker, S, Walsh, K, (2008), 'Enhancing the first year experience – longitudinal perspective on a peer mentoring scheme', *Proceedings of the Australian Association for Research in Education*, Fremantle, Australia.
- Helland, P, Stallings, H, Braxton, J, (2001-2002), 'The fulfillment of expectations for college and student departure decision', *Journal of College Student Retention: Research, Theory and Practice* 3(4), 381-396.
- Herrington, A, Herrington, J, (2007), 'Authentic mobile learning in higher education', presented at The Association for Research in Education International Educational Research Conference, 21 November 2007, Fremantle, WA.
- James, R, Baldwin, G, McInnis, C, (1999), *Which university? The factors influencing the choices of prospective undergraduates*, Melbourne: University of Melbourne Centre for Study of Higher Education.
- James, R, Krause, K, Jennings, C, (2010), *The first year experience in Australian universities: Findings from 1994 to 2009*, Melbourne: University of Melbourne Centre for the Study of Higher Education.
- Junco, R, (2012), 'Too much face and not enough books: the relationship between multiple indices of Facebook use and academic performance', *Computers in Human Behavior* 28(1), 187-98.
- Kennedy, G, Krause, KL, Judd, T, Churchward, A, Gray, K, (2006), *First year students' experiences with technology: are they really digital natives? Preliminary report of findings*, Melbourne: University of Melbourne Centre for Study of Higher Education.
- Kift, S, (2008a), Articulating a transition pedagogy, In: ALTC (Australian Learning and Teaching Council), *Senior Fellowship Forum on the First Year Experience and Curriculum Design*, Perth, WA 2 December 2008.
- Kift, S, (2008b), The next, great first year challenge: Sustaining, coordinating and embedding coherent institution-wide approaches to enact the FYE as 'everybody's business' (keynote speech), In: *11th Pacific Rim First Year Experience in Higher Education Conference*, 30 June – 2 July 2008, Hobart, TAS.
- Kirschner, PA, Karpinski, AC, (2010) 'Facebook® and academic performance', *Computers in Human Behavior* 26(6), 1237-45.
- Kraus, K, Coates, H, (2008), 'Students' engagement in first-year university', *Assessment & Evaluation in Higher Education* 33(5), 493-505.
- Kuh, GD, Cruce, TM, Shoup, R, Kinzie, J, Gonyea, RM, (2008), 'Unmasking the effects of student engagement on first-year college grades and persistence', *The Journal of Higher Education Research* 79(5), 54-6.
- Long, M, Ferrier, F, Heagney, M, (2006), *Stay, play or give it away? Students continuing, changing or leaving university study in their first year*, Clayton: Monash University.
- McGreen, N, Sanchez, IA, (2005), 'Mapping challenge: a case study in the use of mobile phones in collaborative, contextual learning' In: Isaias, P, Borg, C, Kommers, P, Bonanno, P, eds. (2005) *Mobile learning*, Malta: International Association for Development of the Information Society Press, pp. 213-7.
- McInnis, C, James, R, Hartley, R, (2000), *Trends in the first year experience in Australian universities*, Melbourne: University of Melbourne Centre for Study of Higher Education.
- McKenzie, K, Schweitzer, R, (2001), 'Who succeeds at university? factors predicting academic performance in first year Australian university students', *Higher Education Research and Development* 20(1), 21-33.
- Mioduser, D, Nachmias, R, Oren, A, Lahav, O, (1999), 'Web-based learning environments: current pedagogical and technological state', *Journal of Research on Computing in Education* 33(1), 55-76.
- Naismith, L, Lonsdale, P, Vavoula, G, Sharples, M, (2004), *Literature review in mobile technologies and learning - Report 11*, Birmingham: Nesta Futurelab.
- Queensland Tertiary Admissions Centre, (n.d.), Non-Year 12 – how to apply, <http://www.qtac.edu.au/Applying-NonYear12/Introduction.html>, accessed 23 August 2012.
- Peel, M, (2000), 'Nobody cares': The challenge of isolation in school to university transition', *Journal of Institutional Research* 9(1), 22-34.
- Prensky, M, (2001), 'Digital natives, digital immigrants', *On the Horizon* 9(5): 1-6.

- Roberts, GR, (2005), 'Technology and learning expectations of the net generation', In: Oblinger, DG Oblinger, JL eds. (2005) *Educating the net generation*, Washington, DC: Educause, pp. 3.1-3.7.
- Scott, G, Shah, M, Grebennikov, L, Singh, H, (2008), 'Improving student retention: A university of Western Sydney case study', *Journal of Institutional Research* 14 (1), 9-23.
- Sharples, M, Sanchez, IA, Milrad, M, Vavoula, G, (2009), 'Mobile learning: small devices, big ideas', In: Balacheff, S, Ludvigsen, S, deJong, T, Lazonder, A, Barnes, S, eds. (2009) *Technology enhanced learning: principles and products*, Dordrecht: Springer, pp. 233-49.
- Silander, P, Sutinen, E, Jorma, T, (2004), 'Mobile collaborative concept mapping: combining classroom activity with simultaneous field exploration', Proceedings of the 2nd IEEE International Workshop on Wireless and Mobile Technologies in Education, 23-25 March 2004, JungLi, Taiwan.
- Soon, CJ, Roe, P, Tjondronegro, DW, (2008), 'An approach to mobile collaborative mapping', Presented at the Symposium on Applied Computing, March 16-20, 2008, Fortaleza, Ceara, Brazil.
- Soutar, GN and Turner, JP, (2002), 'Students' preferences for university study: a conjoint analysis', *The International Journal of Educational Management* 16(1), 40-5.
- Terenzini, PT, Pascarella, ET, (1978), 'The relation of students' pre-college characteristics and freshman year experience to voluntary attrition', *Research in Higher Education* 9, 347-66.
- The University of Queensland, (2004), *Creating a positive first year experience: Report of a working party chaired by the Deputy Vice-Chancellor (Academic)*, Brisbane: University of Queensland.
- Thomas, L, (2002a), 'Student retention in higher education: the role of institutional habitus', *Journal Education Policy* 17(4), 423-42.
- Thomas, L, (2002b), 'Building social capital to improve student success', presented at the *British Educational Research Association Conference*, University of Exeter, Sept 2002.
- Tinto, V, (1975), 'Dropout from higher education: a theoretical synthesis of recent research', *Review of Educational Research* 45, 89-125.
- Tinto, V, (1995), 'Educational communities and student success in the first year of university', *Monash University Conference on the Transition from Secondary School to University*, Nov. 29-Dec. 1, 1995, Monash University.
- Tinto, V, (2002), 'Establishing conditions for student success', presented at the *11th Annual conference of the European Access Network*, Prato, Italy.
- Tinto, V, (2006-2007), 'Research and practice of student retention: what next?' *Journal of College Student Retention* 8(1), 1-19.
- Upcraft, ML, Gardner, JM, Barefoot, BO, (2005), *Challenging and supporting the first year student*, San Francisco: Jossey-Bass.
- Vavoula, G, Sharples, M, (2009), 'Meeting the challenges in evaluating mobile learning: a3-level evaluation framework', *International Journal of Mobile and Blended Learning* 1(2), 54-75.
- Williams, J, Jacobs, J, (2004), 'Exploring the use of blogs as learning spaces in the higher education sector', *Australasian Journal of Educational Technology* 20(2), 232-247.

Urban Forests along Sydney Transport Corridors: the Possible Role of LiDAR in Future Planning and Management

Wang, M-Z., Merrick, J. R. and Amati, M.

Graduate School of the Environment, Department of Environment and Geography, Faculty of Science, Macquarie University

Contact: mingzhu.wang@students.mq.edu.au

Abstract: In the context of expanding urbanisation, climate change and peak oil, the maintenance and extension of connected vegetation corridors has become an essential component of urban planning and environmental management. In addition to ecological benefits, urban forests improve air quality, save on energy (cooling and heating) and mitigate greenhouse emissions. As part of broader studies on the use of Light Detection and Ranging (LiDAR) technology in urban tree management, the work reported here focuses on initial surveys of urban forests bordering two highway corridors in Sydney. These are used to demonstrate the potential and technical aspects of working with LiDAR in densely developed areas. Aspects of planning and management for urban forests are briefly discussed. Limitations of resolution of this technology and new ways in which LiDAR might be utilised are suggested.

Key Words: urban forests, urban forests planning, remote sensing technologies, improved management strategies, public areas.

Introduction

General Background

Among the expanding range of socio-economic and environmental issues that have to be considered in planning now is that of green infrastructure, which presents a range of planning challenges. This paper presents initial findings into the factors that affect the quality of green infrastructure and the potential for new technologies to facilitate the management of urban forests.

Remote sensing has been a stock in trade among planners for several decades. The technologies are known to enable the survey of large areas in a short time. The utility of remote sensing is reflected in the incorporation of geographic information system (GIS) units as a core component of all planning programs in Australia. While GIS has found an application in a range of domains its application to green infrastructure has been overlooked.

Light detection and ranging (LiDAR) is one such remote sensing technology. It produces a comprehensive database for subsequent analysis; giving accurate assessments of tree extent and condition. It is non-invasive which minimises the problem of access or privacy; permitting identification of changes or problems that, if necessary, can be investigated by on-ground staff. These advantages, in turn, contribute to more efficient use of limited field equipment and finite human resources.

Importance of Planning Green Infrastructure

Clearly, although threatened globally by accelerating urbanisation, urban trees and green spaces are becoming increasingly valuable resources, performing both socio-economic and environmental functions that are summarised in Table 1. Urban environments have been highly transformed by anthropogenic activities and have specific climatic conditions due to high levels of fossil fuel combustion (Nowak and Crane, 2002). The remaining and new vegetation within urban areas provides various crucial environmental benefits (Brack, 2002). It should be noted at this stage that most studies of green infrastructure have focused on, or emphasised, trees. Accordingly much of the discussion here relates to trees or urban forests.

Table 1 Summary of environmental and socio-economic functions of urban forest trees- some of these overlap between role categories.

Role	Function (Source)
E	• Refuges and additional habitat, enhancing usage of remaining fragmented habitat (Bennett et al., 1999, Bennett et al., 2006)
C	
O	• Corridors and reserve network for limited biodiversity in landscape (Bennett et al., 1999)
L	• Lower or moderate ambient temperatures by evapotranspiration
G	• Carbon storage and sequestration mitigates climate change (Nowak and Crane, 2002)
I	• Intercept rainfall increasing soil absorption and reducing surface runoff as well as erosion (Brack, 2002) – in turn, reducing sedimentation in waterways

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- Mitigates air pollution - remove gaseous pollutants, intercept airborne particles (Beckett et al., 2000a, Beckett et al., 2000b, McPherson, 2000, Nowak et al., 2006, Nowak et al., 1998)
 - Shading decreases incident solar radiation - reduces local air temperature lowering need for air conditioning in summer (McPherson, 2000)
 - Reduced wind speed reduces building heating demand in winter (McPherson, 2000)
 - Street trees protect pedestrians from wind, rain or sunlight (Nagendra and Gopal, 2010)
 - Combined effects of shading and evapotranspiration directly modify building energy use (Simpson, 2002)
 - Combined effects of shading and evapotranspiration indirectly reduces carbon emissions and air pollutants from lowered power plant emissions (Simpson, 2002).
 - Carbon storage and sequestration mitigate local and global climate change (Nowak and Crane, 2002)
 - Reduce rapid surface runoff – reducing transport of pollutants from anthropogenic activities into waterways (Brack, 2002)
 - Increased aesthetic qualities and health benefits (Powe and Willis, 2004)
 - Improved property values in immediate area (Anderson and Cordell, 1988, Laverne and Winson-Geideman, 2003, Sander et al., 2010)
-

While many beneficial roles have been identified for urban trees, there are some problems as well. These include: bushfire potential, increased risk of physical tree damage to buildings or infrastructure due to storms, reduced visibility and increased risk of collision with street trees. Effective management has to consider these benefits and costs.

Objectives

The overall goal of this project is to better understand the environmental benefits of urban forests in Australian cities. While emphasising the necessity of including urban forests in medium and long-term planning, the objectives of this paper are: (1) to outline the broad stages in development of urban forests planning and strategies in Sydney; (2) to briefly explain some of the technical aspects of working with a remote sensing technology, to measure parameters to facilitate improvement in urban planning; (3) to point to the factors and limitations that need to be considered in urban forest management.

Development of Urban Forest Plans - Phases and Planning

Before undertaking any field surveys it was necessary to collate and review the existing data and management processes relating to urban forests. A number of the key background points summarised in Figure 1 are considered in subsequent discussion. But, in summary, the most important findings are that: a wide range of land uses and stakeholder requirements have to be accommodated; a wide range of technologies are currently used to assess urban forests – to varying degrees in different local areas; the development of comprehensive urban forest plans is a long-term process.

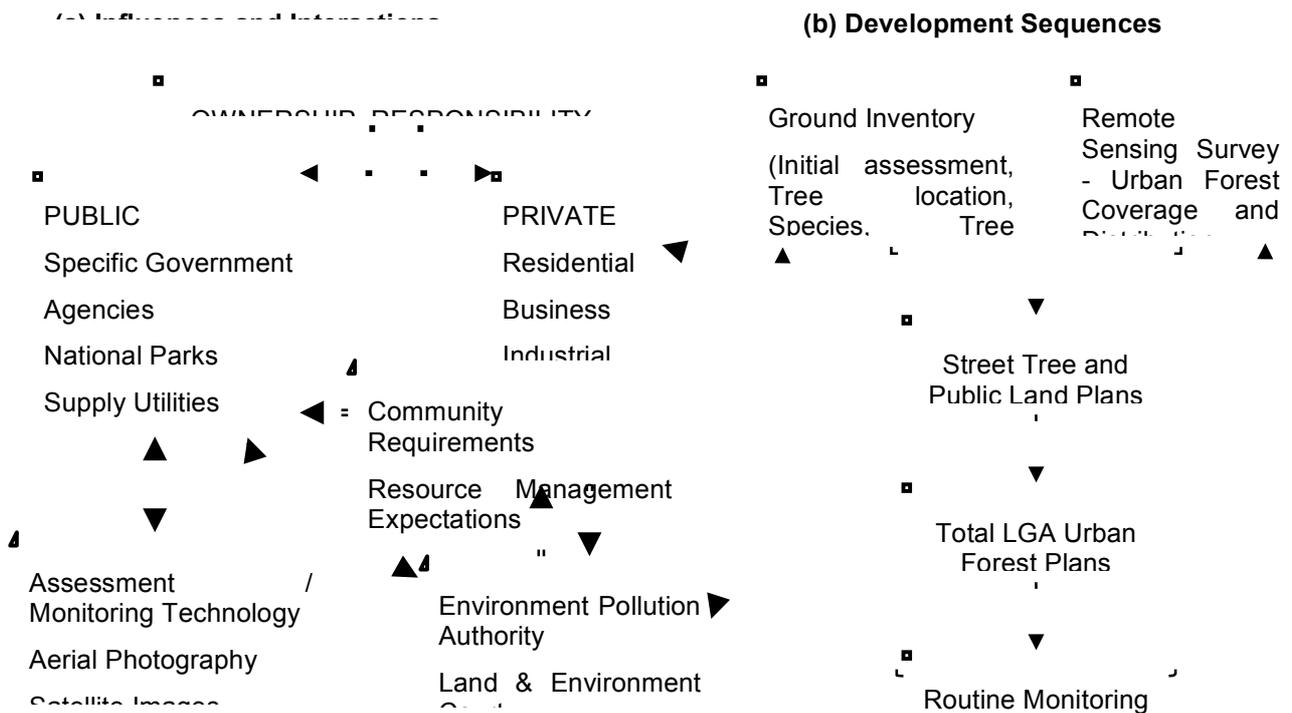


Figure 1 General summary of: (a) influences and interactions; and (b) stages in the development of Urban Forest Plans, in the Sydney Metropolitan Area

The Potential for Remote Sensing

Recently, passive remote sensing technologies such as aerial photography or satellite images have been used for tree studies because they are relatively inexpensive and easy to obtain (Secord and Zakhor, 2007). But these methods are sensitive to weather, season, and the time of day when data is collected, and limited in providing three-dimensional information (Jung et al., 2011, Patenaude et al., 2004, Shan and Sampath, 2005). Figure 2 reveals the types of distributional, size and canopy cover data yielded by aerial photography.



Figure 2 Samples of North Sydney Tree Canopy Cover Data: (a) shows the beginning of the Pacific Highway in a business area; and (b) shows the middle part of the highway within the North Sydney LGA, where there is mixed commercial and residential development.

LiDAR Features and Limitations

Light detection and ranging (LiDAR) is one of the most important active remote sensing technologies. The airborne LiDAR system emits laser pulses towards the ground surface and the pulses are reflected back to the sensor by objects such as trees, buildings and the ground. The LiDAR device measures the time-delay between pulse emission and return, converting it to distance measurement (Popescu, 2007). In this way, an accurate three-dimensional model of natural and man-made structures, as well as underlying topography, can be created. Compared to other photogrammetric approaches, LiDAR has several distinct advantages for environmental studies: it is less dependent on weather conditions or sun angles (Patenaude et al., 2004, Shan and Sampath, 2005); it can collect both vertical and horizontal information at high density (Jung et al., 2011); it can generate high density airborne data to produce digital surface models with high spatial resolution (Kato, 2008, Patenaude et al., 2004); it is a more effective tool with higher accuracy than field or passive remote sensing approaches (Jung et al., 2011, Secord and Zakhor, 2007); and for tree measurements it can penetrate the tree canopy, capturing its vertical structure as well as underlying terrain (Hollaus et al., 2009). These features are already used by councils to map the terrain surface, however the potential for LiDAR in urban forest management is under utilised.

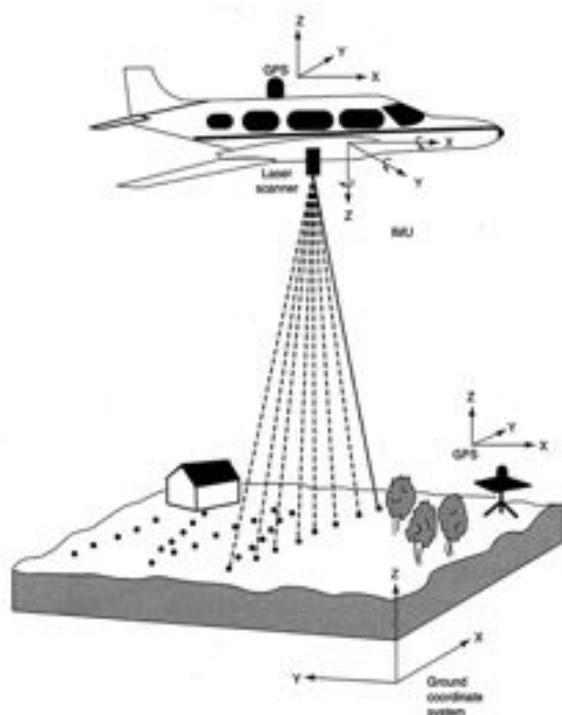


Figure 3 Airborne LiDAR System and how it works

Source: Zhang et al. (2011)

The two aspects of the general advantages listed above, that are most important in this context are: (a) greatly increased resolution; and (b) the capacity to interpret and visualise the environment in three dimensions. This assists assessments / management of forests in several ways.

First, unlike previous technologies, LiDAR has the capacity to differentiate different types of tree (Hollaus et al., 2009, Moffiet et al., 2005, Zhang et al., 2011), so it can identify diversity and assemblages in a way not previously possible. What is unclear at present is the level of botanical diversity that can be reliably distinguished: whether it can only delineate different families or whether it can distinguish genera or species. However, the combination of LiDAR and hyperspectral or multispectral images which provide the spectral information of forests can greatly increase the accuracy of extracting tree parameters including tree height, location and tree species (Holmgren et al., 2008). If the spatial and spectral resolution is high, it also raises the possibility of detecting differences in condition of individual or groups of trees – perhaps giving an early indication of drainage or pollution problem or critically, a potential danger to powerlines.

Second, associated with this improved recognition of different tree types, is the ability to detect an expansion or reduction (in numbers) of a particular species between successive surveys. Differences in understorey structure should also be detectable – even in steep inaccessible sites.

The capacity to illustrate the spatial interrelationships of forest and infrastructure or buildings is critical in management and development. For example, the assessment of shading impacts is highly dependent on the relative positions of trees and buildings, together with relative heights and aspects. In the case of transport corridors, the effectiveness of pollution mitigation is highly correlated with tree type, density of planting and proximity to the fume source (Baldauf et al., 2008, Beckett et al., 2000a, Nagendra and Gopal, 2010).

Perceived limitations of this technology, at present, are:

- (a) the volume of data generated requires extensive computer storage and analysis resources;
- (b) effective analysis and working outputs are dependent on trained specialist personnel;
- (c) some uncertainty as to the level of resolution possible;
- (d) the relative expense of the aerial surveys.

Highway Corridors – Study Areas

Parts of two major highway corridors were surveyed. In each case the survey length was around 20 km – running from inner central business districts to outer suburbs. One survey extended along the Pacific Highway – from North Sydney to Hornsby. The other extended out along Parramatta Road – from Camperdown to Parramatta (Figure 4). The survey band included the road with an overlap of about 150m either side of it.

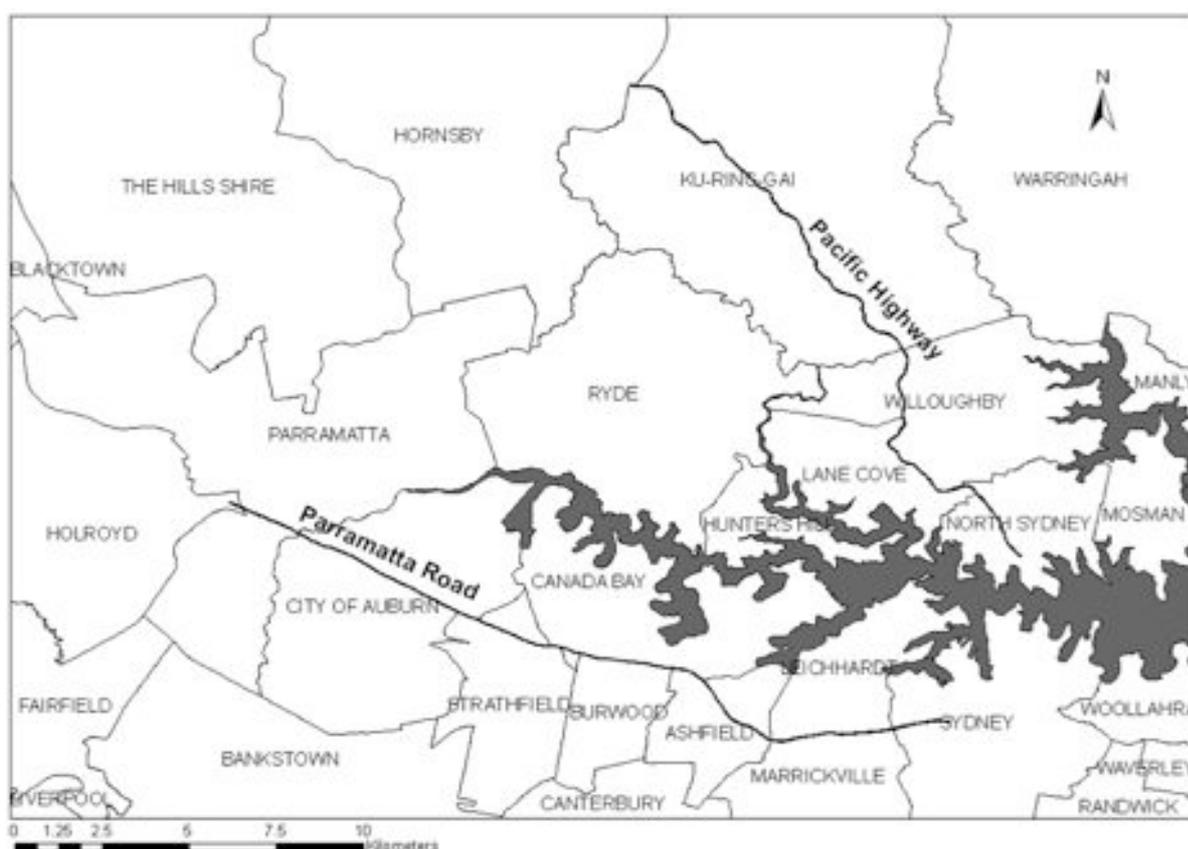


Figure 4 Map of inner metropolitan area showing the lengths of Parramatta Road and Pacific Highway surveyed as well as Local Government Area (LGA) boundaries.

Data Source: ABS and NSW Lands, Prepared by: Shih-Hsien Yung

In the absence of combined or comprehensive tree species lists for these corridors (and ground-truthing check for the planned aerial survey), a preliminary field survey was carried out to investigate the diversity of roadside trees along Parramatta Road and the Pacific Highway. A car was driven slowly along these two roads while a botanist identified tree species on the road verge. All tree species (> 2.0m in height) were recorded and identified to generic or specific level. Further information about trees on public lands within the 150m buffers, including species in parks and street tree databases, was provided by tree officers from relevant councils.

Results and Discussion

Urban Forest Resource – Initial Transport Corridor Surveys

The benefits of the urban forest resource are widely recognised; however, this recognition has not always been matched with appropriate monitoring or management resources. It should also be noted that the generalised sequence in the development of comprehensive urban forest plans (Figure 1), has largely evolved in response to a perceived need and demand for conservation of a specific resource that is dwindling and poorly-documented; so objectives to date have largely focused on basic features of the urban forest complex. But initial plans and on-going management will be increasingly modified as a result of integration of urban planning issues – and the extent of socio-economic and ecological interactions are fully realised.

Understandably, urban forest strategies for public land are usually applied throughout the LGA and adequate baseline data for particular zones, such as transport corridors, are often not available. The field surveys reported here demonstrated the following:

- (a) unexpected diversity – beneficial from a conservation point-of-view, but needing more intensive management;
- (b) wide variation in overall species diversity and component species within local areas and between different sections of each corridor;
- (c) very patchy tree distribution in some areas;
- (d) planting and maintenance of some species that did not contribute to conservation, shading or pollution mitigation.

The follow-up enquiries indicated that, while the street-tree strategies were at varying levels of development, most councils were upgrading databases and management plans for this category of vegetation. It should also be noted that some of the limitations or problems, associated with urban tree management, have only become apparent in recent years (see Table 2).

Table 2 Summary of factors, limitations or problems that need to be considered in urban tree management

Factor, Limitation or Problem	Source
1. Maximum benefits from urban forests are only achieved when density of the tree canopy is appropriate and when each individual tree is properly maintained and replaced when necessary.	North Sydney Council (2006)
2. Inappropriate plantings in unsuitable conditions or locations can cause different kinds of problems in local environments or communities. For example: particular tree or grass species can cause allergies or irritations by producing a greater pollen load leaf or fruit droppings can increase litter problems or make ground slippery when fleshy fruits or leaves decompose	City of Sydney (2011)
3. Root systems of some vigorous or large growing species can cause damage to underground services, pavements, kerbs and properties	Pittendrigh Shinkfield Bruce Pty Ltd (2005), City of Sydney (2011)
4. Maintenance costs may outweigh benefits when urban trees reach a certain stage or life span (over-maturity) or are in poor condition	North Sydney Council (2006)
5. Species selection – especially for new plantings of street trees – should consider:	
(a) local climate, geology, soil and topography (especially in relation to drainage);	
(b) growing space – relating to overhead / underground services;	Pittendrigh Shinkfield Bruce Pty Ltd (2005)
(c) height, maturation size, foliage (deciduous / evergreen) and physiology;	North Sydney Council (2006)
(d) tolerance to pruning	

For effective tree management, to improve local environments, comprehensive and current inventory data are essential. For example, Council tree officers can predict potential problems caused by larger trees using

knowledge of growth rates and maturation height. Considerations in the selection of species for new (or replacement) plantings are summarised in Table 2. Other factors to be considered include: if the species is native – relating to disease resistance; and street width – in relation to traffic and ability to alleviate impacts (City of Sydney, 2011, Nagendra and Gopal, 2010).

Common indigenous species like Eucalyptus are often adapted to soils with low nutrient levels and rapid drainage (City of Sydney, 2011). But the growing conditions in an urbanised area are quite different from natural conditions (North Sydney Council, 2006) so these species may not do well in some urban areas. Conversely, exotic deciduous species are more popular in inner urban contexts, like North Sydney, because they are more tolerant of paved areas. Deciduous trees also have the advantages of being energy saving by providing shade in summer and sun access in winter (North Sydney Council, 2006). In highly developed areas, native vegetation communities are limited and their scale is negligible. Clusters of trees are largely planted around places such as schools, churches and parks. While in less developed areas, the density of native vegetation is much higher.

With reduced green reserves in urban areas, the parks around transport corridors have become more important. Compared to paved streetscapes, parks provide better growing conditions, consequently trees in parks normally have longer life spans and are healthier (Marrickville Council, 2010). As public parks are now the few urban habitats remaining that are suitable for trees, it is logical that they be used more intensively for this purpose. However, a lack of data or tree management strategies in some LGAs, as well as the need to maintain other traditional recreational functions of parks, will slow progress towards more intensive management.

Although trees planted along transport corridors are playing a significant role in pollution mitigation, they have often been undervalued in urban planning (Nagendra and Gopal, 2010). In the long term, effective urban forest management requires the local governments to increase expenditure on the renewal and maintenance of street trees and re-planting of trees that are removed by infrastructure development (Nagendra and Gopal, 2010).

Managing and Monitoring with Remote Sensing Technologies

Except in particular circumstances, local government cannot carry out work on trees on private land. But tree data from private land are important in developing urban forest strategies for the whole LGA. Remote sensing provides an accurate, efficient and cost-effective way to collect this information. Aerial photographs are commonly used to map and calculate canopy coverage and i-Tree is another tool used by local government to estimate the environmental benefits provided by their urban forest. But i-Tree has limitations, it can only provide averaged value estimates, usually based on local weather and pollution data and location databases for a whole city. As physical environments within LGAs vary widely, using i-Tree cannot provide accurate information for small local environments and it is difficult to identify problems at a specific location.

Remote sensing technologies are currently used in various ways in different LGAs and although some methods are relatively expensive, they show great potential for wider usage. North Sydney Council uses remote sensing data, such as aerial photographs, to get information on overall canopy cover within its area (North Sydney Council, 2006). Lane Cove Council uses aerial photography only to locate trees, prior to site inspections, and does not use LiDAR for tree management. Ku-ring-gai Council uses aerial photography and LiDAR to map woody vegetation coverage of its LGA; LiDAR data is also used to determine height of its vegetation communities. The Urban Forest Strategy of Marrickville Council set a high priority on using aerial photographs to assess the existing percentage of urban forest canopy cover and change each decade from 1980 until 2010 (Marrickville Council, 2010). Strathfield Council has an aerial photo of the municipality with the trees being roughly plotted and with notes from an inspection undertaken in 2005.

These technologies are now capable of providing faster, efficient monitoring of urban forest dynamics at landscape level (Myeong et al., 2006). Aerial photographs are now readily available and inexpensive, providing a cost effective tool to assist urban forest management by local government. LiDAR shows greater potential in future planning and management since it can provide precise data of tree height, crown width, basal area, crown base height and crown volume (Kato, 2008).

Summary and Recommendations

Management of urban forests is another issue that will inevitably grow in significance in planning. In combination with traditional field measurements, remote sensing techniques can be used to build comprehensive urban forests inventories more rapidly. Using this multi-temporal data not only enables forest changes to be monitored (Myeong et al., 2006) but, for the first time, permits detailed investigation of interrelationships between urban forests and structures. This will improve planning for pollution mitigation and energy use.

This paper uses the findings of preliminary surveys and analyses of roadside forests along major road corridors in Sydney, to demonstrate the current situation and types of challenges faced in management of

this resource. Based on these initial studies, several general recommendations, for all councils along these corridors, can be made:

- (a) that adequate resources be allocated to upgrading and/or updating inventory databases, for both roadside and park trees;
- (b) that remote sensing technologies be considered to rapidly accelerate the development of databases and assist in monitoring for more effective management in future;
- (c) that comprehensive programmes of maintenance and new plantings be retained or extended;
- (d) that long-term strategic plans be developed or implemented to expand urban forest on public land in each LGA – by extending plantings of appropriate species on roadsides and increasing connections with park or reserve forest communities.

Much of the discussion is focused at LGA level, as councils have prime responsibility for urban forests; however, the potential of remote sensing, as well as many of the management criteria or strategies and challenges identified, apply equally at broader scales.

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References

- ANDERSON, L. M. & CORDELL, H. K. 1988. Influence of trees on residential property values in Athens, Georgia (U.S.A.): a survey based on actual sales prices. *Landscape and Urban Planning*, 15, 153-164.
- BALDAUF, R., THOMA, E., KHLYSTOV, A., ISAKOV, V., BOWKER, G., LONG, T. & SNOW, R. 2008. Impacts of noise barriers on near-road air quality. *Atmospheric Environment*, 42, 7502-7507.
- BECKETT, K. P., FREER-SMITH, P. & TAYLOR, G. 2000a. Effective tree species for local air quality management. *Journal of Arboriculture*, 26(1), 12-19.
- BECKETT, K. P., FREER-SMITH, P. H. & TAYLOR, G. 2000b. Particulate pollution capture by urban trees: effect of species and windspeed. *Global Change Biology*, 6, 995-1003.
- BENNETT, A. F., INTERNATIONAL UNION FOR CONSERVATION OF, N., NATURAL, R. & PROGRAMME, I. F. C. 1999. *Linkages in the landscape: the role of corridors and connectivity in wildlife conservation*, IUCN--the World Conservation Union.
- BENNETT, G., MULONGOY, K. & SECRETARIAT OF THE CONVENTION ON BIOLOGICAL, D. 2006. *Review of experience with ecological networks, corridors, and buffer zones*, Secretariat of the Convention on Biological Diversity.
- BRACK, C. L. 2002. Pollution mitigation and carbon sequestration by an urban forest. *Environmental Pollution*, 116, 195-200.
- CITY OF SYDNEY 2011. Street Tree Master Plan 2011: Part B - Tree Species Selection. Sydney: City of Sydney.
- HOLLAUS, M., MÜCKE, W., HÖFLE, B., DORIGO, W., PFEIFER, N., WAGNER, W., BAUERHANSL, C. & REGNER, B. 2009. Tree species classification based on full-waveform airborne laser scanning data. *9th International Silvilaser Conference*. Texas A&M University, College Station, Texas, USA.
- HOLMGREN, J., PERSSON, Å. & SÖDERMAN, U. 2008. Species identification of individual trees by combining high resolution LiDAR data with multi-spectral images. *International Journal of Remote Sensing*, 29(5), 1537-1552.
- JUNG, S.-E., KWAK, D.-A., PARK, T., LEE, W.-K. & YOO, S. 2011. Estimating crown variables of individual tree using airborne and terrestrial laser scanners. *Remote Sensing*, 3, 2346-2363.
- KATO, A. 2008. *Capturing tree crown attributes from high resolution remotely sensed data*, University of Washington.

- LAVERNE, R. J. & WINSON-GEIDEMAN, K. 2003. The influence of trees and landscaping on rental rates at office buildings. *Journal of Arboriculture*, 29(5), 281-290.
- MARRICKVILLE COUNCIL 2010. Marrickville Urban Forest Strategy. Sydney: Marrickville Council.
- MCPHERSON, E. G. 2000. Urban forests and climate change. In: ABDOLLAHI, K. K., NING, Z. H. & APPEANING, A. (eds.) *Global climate change & the urban forest*. LA: GCRCC.
- MOFFIET, T., MENGERSEN, K., WITTE, C., KING, R. & DENHAM, R. 2005. Airborne laser scanning: exploratory data analysis indicates potential variables for classification of individual trees or forest stands according to species. *ISPRS Journal of Photogrammetry & Remote Sensing*, 59, 289-309.
- MYEONG, S., NOWAK, D. J. & DUGGIN, M. J. 2006. A temporal analysis of urban forest carbon storage using remote sensing. *Remote Sensing of Environment*, 101, 277-282.
- NÆSSET, E., GOBAKKEN, T., HOLMGREN, J., HYYPPÄ, H., HYYPPÄ, J., MALTAMO, M., NILSSON, M., OLSSON, H., PERSSON, Å. & SÖDERMAN, U. 2004. Laser scanning of forest resources: the Nordic experience. *Scandinavian Journal of Forest Research*, 19, 482-499.
- NAGENDRA, H. & GOPAL, D. 2010. Street trees in Bangalore: Density, diversity, composition and distribution. *Urban Forestry & Urban Greening*, 9(2), 129-137.
- NORTH SYDNEY COUNCIL 2006. Street Tree Strategy 2006. Sydney: North Sydney Council.
- NOWAK, D. J. & CRANE, D. E. 2002. Carbon storage and sequestration by urban trees in the USA. *Environmental Pollution*, 116, 381-389.
- NOWAK, D. J., CRANE, D. E. & STEVENS, J. C. 2006. Air pollution removal by urban trees and shrubs in the United States. *Urban Forestry & Urban Greening*, 4, 115-123.
- NOWAK, D. J., MCHALE, P. J., IBARRA, M., CRANE, D., STEVENS, J. C. & LULEY, C. J. 1998. Modeling the effects of urban vegetation on air pollution. In: GRYNING, S.-E. & CHAUMERLIAC, N. (eds.) *Air Pollution Modeling and Its Application XII*. New York: Plenum Press.
- PATENAUDE, G., HILL, R. A., MILNE, R., GAVEAU, D. L. A., BRIGGS, B. B. J. & DAWSON, T. P. 2004. Quantifying forest above ground carbon content using LiDAR remote sensing. *Remote Sensing of Environment*, 93, 368-380.
- PITTENDRIGH SHINKFIELD BRUCE PTY LTD 2005. Final Burwood Council Street Tree Management Strategy. Sydney: Burwood Council.
- POPESCU, S. C. 2007. Estimating biomass of individual pine trees using airborne lidar *Biomass & Bioenergy*, 31, 646-655.
- POWE, N. A. & WILLIS, K. G. 2004. Mortality and morbidity benefits of air pollution (SO₂ and PM₁₀) absorption attributable to woodland in Britain. *Journal of Environmental Management*, 70, 119-128.
- SANDER, H., POLASKY, S. & HAIGHT, R. G. 2010. The value of urban tree cover: A hedonic property price model in Ramsey and Dakota Counties, Minnesota, USA. *Ecological Economics*, 69, 1646-1656.
- SECORD, J. & ZAKHOR, A. 2007. Tree detection in urban regions using aerial LiDAR and image data. *IEEE Geoscience and Remote Sensing Letters*, 4(2), 196-200.
- SHAN, J. & SAMPATH, A. 2005. Urban DEM generation from raw lidar data: a labeling algorithm and its performance. *Photogrammetric Engineering & Remote Sensing*, 71(2), 217-226.
- SIMPSON, J. R. 2002. Improved estimates of tree-shade effects on residential energy use. *Energy and Buildings*, 34, 1067-1076.
- ZHANG, Z., LIU, X., PETERSON, J. & WRIGHT, W. 2011. Cool temperate rainforest and adjacent forests classification using airborne LiDAR data. *Area*, 43(4), 438-448.

The Shock of the Huge: Teaching Urban Planning through Experiential Learning in Large Classes

Carolyn Whitzman¹ Crystal Legacy² & Catherine Harris¹

University of Melbourne¹ & University of New South Wales²

Abstract

The advantages of teaching urban planning through providing 'real life' problem-based experiences have long been discussed with Australian and international planning schools (Tyson and Low, 1987; Kotval, 2003; Budge and Butt, 2009). However, most of the examples described in this research are from small classes, such as intensive design studios. What happens when you have 250 students in an undergraduate subject, all of whom are potentially interested in making cities better, but few of whom know anything about planning?

This paper looks at the example of an undergraduate class called 'Cities: from Local to Global' in an interdisciplinary Bachelor of Environments course at the University of Melbourne. The subject introduces urban planning to undergraduates in planning and design, property, and architecture majors. For the past two years, the subject has incorporated experiential learning based on partnerships with the Department of Transport (on improving walkability) and Places Victoria, the state-owned development agency (on resident preferences in an inner suburb undergoing rapid change). Using the data collected by students for their 'clients', student essays, and both formal and informal student evaluations, the challenges and successes of this experiment will be analysed to conclude whether active experiential learning exercises can combat the sense of anonymity and ennui often met with in large lecture-based classes.

Keywords: urban planning, experiential learning, anonymity, large classes

Introduction

The question of 'how urban planning is taught' – both to urban planners in training and also to associated professionals in training (architecture, urban design, civil and transport engineering, property development) - cannot be separated from an evolving understanding of 'how urban planning is changing'. Many recent Australian (Heywood, 2011; Thompson, 2007; Gleeson and Low, 2000) and international (Healey, 2010; UN-Habitat, 2009; Sandercock, 1998) planning texts emphasise that both the teaching and practice of planning must change, in order to address issues of climate change and environmental sustainability; support democratic governance in multicultural cities; and manage economic globalisation and neo-liberal policies, which too often lead to increasing disparities between rich and poor.

Specifically, recent debate over the Planning Institute of Australia's accreditation criteria identified several emerging issues for professional planning education (Gurran *et al*, 2008). The introduction of the Bologna model into Australian tertiary education at the University of Melbourne crystallized debate over whether a generalist undergraduate education, followed by a postgraduate professional qualification, was necessary or even desirable for professional planners (Gurran *et al*, 2008: 14; see also Whitzman, 2009). The ongoing tension between industry needs and rigorous scholarly enquiry is far from resolved (Gurran *et al*, 2008: 16), and informs questions such as whether professional industry placements and work experience should be an essential part of planning education. A further issue is the extent to which planning education engages with local issues, legislation, and initiatives, compared to the extent to which planning education can produce global citizens, capable of practising as planners in other countries (Whitzman, 2009; see also Faludi, 2009 and Sandercock, 1998).

One area of both continuity and relative consensus is the importance of experiential learning in planning education. Experiential learning encompasses activities such as fieldwork, design studios dealing with real-life problems, community service, work placements, and working on projects for professional and/or community clients (McKeachie, 1999; Baldwin and Rosier, 2009). The principles involve a movement from concrete observation of real problems in real sites, to observation and reflection that usually includes some background theory or policy readings, to formulation of abstract concepts and principles, to testing in new situations (Tyson and Low, 1987; Baldwin and Rosier, 2009). The purpose of experiential learning is to encourage students to take an active role in formulating and modifying ideas, through connecting existing knowledge to the real world context (McKeachie, 1999). Through experiential learning, students should develop transferrable problem-solving skills that will serve them well in their careers, including time management, independent learning, working effectively with others, and evaluating different approaches to problems (Kotval, 2003; Baldwin and Rosier, 2009). McKeachie (1999: 155) adds that one goal of

experiential learning is to encourage service to others – the notion that learning is not abstract, but part of a normative assumption that professionalism should include meeting community needs. This is echoed by Kotval (2003) who argues that experiential learning can also include an element of community outreach which includes working with communities to address a particular planning need.

The advantages of teaching urban planning through providing 'real life' problem-based experiences have long been discussed with Australian and international planning schools (Tyson and Low, 1987; Kotval, 2003; Butt and Budge, 2009; Baldwin and Rosier, 2009). But most of the examples described in this research are from small classes, such as intensive design studios where the student number better support activity-based learning exercises. The question remains, what happens when you have 250 students in an interdisciplinary undergraduate subject, all of whom are potentially interested in making cities better, but few of whom know anything about planning?

This paper presents a case study of a second year undergraduate subject called 'Cities: from Local to Global' (CLG) offered at the University of Melbourne. CLG introduces urban planning to students in planning and design, property, and architecture majors, and is also popular with students from all majors, as it has no prerequisites. In 2011 and 2012, the authors embarked on an ambitious experiment to integrate real life problem based experiential learning into this subject.

Using student essays, the formal student evaluation at the end of class, and informal feedback from students and clients (tutors requested some of their more involved students to reflect on the experience via email), the challenges and successes of this experiment are analysed. The two questions for this paper are first, do active experiential learning exercises combat the sense of anonymity and disconnection often met within large lecture-based classes; and second, what do these client-based exercises teach both potential planners, and those interested in associated professions, about planning?

Experiential Learning in 'Cities: from Local to Global'

CLG was introduced in 2009, as part of the second year subject offerings in the Bachelor of Environments course. The Bachelor of Environments is one of six 'New Generation' courses that replaced 96 courses and professional degrees, in a radical restructuring of the undergraduate program at the University of Melbourne. While many of the undergraduate courses resemble generalist courses in North America or Europe (Arts, Science, Commerce), the Environments course describes itself as a "unique program that brings together science, technology, design and the social sciences" (University of Melbourne, 2012). First year subjects are intended to expose students to both environmental issues (through the core subject 'Natural Environments') and human responses (through the core subject 'Reshaping Environments').

There are 11 majors in the course. CLG is a second year required subject in two majors - Planning and Design, and Property. The subject has increased in popularity over the four years it has been provided: from 110 students in 2009, to 250 students in 2012. This increase in numbers is due to the increasing popularity of the Bachelor of Environments course: in 2012, there were 96 students in the Property major in the subject, 62 in the Planning and Design major, smaller numbers from the other majors (such as Architecture), and only 18 students from other courses such as Arts or Science.

In their first year of studies, students enrol in the subject 'Urban Environments'. This subject introduces students to urban history (how cities have formed and expanded), the use of environmental resources at the urban level, and population and social dynamics. CLG, to some extent, builds on this first year subject, by providing "an introductory understanding of current social, economic, environmental, and cultural concerns in cities and their relation to planning processes and outcomes" (Whitzman, 2012). The emphasis, thus, is on 'what are the challenges cities face' and 'why planning is important in meeting these challenges', rather than 'how to plan'.

The authors have coordinated and/or acted as senior tutors for the subject since its inception in 2009. Over the past four years, the subject has engaged students in three major assignments which focus on 'why planning is important': the first at the 'local' scale, the second at the 'metropolitan' scale, and the third at the 'global' scale. The first assignment looks at neighbourhood determinants of liveability, with a focus on walkability and sense of safety. The second assignment has, in the past, involved a field trip to both a greenfield development and an urban regeneration site, with an emphasis on how well urban planning is working to make these communities a better place to live. The third assignment has been an essay identifying a good practice from another city and how it could be applied to Melbourne.

In 2011, we embarked upon an experiential learning exercise to further bridge theory and practice in the classroom, by engaging in a partnership with the Department of Transport to determine some of the very local determinants of walkability. This partnership continued into 2012, and was supplemented by another partnership with the state-owned urban renewal authority, Places Victoria, in 2012. The students first undertake fieldwork, gathering data for their 'clients'. For the Department of Transport, teams of two students undertook two hour shifts in a dozen sites over two days to count pedestrians and provide site audits of

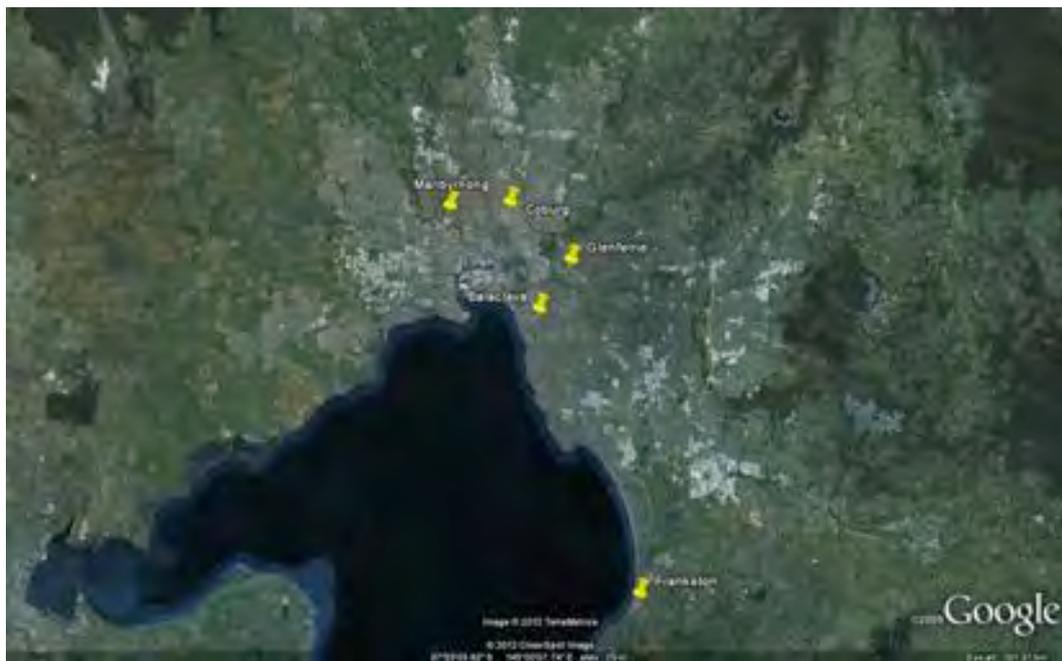
walkability. For Places Victoria, teams of two students undertook two hour shifts administering a street survey in Footscray over two weekends. The students then wrote individual essays based on their fieldwork, discussing how planners can best improve walkability in the first essay, and how planners can best improve social equity outcomes as part of redevelopment in their second essay. To echo Dorsey (2001: 124 original emphasis), the university-community (in this case, government) partnership is an experiential exercise creating a reflective environment for students to consider *'where* problems exist or *where* solutions might be applied'. The following section describes the nature of this partnership and how it facilitated an experimental exercise in large-class applied learning.

Methods

The Department of Transport is undertaking a research methodology called 'Principal Pedestrian Networks' (Department of Transport, 2011). The methods, based on previous identification of Principal Road Networks, Principal Freight Networks, and Principal Bicycle Networks, seek to identify the shortest route that people are likely to take between their home and destination and to map 'walkable' catchment areas around key destination points (e.g. activity centres, train stations) to understand what routes carry the largest number of people walking. Overall the goal is to have more people making shorter trips, help to achieve more activity contributing to overall health levels, and assist in reducing local congestion. The project is part of a broader imperative to better integrate multiple forms of transportation.

In 2011, Carolyn was approached to undertake research related to these methods; she suggested using the undergraduate students in CLG to undertake a large-scale piece of field research. In 2011, the student exercise focused on two middle suburban destination points: Coburg and Balaclava train stations. In 2012, the focus was one middle suburban train station, Glenferrie, and one outer suburban train station, Frankston. While there were some socio-economic status (SES) differences between Coburg (low middle SES) and Balaclava (high middle SES) in 2011, the SES differences between Glenferrie (high SES) and Frankston (low SES and a high crime reputation) in 2012 were more extreme, and led to some student complaints (See Figure 1 for site locations).

Figure 1: Map of Site Locations



The Department of Transport made a presentation during the third week of class, which focused on walkability. In it, they explained the overall purpose of the Principal Pedestrian Strategy and how the student work fit into their research and policy generation.

The field trip component to the exercise was undertaken for two days in the following week, with the CLG students divided into two groups: one focusing on each train station. Students were paired and allocated sites where they engaged in pedestrian counting and pedestrian observations over a two hour period. It was important that the exercise capture peak and off-peaks hours and so the student pairings were staggered over two-hour blocks from 7am to 7pm over the two days. Each pair of students was expected to return one set of pedestrian counts and a set of walkability observations.

The pedestrian counts were entered into an excel spreadsheet, which was provided to the Department of Transport. They analysed the full set of data and gave a summary presentation to the students two weeks later. The students then undertook a 1,500 word essay on how planning was working to improve walkability in the sites where they had done fieldwork.

In the case of Places Victoria, Carolyn Whitzman was approached by a senior manager at the newly re-badged (formerly VicUrban, and before that, Urban Land Authority) state government urban renewal agency. Places Victoria was interested in the challenge of providing affordable family friendly housing in some of the central city neighbourhoods under rapid redevelopment. Carolyn had been finding it increasingly difficult to arrange for an organised field trip to a green field development. This is partly because they are un-serviced by rapid transport, and thus required an ever-increasing number of school busses to reach, and partly because it was increasingly impossible to marshal over 200 students in a guided field trip. Thus it was convenient and effective for students to focus on a self-directed (including responsibility for transport) exercise in a brownfield development. In consultation with Places Victoria, the local council (City of Maribyrnong) and the Department of Planning and Community Development, we decided to undertake a street survey on what community infrastructure might facilitate 'family friendliness' as part of new developments. This built on concurrent consultations with community agencies on community infrastructure needs in relation to redevelopment.

A self-guided field trip was developed, focusing on a proposed new Places Victoria development near the Maribyrnong River. Students were expected to form into pairs and conduct 10 street surveys during a two hour weekend time-slot. The students were organised into shifts over two weekends, in order to avoid 250 surveyors overwhelming the local populace. A 'power panel', including a local developer, the CEO of the local arts centre, a local strategic planner, a state social planner, and a researcher on urban intensification on brownfield sites, gave their differing perspectives on Footscray. Armed with these experiences and with several relevant articles and policy documents, students wrote a 1,500 word essay on how well planning was working to improve liveability in Footscray.

University Ethics and Employee Health and Safety approval was obtained for both pieces of fieldwork. In the case of ethics, the students had fact sheets on the research to hand out to members of the public, with contact information on the 'client' and the coordinator of the subject. Health and safety concerns led to students being paired, and tutors (and the coordinator) taking shifts at the sites during the fieldwork, with students provided with emergency phone numbers.

Findings

In 2011 when the partnership-based approach was first adopted, the exercise drew praise from the students. After every subject, students are encouraged to respond anonymously to an online Student Experience Survey. The response rate for 2011 was 54% and the response rate in 2012 was 53%. Some students enjoyed the activity, noting that "the site visit was exciting" (Student Experience Survey, 2011). Those who praised the activity enjoyed the opportunity to go to a place that took them outside of their comfort zone and to neighbourhoods that have very low walkability indices. They also enjoyed the "real life" dimension to the site visits which the participation of DoT offered. Some students felt that the hands-on experience gave them insight into the practice of planning:

Going out into the field for a walkability audit was also a great opportunity for learning more about the planning profession (Student Experience Survey, 2011).

We had a taste of working in the field of planning. Some hands-on experiences are invaluable (Student Experience Survey, 2011).

One of the key dimensions to the subject was presentations from interested bodies to speak to the students about the importance of walkability. To provide an overview of the significance of walkability the Heart Foundation spoke about the health benefits, while Jenny Donovan a respected urban designer described what constitutes good urban design and how this good design fosters pedestrian oriented spaces. The subject also included presentations from the urban designer and urban planner from the City of Port Phillip (Balaclava) and the City of Moreland (Coburg). They described their current initiatives to design the precinct around their major transport hubs and what strategies their planners were deploying to make these spaces more walkable. A metropolitan-wide perspective provided by the Planning Institute of Australia (Vic) on walkability and liveability informed the students of a movement to create more 'liveable' spaces on the urban periphery. These presentations contextualised the field trip exercise, framing the significance of the walkability audit from a number of perspectives. As one student noted, linking the guest lecturers with the assessment component of the course was valued.

I really enjoyed the style of teaching, and the fact that the content was quite relevant to Melbourne and raised a lot of issues with the future. The assessment in this subject was brilliant, set out well, and was something I actually enjoyed doing as they allowed for creativity. The diversity in the

lectures was also great, especially guest lecturers which mixed it up a bit and brought in different perspectives (Student Experience Survey, 2011).

Students participated in an exercise where their engagement had ramifications to the development of the Principal Pedestrian Network. As such, students commented on the practical relevance of the assessment activities.

Also, I liked that we had guest speakers talking about things happening RIGHT NOW and RIGHT HERE in Melbourne - like the Selandra Rise development and the walkability exercise, so we were constantly being informed of movements in the planning industry, right here in Melbourne (Student Experience Survey, 2011).

The positive written feedback from the students mirrored the student experience survey scores that were received – amongst the highest in the Bachelor of Environments in 2011. Introducing a partnership-based field trip exercise brought a nuanced dimension to teaching this subject. Students found the activity to be well structured and effective as a way of getting the students to experience an urban environment and to see it through a “lens” that they normally would not.

However, there were some challenges. Setting up the two–day, two-site walkability exercise was difficult and time consuming. Scheduling the students into groups of three to undertake a walkability audit in two hour intervals, over a 12 hour period, in two sites, and over two days required precise coordination. It also required a level of trust in the students to complete the task in the manner laid out. To minimise confusion, the lecturer and a representative from DoT were present at each site to act as a check point. This two day walkability audit allowed the lecturer to meet students and to engage students in groups of three in a discussion about the exercise, hence overcoming issues of anonymity. Students upon arrival would sign in and upon their departure, sign out. Students were also guided through the activity with the use of a worksheet.

In 2012, the administration of 250 students for the two field-based exercises remained a challenge. This time, the allocation of groups was conducted using the university's online Learning Management System (LMS) via a group registration tool. From the administration end, the head tutor set up 20 shifts (5 shifts per day, per location) using the tool, and then the students were able to access this tool by logging onto the LMS and individually selecting a shift that best suited them. The registration process continued until most groups were full (there was a limit of 12 or 13 per group). The head tutor then allocated students with common shifts into groups of two or three, entered this information into an excel spreadsheet, and made it available to students on the LMS. Students were expected to contact their group member(s) via e-mail to organise their field visit, made possible by a function of the registration tool that enabled those in the same group to contact each other. However, there were issues with this method. For instance, some students did not communicate effectively with their partners; most had never met each other prior to the field exercise, and since e-mail was the only form of contact, this limited the range of communication. As a result, some students failed to contact their partners prior to the field visit or could not locate each other on site, and ended up completing the field exercise alone. While this issue was partly a lack of initiative and responsibility on the students' part, there were clearly some faults with the initial registration process. Although tutors were present at both Frankston and Glenferrie on both days, there were no set check points at these locations this year. Essentially, the problem of anonymity due to the large class size was not adequately addressed in this particular case.

To rectify the organisational problems of the walkability field exercise, the lecturer and the tutors asked the students informally in class to provide feedback and suggestions as to how the issues raised in the first field exercise might be resolved for the second field exercise in Footscray. To overcome the issue of anonymity between group members, students voiced a preference for forming pairs in their tutorials. This worked well because students already knew each other, they could easily negotiate a time to visit the site, and they could swap phone numbers as well as e-mail addresses. For the second field exercise, students were also required to meet the tutor on site at a specified location to ‘sign in’ prior to their shift. Similar to 2011, this placed greater responsibility onto the students to participate in the exercise and the set meeting place meant students were able to locate their partners without difficulty.

Despite administrative hiccups, student feedback on their learning experiences from the field work was generally positive. The following comments came from two outstanding students who were asked by their tutors to provide a brief, candid account of their overall experience of the field based exercises:

Cities: From Local to Global has given me the opportunity to look at and explore cities in different ways. Interacting with people in different areas of Melbourne and observing the ways they use the built environment were simple methods of gaining a richer understanding of the city [...] (Alex).

As a budding urban planner, sometimes there is nothing more frustrating than feeling like you have been locked inside a classroom for an entire semester. Fortunately, Cities: From Local to Global has

given me the opportunity to step outside the classroom (and at times my comfort zone). Finally, I could apply all that knowledge to the 'real world' [...] (Sarah).

From the above responses it is apparent that the field exercises have enabled students to observe places 'on the ground', and encourage them to think about their own response to planning issues in a more deliberate way, contrary to what may have ensued simply by taking notes in a lecture theatre. Similarly, the most common response emerging from the student experience survey was that practical application of knowledge was a valuable learning tool:

The practical activities were useful in gaining hands on knowledge on how research and statistics are collected in the field, and at a social level [the practical activities] were good to engage with the wider community as well as other students (Student Experience Survey, 2012).

The assignments relating to real life projects, and development happening right now was exciting and enjoyable to take part in. In my opinion, this was the most relevant subject I have taken during the whole undergrad degree. The real life examples of data collection being integrated with research were very valuable (Student Experience Survey, 2012).

Conducting research in the field also provided a beneficial learning experience for international students, who normally would not have as much local knowledge about Melbourne's suburbs as domestic students, as expressed in the comment below:

Site visits [were] the best part [of the subject]. Students should not only focus on books and notes, we should have real experiences to understand. This is not only useful for studying [...] it's useful for overseas students to know about local culture and situation (Student Experience Survey, 2012).

However, not all students shared the same enthusiasm for the field work. Some found the activities to be "time consuming", that weekend hours were "unsociable", and that the data collection was insufficiently aligned with their assignments. The following comments reflect some of the more negative feedback obtained from the student experience survey:

As for the street surveys - I have never been more terrified in my life. Why the University deemed it acceptable to send two small young women to Footscray alone is beyond me [...] (Student Experience Survey, 2012).

[...] did not appreciate spending university time collecting data for other organisations (Student Experience Survey, 2012).

[...] limited slots during the week for undertaking field work meant that anyone who missed out was forced to undertake this during unsociable hours on the weekend, namely 8am on Saturday morning which is extremely difficult for students like myself who must work late on Friday nights to support themselves (Student Experience Survey, 2012).

The use of data collected in the field seemed superficial and did not really feed into the corresponding assignments (Student Experience Survey, 2012).

I feel for the effort put into going out to the field, we didn't really use it in the assignment [...] which felt that the effort was a waste of time and not rewarded (Student Experience Survey, 2012).

Most importantly, what have these field-based exercises taught students about planning? And did they feel like more than 'faces in the crowd'? In order to address this question, samples of students' first and second essay assignments were analysed. The first essay undertaken by the 2012 cohort of students focused on improving walkability and public space in Frankston and Glenferrie and relied heavily on the students' direct observations of pedestrian behaviour and the surrounding urban environment to inform their essays. Students demonstrated the ability to provide concrete examples from specific places based on their observations, using unique approaches. One student provided a very good social determinant-based analysis of privileging safety over walkability around the Swinburne University plaza at the Glenferrie site:

[...] the area has been designed for risk. Security cameras, notices and warnings bombard the user and it creates an uninviting atmosphere and sense of not having the 'right' to use the space. The result is an underused space with so much potential [...] students were simply walking through the area to get from A to B rather than using the space (Sarah 1).

Another student, Sinead, observed that the busiest streets at the Glenferrie site were associated with destinations. Sinead supported her arguments with photographic evidence and was able to integrate class readings into her analysis:

Bowen Street was the most aesthetically pleasing in terms of consistency of streetscape – trees planted and maintained, highest quality footpaths and neatly kept houses – this however did not equate to more people using the street (Sinead).

In Frankston, student Alex noted that:

Only 5-10% of pedestrians observed used the landscaped side of [Beach] street. Also any pleasantness created by lawn, trees and native grasses is lost due to this space's proximity to the noisy freeway entrance. TAFE students and staff use this space during breaks. They are provided with inadequate seating and forced to cross the busy road dangerously to get to the shops on the other side (Alex).

These observations are directly tied in with an analysis of the Department of Planning and Community Development's (DPCD) (2011) report, 'Renewing Frankston's City Centre', in which Alex recognises their efforts to improve the local pedestrian environment, but yet also promote increased car parking and entry points to the Nepean Highway. In his essay, Alex demonstrated an understanding of the difficulties that can arise between conflicting land uses and priorities.

Students had a much more challenging and active role for the second field exercise because they were required to speak with residents and visitors about planning challenges and opportunities in Footscray. For many students, this type of exercise was a step outside their comfort zone, as was the visit to Footscray itself. Having not visited Footscray prior to the field visit, one student was able to overcome preconceived opinions of the suburb, as a result of simply experiencing the place first-hand:

Stepping out of the Footscray train station, armed only with the negative perceptions I had about the area, I was met with a pleasant surprise. Despite the relatively dilapidated physical environment that surrounded me, there was a buzz in the air that made me excited to be in Footscray. This "buzz", I believe, is Footscray's most valuable asset: its distinctive and vibrant culture (Sarah 2).

In the act of speaking to the local Footscray community, another student's expectations were exceeded:

Initially I was worried that people wouldn't be interested and would much rather be doing something else on a Saturday morning than taking part in a survey about the future changes in Footscray. But I was quickly proved wrong. In fact, the challenge proved to be getting a word in edgeways! The locals truly know Footscray, better than any planner that imposes changes from above (Sarah 1).

The students learned that local people have specific knowledge about the places they live, work and socialise in, and that this knowledge is invaluable in the context of planning. Having the opportunity to communicate with people- as opposed to simply observing their behaviour in the urban environment immersed students a little deeper into the realities of planning; that there are other voices to be heard. After conducting the community surveys, many students recognised and incorporated the survey responses into their essays as is shown below:

[...] residents and visitors have revealed during the interview that they are still apprehensive about the safety of the neighbourhood and parks [...] (Hui).

They [the shops and markets in Footscray] were busy and bustling centres of trade and interaction, and were a source of employment for visitors in our surveys. They are an attraction to people from outside Footscray as a number of people mentioned the shops (specialty) as one of the most important aspects of Footscray and something they want continued in further developments [...] (Andrew).

[...] whilst conducting a survey I had the opportunity to speak with a young man who had travelled specifically to the area, from the Melbourne CBD, for a haircut. This man was of African descent and had been told that hairdressers in Footscray "knew their stuff" when it came to styling hair in a way that he liked best (Sarah 2).

What makes the argument for parks and open space so valuable is that it was shown through the street surveys that the residents and visitors to Footscray want this kind of public realm development (Sinead).

Students also had the opportunity to critically analyse the various policy documents relating to Footscray's development. Many students demonstrated confidence in critiquing and questioning the plans; it was observed that students were beginning to question the underlying value systems of the planning profession itself, as well as the motivations behind various stakeholders involved in the impending development of Footscray. This is indicated in the response below:

[...] the participation process in Footscray remains what Mees has termed a 'window-dressing ritual' Street surveys conducted in Footscray show that there is great community concern for affordable housing in the area [...] However, as the discourse analysis of the Joseph Road Precinct and the

Council's Masterplan show the voices from below are being drowned out by the power of neo-liberalism and private investors (Sarah 1).

Ultimately, the client-based approach of CLG has made students aware of the complexity and reality of the planning process, its embeddedness within local socio-political contexts, and the validity of local knowledge in making planning decisions. Students have also demonstrated an ability to reflect on their own experiences, linking the themes of the field work assignments to their more personal knowledge and experience of place, as indicated in the responses below:

What the process has taught me is that local knowledge is valuable to anyone in the planning profession. But it is when it is combined with what we have learnt in the classroom that the most suitable decisions and compromises can be made to benefit the wider community (Sarah 1).

I also relished doing the assignment on housing affordability in Footscray, where I am a resident. Melbourne's west is my adopted home from when I moved to Melbourne and I feel very passionate about issues of socio-spatial equality, which are probably nowhere more evident than on this side of the city, thank you for the opportunity to flesh some of this out (Student Experience Survey, 2012).

Discussion

Both projects offered a unique opportunity to use a 'live' policy relevant exercise as a teaching tool. The activity exposed students to how policy is translated into outcome by engaging in a pilot study where students learned about the data underpinning policy, about data collection techniques, about how to analyse that data and then use that data in a visioning exercise on how these spaces can better serve people. Students also learned how people use cities at a localised scale and how the built form shapes people's behaviour.

Adopting a client-based partnership as a learning tool maximised the educational potential of the exercise and allowed three key aims to be achieved. First, to bridge theory and practice by engaging students in an applied exercise that would take place 'in the field', and drawing on that experience, design a series of subsequent in-class activities to deconstruct and give meaning to the experience. Second, to involve DoT and Places Victoria as the students' clients and establishing a link between the students' field work activity, and the relevance of the data they collected to policy-making. The students were given the chance to participate in a project that fed into a much broader goal of understanding pedestrian mobility and creating urban environments that support walkability. Third, the students were introduced to methodological tools (site audit, head counts, pedestrian observations, street survey) and gained experience in collecting primary data, and then using the data to draw conclusions on how to make cities better.

There is no doubt that this experiential learning required a considerable time investment from both 'clients' and instructors. While the students collected the data, the analysis was left to the clients. The clients provided both a framing guest lecture and a report back on the results of data collection. The turn-around times from receipt of data to delivery of results back to students was two weeks. This was not only 'free work by students', but a considerable commitment by the clients. But in both cases, the clients were thrilled with the results. The DoT used the two year collaboration to successfully apply for a Nation Building Grant further extending their walkability work. All of the local councils used the data in active transport strategies in the year following the data collection. As for Places Victoria, the client expressed her gratitude for the volume and quality of the data received and was very impressed with how "bright and engaging" the students seemed during the panel discussion (Personal email communication, May 23, 2012). Not only do both clients want to participate in 2013, the work has spun out to other successful research opportunities for instructors.

One of the most difficult challenges associated with teaching large classes of 100 students or more is delivering a course that is inclusive and engaging of all students. This includes designing activities and assessments that allow students to play to their strengths. CLG is a subject that is willing to remove students from the comfort of the lecture theatre to the relative discomfort to where "the real work of bringing about a better future must take place" (Tallis, 1997 in Campbell, 2012: 143). A subject that attracts students from a broad range of disciplines and the core subject areas of planning, design and construction resulting in a diverse range of students needs to continue to keep student engagement levels high.

The students generally enjoyed getting out of the classroom and experiencing different urban environments. Structuring these visits by undertaking data collection focused the activity by targeting students' attention to particular qualities of space. The activity also included observational analysis of the space they experienced. In doing so, students were able to describe how space is being used, how everyday people act and think about their local environments, and the ways in which planners can make these spaces better.

This paper has examined how the problem of anonymity and ennui can be minimised in large class settings with the introduction of client-based partnerships which bring to the learning environment real-world planning challenges. As McKeachie (1999: 213) posits, the problem of anonymity encountered in large classes can

result in students taking less responsibility for their learning, “a consequence not only damaging to morale and order but also unlikely to facilitate learning”. Student evaluations and essay outcomes presented in this paper indicate an engaging educational exercise that shaped students’ understanding of the procedural aspects of planning (data collection and analysis) and how the physical environments shapes people’s experience of their cities.

CLG is designed to introduce students to planning challenges facing contemporary cities. For those students who have not experienced a wide range of urban environments, and indeed those students that have, integrating a practical component into a subject also allows students to step outside of the lecture hall and to encounter a city of strangers. Students observe how cities work (e.g. how land use and transport interact) and how people use cities (e.g. how the built forms shapes people’s use of the city) giving students greater insight, but also reinforces the notion that to understand cities requires observational analysis of how they work.

Students engage with the cities in which they live and gain firsthand experience of the challenges 21st century planning needs to address. Whilst a common approach to exposing students to real-life problems is through internships and work-placements, the findings of this paper are consistent with Dorsey (2001: 127) who argues that ‘the engaged campus’ is one where students are involved in project based learning that targets substantive planning challenges (e.g. improving walkability and social infrastructure) as well as engaging the community (e.g. Footscray residents, a major developer, State government) in the learning objectives of the subject. Large scale experiential learning exercises are both possible and worthwhile, in teaching large groups of potential urban change agents.

References

- Baldwin, C., Rosier, J. (2009). ‘Evaluating the effectiveness of experiential learning in preparing planning graduates’. Presented at the Australian and New Zealand Association of Planning Schools Conference (ANZAPS), Brisbane, Queensland, September 2009
- Budge, T. and Butt, A. (2009). ‘The Shock of the New: Experimenting with Innovative Methods to Teach Core Curriculum’. Proceedings of the Australian and New Zealand Association of Planning Schools Conference (ANZAPS), Brisbane, Queensland, September 2009
- Campbell, H. (2012). ‘Planning to change the world: Between knowledge and action lies synthesis’. *Journal of Planning Education and Research*, 32(2), pp.135-146
- Department of Transport. (2011). ‘Principal Pedestrian Networks: Developing a Methodology’. Presentation to Cities: From Local to Global, April 2011
- Department of Planning and Community Development. (2011). ‘Renewing Frankston’s City Centre’, Frankston Activities Area Community and Stakeholder Engagement Feedback Report, November 2011
- Dorsey, B. (2001). ‘Linking theories of service-learning and undergraduate geography education’. *Journal of Geography*, 100(3), pp.124-132
- Faludi, A. (2009). ‘A turning point in the development of European spatial planning? The Territorial Agenda of the European Union and the First Action Programme’. *Progress in Planning*, 71, pp. 1-42
- Gleeson, B. and Low, N. (2000). ‘Australian Urban Planning: New Challenges, New Agendas’. Sydney, Australia, Allen & Unwin
- Gurran, N., Norman, B., Gleeson, B. (2008) ‘Planning Education Discussion Paper’, prepared for the Planning Institute of Australia, January 2008. Available online: <http://www.planning.org.au/documents/item/67>
- Healey P. (2010). ‘Making Better Places: the planning project in the 21st century. London: Palgrave Macmillan
- Heywood, P. (2011). ‘Community Planning: Sustaining active societies’. Oxford, Wiley-Blackwell
- Jenkins, A. (1994). ‘Thirteen ways of doing fieldwork with large classes/more students’. *Journal of Geography in Higher Education*, 18(2), pp.143-154

- Kotval, Z. (2003). 'Teaching experiential learning in the urban planning curriculum'. *Journal of Geography in Higher Education*, 27(3), pp. 297-308
- McKeachie, W.J. (1999). 'Teaching tips: Strategies, research, and theory for college and university teachers (10th Edition)'. Boston, Houghton Mifflin
- Sandercock, L. (1998). 'Towards Cosmopolis: Planning for Multicultural Cities'. London, U.K, Wiley
- Thompson, S., Ed. (2007). 'Planning Australia: An overview of urban and regional planning'. Cambridge, Cambridge University Press
- Tyson, T. and Low, N. (1987). 'Experiential Learning in Planning Education'. *Journal of Planning Education and Research*, 7(15), pp.15-27
- UN-Habitat (United Nations Human Settlements Programme) (2009) Planning Sustainable Cities: global report on human settlements. London, Earthscan.
- University of Melbourne (2012) Bachelor of Environments. Accessed at <http://www.benvs.unimelb.edu.au/> on 25 May, 2012
- Walker, J.D., Cotner, S., Baepler, P., Decker, M. (2008). 'A delicate balance integrating active learning into a large lecture course'. *CBE-Life Sciences Education*, 7, pp. 361-367
- Whitzman, C. (2012). Cities from Local to Global subject manual. Melbourne, The University of Melbourne
- Whitzman, C. (2009). Reinventing Planning Education'. *Australian Planner*, 46(1), pp.14-21

Teaching planning beyond the national context: pedagogic analyses of international fieldtrip experiences

Tan Yigitcanlar

Queensland University of Technology

Abstract

Urban and regional planners, in the era of globalization, require being equipped with skill sets to better deal with complex and rapidly changing economic, socio-cultural, political and environmental fabrics of cities and their regions. In order to provide such skill sets, urban and regional planning curriculum of Queensland University of Technology (Brisbane, Australia) offers regional planning practice in the international context. This paper reports the findings of the pedagogic analyses from the regional planning practice fieldtrips to Malaysia, Korea, Turkey, Taiwan, and discusses the opportunities and constraints of exposure of students to regional planning practice beyond the national context.

Keywords: Internationalization of education, international fieldtrips, trans-cultural engagement, urban and regional planning education

Introduction

In the era of globalization with rapidly changing economic, socio-cultural, political and environmental conditions, urban and regional planners need to become more resilient, innovative and be able to better deal with the complex and complicated nature of cities and their regions. Urban and regional planning ('planning' in short) education plays a fundamental role in training and forming planning practitioners to be able to tackle such problem. In the globalizing and rapidly changing world, trans-cultural engagement has demonstrated its potentialities for planning education and practice to become more attentive to the diversity and change management (Abramson, 2005). Along with this, the need to internationalize planning education has been widely recognized by various associations such as the North American Association of Collegiate Schools of Planning, Association of European Schools of Planning, Australian and New Zealand Association of Planning Schools, and Planning Institute of Australia (Frank, 2006).

Reid and Loxton (2004) stressed that from the student perspective internationalization can mean the experience of visiting a different country, learning about contrasting ways of living and thinking, and perhaps integrating these experiences into their own value systems. This seems to reflect closely on the wider strategies of many universities, which seek to prepare students to live and work in a global and multicultural society, with cultural and environmental sensitivity, understanding and communicative competencies (Reid & Loxton, 2004). In this perspective, international fieldtrips represent a widely regarded and useful delivery mechanism for such enriching educational experience and competencies, where students can learn via first hand experiences (Fuller *et al.*, 2006; Houser *et al.*, 2011). This makes international fieldtrip approach one of the 'optimal' models for positive learning outcomes as long as it is linked with the project started in the classroom and continued after the return from the trip (Edwards, 2009).

This paper aims to explore the role of international fieldtrips in cultivating the pedagogy of student experience in the planning practice in the light of the literature and organized fieldtrip exercises. The paper reflects on the learnings from the four consecutive international fieldtrips organized to Malaysia (2008), Korea (2009), Turkey (2010) and Taiwan (2011) based on the analyses results of student focus group interviews, fieldtrip evaluation surveys, informal discussions with the professors and student performance differences between the student groups who participated and not participated to the international fieldtrips. These fieldtrips took place as part of the regional planning practice course of Queensland University of Technology (QUT), Brisbane, Australia, where some of the fourth year undergraduate planning students attended.

The paper is structured in five parts. Following to this introduction, Section 2 presents the summary of the review of the literature on internationalization of higher education, international fieldtrips and student performance, and highlights the benefits of expanding the planning curriculum to incorporate international elements such as fieldtrips. Section 3 reports the purpose and technical details of the course and four international fieldtrips organized jointly by QUT and hosting universities of the visited countries between 2008 and 2011. Section 4 discusses the fieldtrip outcomes in the light of information collected through student interviews, surveys and assignment performances along with discussions with their professors. Section 5 concludes by highlighting the opportunities and constraints of exposure of students to regional planning practice beyond the national (Australian) context.

Internationalization of education, international fieldtrips and student performance

Globalization and the ascendancy of the knowledge- and service-based marketplace have had a profound impact on the economic, socio-cultural, political and environmental contexts, and consequently resulted in a trend towards growing reflexivity within the higher education system (Yigitcanlar, 2011). According to Khan (2009), “[g]lobalization requires interaction with different regions and various cultures and this is leading universities to redefine the direction of their courses and the graduate attributes to be pursued. Economic and cultural pressures associated with globalization have created a concern for a workforce that is globally aware and employable in cross-cultural settings... In order to remain competitive, universities feel the need to internationalize their course content” (p.1).

According to Coates and Edwards (2009), graduates need to be conscious of increasing diversity in their social and organizational surroundings; and have the skills and knowledge that will allow them to be better prepared for local and global citizenship. Knight and Wit (1997) defined internationalization of higher education as a ‘proactive’ response to globalization. Writing from a North American perspective, Ali and Doan (2006) referred to recent efforts to internationalize planning education to provide students with a fundamental multicultural understanding. They indicated that this emerging trend has led many universities to develop internationalization strategies, as part of an effort to recruit a greater proportion of international students and staff. However, these approaches to internationalizing higher education have been criticized by some who argue that such a shift involves more than just marketing the university to attract foreign students and staff (Wende, 2001). According to Knight (2003), internationalizing the university system requires “integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education” (p.2), and therefore, recommends increasing foreign research collaborations, establishing international didactic partnerships and expanding the curriculum to incorporate international elements. Whilst, support for the internationalization of the university curriculum has increased significantly in recent years, the internationalization of higher education is arguably still in its infancy (Back *et al.*, 1996). This, hence, invites a greater collaborative effort from academic communities.

Internationalization, originating from within the planning academy itself, is an expanding movement towards further developing international research partnerships, enhancing the international perspectives of university programs, and even incorporating specialized international planning subjects into the syllabus. The scholarly assumption appears to be that internationalizing the planning curriculum provides an opportunity to introduce diversity, multiculturalism and cultural differentiation into education; processes that theorists such as Freidmann (1996) lament to be understudied in planning. Other scholars, such as Goldstein *et al.* (2006), contended that the internationalization of planning education strengthens the foundations of cross-cultural sensitivity in students, which not only ensures they are prepared to meet the expectations of a diverse marketplace, but also equips students with the skills of diversity management required by modern organizations. Correspondingly, Alterman’s (1992) empirical critique of planning practice and education implied that failure to incorporate an international perspective into the university program, limits students understanding of the contexts in which planning practice and education occur cross-nationally; and he recommended educating students about other countries to enhance their appreciation of planning processes.

It is evident in the literature that students who receive an internationally focused higher education are more responsive to global market forces, have enhanced social and cultural awareness, and are better prepared to cope with the ramifications of significant political change (e.g., Knight, 2003; Coates & Edwards, 2009). Furthermore, opportunities for international immersion can expand horizons for students, academic researchers and the broader university institution; achieved through facilitating cooperative working relationships across partner universities and generating high-quality research products, that can be used to both inform professional practice as well as contribute to the advancement of the existing body of applied knowledge (Knight & Yorke, 2004). Some planning theorists (e.g., Abramson, 2005; Goldstein *et al.*, 2006) argue that international immersion provides students with more marketable skills in the workplace, in particularly the ability to apply cross-cultural knowledge, and highlight the value of international fieldtrips in expanding traditional pedagogy and practice to an international setting and understanding. Similarly, Afshar (2001) supported the view that international pedagogical experiences provide the participants with an opportunity to acquire knowledge through action across a broad range of institutional and cultural contexts; and is invaluable to the development of a reflective planning practitioner.

Abramson (2005) underlined the usefulness of a series of intense fieldtrips integrated with a continuous relationship of academic exchange and ongoing research to engage students and academics from both countries as a means for discovering the differences in planning culture that exist across nations. He saw that in the foreseeable future the effectiveness of planning professionals would largely depend on the ability of their work to transcend international boundaries, and stated “as greater numbers of planning consultancies practice across national borders, the local embeddedness of actual planning conditions presents a major problem for the training of planning professionals” (p.101). On this point, Taylor and Finley

(2011) highlighted the value addition of international fieldtrips not only by enhancing teaching and learning capabilities, developing research partnerships and widening organizational resources; but also, equipping students with the skills and knowledge to function professionally across diverse cultures.

Similarly, Ali and Doan (2006) identified international fieldtrips to be one of the most innovative methods of enhancing student understanding of planning processes and complexities of diverse cultural, economic and political systems. They emphasized that this type of pedagogical experience constitutes an effective application of integrating an international perspective into the curriculum; as it creates international research partnerships for the development of intercultural skills and understanding of global processes, rather than just marketing the university's programs and students internationally.

International fieldtrips are widely claimed and regarded as an important part of the higher education experience that students have a first-hand, hands-on and problem-based real-world learning experience in a different setting than their own country (Hefferan *et al.*, 2002; Pawson & Teather, 2002; Stronkhorst, 2005; Hovorka & Wolf, 2009). In order to scientifically prove these claims, Houser *et al.* (2011) undertook an objective analysis of student comprehension and retention of course material through a comparison of test performance between students who participated in an international fieldtrip and their peers who did not. The findings of this study revealed that international fieldtrips improve cognitive learning. They stated, "[t]he key finding of this study is that fieldtrip students [received] significantly higher exam scores, as compared to their peers not involved in the study abroad fieldtrip... Fieldtrips have significant social and affective outcomes that contribute toward improved learning outcomes and test performance" (p.526).

In summary, while there are various means that are employed by universities to internationalize their course content, an increasingly popular means of internationalizing the content of education is the incorporation of fieldtrips into the curriculum. International fieldtrips, thus, have the potential to play a significant role in helping universities to respond to the demands of globalization and rapidly changing economic, socio-cultural, political and environmental conditions. Depending on how well they are organized, fieldtrips can be academically rigorous and can create a cultural experience useful in the globalizing world, and the exposure provides an opportunity for students to develop their inter-cultural competence. As Khan (2009) stated, this is a valuable attribute for planning professionals, making them job ready for an expanding and increasingly international job market.

Evaluating the learning outcomes of international fieldtrips

Regional planning practice course (UDB474) of the urban and regional planning undergraduate program (UD40) at QUT offers fourth year planning students an opportunity to develop their knowledge and skills for effective strategic planning and coordination of a positive metropolitan regional change in an international context. Since 2008, each year this course has been choosing a metropolitan region from abroad as a case study for students to: (i) demonstrate an understanding and capability to apply planning theories and principles; (ii) review planning methods critically; (iii) create effective strategic development frameworks, and; (iv) integrate and apply the practice material taught. This course includes an international fieldtrip of about two-weeks to the metropolitan region under investigation.

These international planning exercises were specifically designed to enhance teaching and learning capacities, develop teaching partnerships and provide students with skills and competencies to function professionally in a multicultural context. As part of this course, between 2008 and 2011, four international fieldtrips were organized to Kuala Lumpur (Malaysia), Daejeon (Korea), Gallipoli (Turkey) and Taipei (Taiwan) from Brisbane (Australia). As recommended by Edwards (2009) these international fieldtrips were planned as 'the optimal model' for positive learning outcomes by being linked with the project started in the classroom and continued after the return from the trip.

From each year's regional planning practice class, where approximately 80-90 students enrolled, up to 30 of them, based on first come first served method, has been chosen to participate in the international fieldtrips (for the enrolment numbers see Table 5). During the first three deliveries of the course (2008-2010) while international fieldtrip participants' project focused on the international metropolitan region they visited, a local project from the local metropolitan region (Brisbane) has been assigned to the rest of the class as their study region. At the last delivery of the course (2011) the entire class took the same international metropolitan region (Taipei) as the case study area.

Planning and preparation of fieldtrip activities commenced about a year before the trip and continued in strong collaboration with hosting universities. Several funding resources from QUT were channeled for these trips to become as affordable as possible for the participating students. In all four fieldtrips while students covered the cost of their own air travel, their accommodation, meals, travel insurance and fieldtrip related technical expenses were covered by QUT, and the hosting universities covered the local transportation, local seminar and forum speakers' expenses and venue hiring costs.

The fieldtrip destinations were carefully selected considering the following key criteria: (i) study region providing a unique real-world planning problem that would help students to enrich their comprehension of planning issues beyond Australia; (ii) data and information availability of the study region in English; (iii) good ties with the hosting institutions, which secures the local delivery and quality of lectures, workshops, site visits and surveys; (iv) participation of local university professors and students to the activities, and; (v) affordability of the fieldtrip for students. Table 1 lists the details of the international fieldtrips and participants.

Table 1. International fieldtrips and participants

	Kuala Lumpur, Malaysia	Daejeon, Korea	Gallipoli, Turkey	Taipei, Taiwan
Visiting universities	QUT	QUT	QUT	QUT
Hosting universities	IUM	HNU	ITU & COMU	NTPU
Year of fieldtrips	2008	2009	2010	2011
Length of fieldtrips in days	9	10	15	13
Length of the project in weeks	13	13	14	14
Visiting university students	16	28	25	25
Hosting university students	29	19	18	12
Total students	45	47	43	37
Visiting university professors	3	3	5	4
Hosting university professors	4	5	3	4
Total professors	7	8	8	8
Total fieldtrip participants	52	55	51	45

Note: QUT (Queensland University of Technology), HNU (Hankyong National University), NTPU (National Taipei University), ITU (Istanbul Technical University), IUM (International Islamic University of Malaysia), COMU (Cerrahkule Onsekiz Mart University)

These fieldtrips were collaborative exercises organized jointly by visiting (QUT) and hosting universities and scheduled for the first two weeks of the semester – at the last week of July and first week of August every year between 2008 and 2011. During this period, visiting students (in total 94 QUT students) worked with hosting university students (in total 78), under the supervision of professors (in total 15 from QUT, 16 from hosting universities) in collecting the relevant information for preparing regional development plan proposals at the following 12 weeks after the fieldtrip. Regional planning practice course, in terms of outputs, consisted of a regional appraisal (fieldtrip report), regional activity analysis report (expanded version of fieldtrip report including review of the relevant literature), and regional development plan proposal (plan and accompanying report detailing vision, objectives, key development strategies and actions). During the fieldtrips, students of visiting and hosting universities worked in groups under the supervision of their professors to prepare the first output of the course (i.e., fieldtrip report) and participated in the activities listed in Table 2.

Table 2. International fieldtrip activities

	Kuala Lumpur, Malaysia	Daejeon, Korea	Gallipoli, Turkey	Taipei, Taiwan
Pre-trip lecture			✓	✓
Icebreaker workshop	✓	✓	✓	✓
Introductory lecture	✓	✓	✓	✓
Health and safety inductions		✓	✓	✓
Visiting and hosting university professor lectures	✓	✓	✓	✓
Seminars and local expert presentations	✓	✓	✓	✓
Workshops, studio and lab hands-on exercises	✓	✓	✓	✓
Industry and technical visits	✓	✓	✓	✓
Site visits and field surveys	✓	✓	✓	✓
Consultations with local actors and stakeholders			✓	✓
Statistical data collection	✓	✓	✓	✓
Basemap production	✓	✓		✓
Fieldtrip report preparation	✓	✓	✓	✓
Fieldtrip findings presentations			✓	✓
Attending relevant conferences	✓		✓	
Social activities and excursion	✓	✓	✓	✓
Personal free time	✓	✓	✓	✓
Concluding lecture			✓	✓
Fieldtrip evaluation and feedback	✓	✓	✓	✓
Post-trip lecture	✓	✓	✓	✓

Note: Activities evolved from year-to-year due to the nature of projects, collaboration with hosting universities, results of learnings and student feedback.

After the fieldtrips hosting university planning students kept in touch and supported QUT students with additional information and local knowledge. The regional planning practice course, at the end of the semester, culminated with the presentation of the regional development plan proposals prepared for the visited study regions by QUT students. The hosting university students and professors were invited to attend the final presentations. However, due to time and financial constraints attendance of the hosting university student and staff to the final event of the project in Brisbane could not be materialized.

The following section reports the evaluation method, analysis and results of the learning outcomes from the four international fieldtrip experiences including assignment performance differences between the student groups who participated and who did not to the international fieldtrips.

Method, analysis and results

Focus group discussions, interviews, and surveys are among the commonly applied qualitative and quantitative methods in evaluating teaching and learning outcomes (e.g., Isoardi, 2010; Houser *et al.*, 2011). In order to best capture and analyze the opportunities and constraints of exposure of students to international planning practice, the research methodology includes semi-structured interviews with student focus groups and structured fieldtrip evaluation surveys with students. These interviews and surveys (on top of QUT's standard teaching and learning surveys) were conducted at the end of the semester ($n=24$ and $n=77$ respectively). The purpose of waiting about three months after each fieldtrip was to get a much clearer and settled view from the students on what level the international collaboration improved their skills and competencies, and contributed to their professional and personal development. In addition to the focus group interview and survey techniques, a validity check was conducted by involving professors, who attended to these international fieldtrips, through informal discussions on the results of the student interviews and surveys ($n=11$). Lastly, a performance analysis has been undertaken to measure and shed light on the achievements of the international fieldtrip participants in three of the assessment items in comparison to their peers who did not participated in the international fieldtrips.

Student focus group interviews

The first analysis of the research was conducting interviews with selected student participants of the international fieldtrips. Semi-structured interviews were undertaken for each fieldtrip during the last week of the semester with randomly selected six QUT students, forming a focus group, to reflect the outcomes of international fieldtrip experiences ($n=24$).

From these conversations we found out that almost all interviewed students view the international activity as an extremely positive contribution to their professional and personal development. Interviewee #S19 put forward, "[fieldtrip] was an amazing journey in my university education, it made me open my eyes to the issues beyond Australia... This is a perfect experience for engaging us with an overseas real-world practice, while motivating and triggering our curiosity".

Some interviewees reflected on the contributions of learning from problem-oriented fieldwork. Interviewee #S13 (student number 13) stated, "I gained new insights, perspectives and technical skills from this international project, as we worked on an international real-world problem-based project... This project broadened my vision and helped me to see the big picture".

Some interviewees highlighted the contributions of the international social interaction on their technical abilities. Interviewee #S10 stated, "although the fieldtrip was an innovative way of teaching and equipping us with technical experience, the most important aspects of it were to provide us an opportunity of working in international teams, and increasing professional self-confidence levels and developing cross-cultural social skills". Beyond this, especially networking and building new friendships dimensions of the fieldtrips were frequently voiced as a positive method of encouraging student learning while having goodtime and making new friends.

The comments of Interviewee #S23 on his personal observations and suggestions reflect most of the students' common view on this international collaboration. As he said, "the overall fieldtrip was an invaluable experience, I have personally learned a lot from the joint work with my peers [in the visited country]. The trip provided me with an insight into international planning issues, cultural complexities and the importance of governance within the planning framework. I would recommend the trip to all planning students. This type of fieldtrips and experiences broaden our perspectives and create a thirst for learning more about other countries way of planning".

Lastly, the use of new technology and techniques during the project was also mentioned along with interviewees seeing themselves getting equipped with international knowledge in the discipline area, which may lead to overseas employment opportunities.

On the downside, there were some concerns that were considered as constructive comments for the future fieldtrips. There was a repeated comment on the length of the trip to be extended further as the fieldtrip was found not having enough contact time with local professionals to provide students with an opportunity to engage with a wide range of discussion and in-depth analysis. According to Interviewee #S18, "visiting the local planning departments and learning about local planning practice within another country provides a new platform from which I can now look at planning theories and practice in my area, and challenge the accepted norms. However, it would have been great to spend more time with these experts to get a much more detail information on the study region".

Another point was on the cultural and language differences not helping to follow and join discussions and communicate with local people and local activist group representatives. According to Interviewee #S5 "the level of detail we were able to obtain and evaluate didn't always flow down to local policies due to issues such as language differences". Interviewee #S7 agrees on this view and adds on, "the workshop and lecture contents were very good, but sometimes the language barrier was a problem for us to fully follow the lecture and join the discussion afterwards". Interviewee #S2 said, "the activities were good; however they were too focused on the government perspective and needed more focus on community groups and activists, and urban problems that need to be resolved immediately".

The next key issue was related to the organization of the planning practice and policy development collaboration that provides enough time for students to get to know about each others' culture and planning systems. On that matter Interviewee #S12 stated, "[we] probably need a session to explain both universities' education in terms of planning and discussing planning processes in both countries in more detail". On the very same subject Interviewee #S20 underlined the need for a denser collaboration by saying, "more closeness required learning from each other. Thus, this will break the cultural barriers between two university students... Perhaps home-stay during the fieldtrip might be useful".

Difficulty of arranging regular weekly contact time with hosting university students to complete the project following the fieldtrip was raised as a concern. Interviewee #S19 mentioned, "cooperating with [local] students was very helpful for us... [Study region] is extremely sensitive region not only historically but also environmentally and an outside view on the development and protection strategies would make a great contribution. Nevertheless, following this unique and different planning experience it was quite challenging to keep regular online meetings via emails, instant messengers or Skype to further develop the project".

Lastly, beyond aforementioned issues, logistic limitations (particularly in western standards), fieldtrips being physically demanding for some, limited interpersonal skills of hosting university students (most likely due to cultural characteristics or shyness), involving rather a one-way knowledge transfer (concerning of hosting university students), and limited funding for students were mentioned as other key constrains of the fieldtrips.

The following summary, listed in Table 3, was captured from the focus group interviews (2008-2011) as the main issues concerning opportunities and constraints of the fieldtrips.

Table 3. Results of the student focus group interviews

Opportunities	Constraints
• Invaluable and inspiring international experience	• Cultural and language barriers
• Broadened vision and big picture thinking	• Challenging study and interactions with local students
• Learning by real-world practice	• Time constraints limiting experimental learning
• Gained new insights and perspectives	• Limited logistics
• Innovative teaching and learning	• Lack of western standards
• Triggered curiosity and motivation	• Lack of generous funds to cover all expenses
• Improved professional self-confidence	• Limited interpersonal skills or shyness of local students
• New horizons for prospective employment	• Limited local consultation availability
• Learning by practice and while having fun	• Limited in-depth analysis opportunity
• Networking and building new friendships	• Mostly one-way knowledge transfer limiting local student gain
• Professional and personal growth	• Physically demanding fieldtrip program
• Gained new social and technical skills	• Limited regular online meetings with local students after the trip
• Problem-oriented fieldwork	• Limited continuous collaboration with local students after the trip
• Use of new technologies	• No funding for reciprocating local student visit
• Gained teamwork ethics by working in international teams	• Not presenting the final project findings back in the study area

Note: Issues raised by interviewees are filtered and only highly relevant and issues raised by maximum two interviewees are included.

Student evaluation surveys

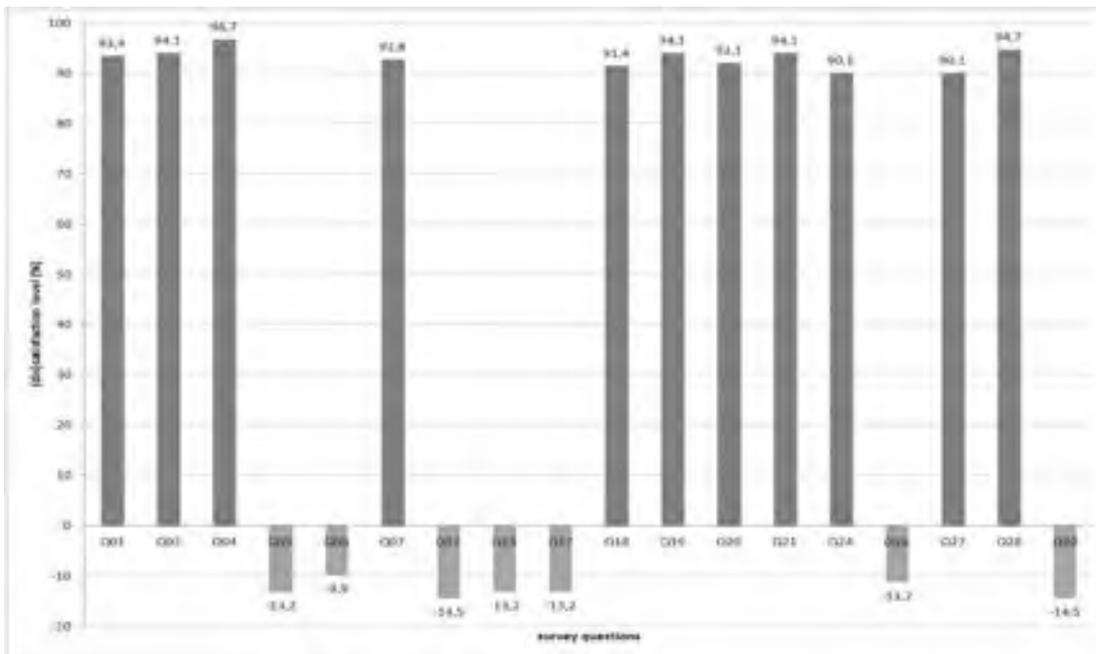
The second analysis was conducting structured surveys with student participants of the international fieldtrips. Survey questionnaires, consisting of 31 questions with five Likert-scale response options, were sent to QUT students by email. The student survey response rates were 81.75, 85.71, 84.00 and 76.00 percents for the Kuala Lumpur, Daejeon, Gallipoli and Taipei fieldtrips, respectively. The four-year average response rate was 81.91 percent ($n=77$). The combined four-year results of the student surveys, undertaken between 2008 and 2011, are presented below in Table 4.

Table 4. Results of the international fieldtrip evaluation surveys

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Total positive responses	Total negative responses
1. Fieldtrip was a valuable experience for my professional growth and development	0.41	0.33	0.04	0.02	0.03	0.93	0.03
2. Fieldtrip was a valuable experience for my personal growth and development	0.45	0.41	0.03	0.03	0.03	0.94	0.03
3. Fieldtrip demonstrates my university education from others	0.30	0.57	0.06	0.01	0.04	0.97	0.03
4. I highly recommend this fieldtrip to other students and universities	0.52	0.45	0.01	0.01	0.01	0.99	0.01
5. Fieldtrip enhanced my qualifications to pursue a professional career domestically	0.35	0.54	0.10	0.01	0.01	0.99	0.01
6. Fieldtrip enhanced my qualifications to pursue a professional career internationally	0.22	0.56	0.11	0.01	0.01	0.79	0.20
7. Fieldtrip provided me an understanding of alternative sets of planning objectives and	0.40	0.53	0.02	0.04	0.01	0.93	0.05
8. Fieldtrip enabled me to think critically and re-evaluate planning objectives and processes	0.20	0.66	0.00	0.05	0.03	0.50	0.50
9. Fieldtrip enhanced my appreciation of local planning objectives and processes	0.26	0.59	0.09	0.03	0.04	0.54	0.53
10. Fieldtrip enhanced my appreciation of national planning objectives and processes	0.16	0.64	0.09	0.04	0.05	0.31	0.69
11. Fieldtrip enhanced my appreciation of international planning objectives and processes	0.15	0.65	0.11	0.01	0.07	0.60	0.40
12. Fieldtrip equipped me with skills to respond effectively to unfamiliar problems in my	0.33	0.58	0.09	0.01	0.01	0.77	0.23
13. Fieldtrip equipped me with skills to respond effectively to unfamiliar problems in my	0.22	0.55	0.10	0.01	0.04	0.77	0.23
14. Fieldtrip equipped me with the skills to respond effectively to diverse contexts in my professional	0.18	0.61	0.16	0.02	0.03	0.60	0.40
15. Fieldtrip equipped me with the skills to respond effectively to diverse contexts in my university	0.17	0.65	0.15	0.01	0.01	0.62	0.38
16. Planning education in my university performs at high level, domestically	0.23	0.58	0.13	0.01	0.01	0.61	0.39
17. Planning education in my university performs at high level, internationally	0.16	0.44	0.24	0.19	0.01	0.63	0.37
18. Fieldtrip enhanced my understanding of diversity in my social and organisational	0.33	0.59	0.07	0.01	0.01	0.91	0.09
19. Fieldtrip improved my ability to communicate in a multicultural or foreign environment	0.37	0.55	0.01	0.01	0.01	0.94	0.06
20. Fieldtrip improved my ability to communicate with people from different countries or	0.41	0.51	0.05	0.02	0.01	0.92	0.08
21. Fieldtrip helped me build networks and cooperative work with students and faculty from	0.20	0.56	0.04	0.01	0.01	0.94	0.06
22. Fieldtrip helped me build networks and cooperative work with students and faculty from other	0.18	0.53	0.11	0.01	0.01	0.62	0.38
23. Fieldtrip was valuable to my understanding of domestic urban and planning issues	0.17	0.64	0.11	0.01	0.01	0.61	0.39
24. Fieldtrip was valuable to my understanding of international planning issues	0.11	0.67	0.09	0.01	0.01	0.90	0.10
25. Fieldtrip activities were appropriate to achieving an understanding of planning issues	0.12	0.66	0.07	0.02	0.01	0.88	0.12
26. Fieldtrip factors were appropriate for achieving an understanding of planning issues	0.15	0.56	0.10	0.01	0.01	0.71	0.29
27. Students contributed positively to the overall quality of the experience	0.19	0.51	0.07	0.01	0.01	0.90	0.10
28. Professors contributed positively to the overall quality of the experience	0.18	0.57	0.02	0.06	0.01	0.95	0.05
29. Professors were helpful in providing information on the region before the fieldtrip	0.19	0.55	0.11	0.01	0.01	0.74	0.26
30. Professors were accessible for guidance on the program after the fieldtrip	0.19	0.46	0.28	0.01	0.01	0.68	0.32
31. In overall I am highly satisfied from the fieldtrip	0.18	0.56	0.10	0.01	0.01	0.84	0.16

Note: Total positive responses are fully completed (not highlighted in bold), and total negative responses are fully completed (not highlighted in bold).

Perfectly aligned with what McLean *et al.* (2007) put forward, Kuala Lumpur, Daejeon, Gallipoli and Taipei fieldtrips have been perceived as quite attractive, because students, particularly the ‘Y generations’, saw them as opportunities to combine leisure activity (e.g., travelling, seeing new places and expanding social networks) with education (e.g., study away from university and home). The highlights of these results are illustrated in Figure 1, and the main issues from the conducted surveys between 2008 and 2011 are presented and discussed below.



Note: Positive values indicate student satisfaction levels and negative ones dissatisfaction.

Figure 1. Highlights of the international fieldtrip evaluation surveys

In terms of overall findings of the fieldtrips in total 28 percent of the respondents had 'strongly agreement' on the benefits of the planning fieldtrips, where other 56 percent had 'agreement' (total 84% satisfaction rate). The points that students almost had a consensus on (above 90% satisfaction rate) were:

- (Q1) fieldtrip was a valuable experience for my professional growth and development;
- (Q2) fieldtrip was a valuable experience for my personal growth and development;
- (Q4) I highly recommend this fieldtrip to other students and universities;
- (Q7) fieldtrip provided me an understanding of alternative sets of planning objectives and processes;
- (Q18) fieldtrip enhanced my understanding of diversity in my social and organizational surroundings;
- (Q19) fieldtrip improved my ability to communicate in a multicultural or foreign environment;
- (Q20) fieldtrip improved my ability to communicate with people from different countries or cultures;
- (Q21) fieldtrip helped me build networks and cooperative work with students and faculty from my university;
- (Q24) fieldtrip was valuable to my understanding of international planning issues;
- (Q27) students contributed positively to the overall quality of the experience, and;
- (Q28) professors contributed positively to the overall quality of the experience.

There was only in total seven percent of combined 'disagreement' (3%) and 'strong disagreement' (4%) on some of the issues. The main disagreements (above 10% dissatisfaction rate) were (on the other hand, the satisfaction rates range between 63% and 78% for all of these issues):

- (Q5) fieldtrip enhanced my qualifications to pursue a professional career, domestically;
- (Q6) fieldtrip enhanced my qualifications to pursue a professional career, internationally;
- (Q12) fieldtrip equipped me with skills to respond effectively to unfamiliar problems in my professional career;
- (Q13) fieldtrip equipped me with skills to respond effectively to unfamiliar problems in my university education;
- (Q17) planning education in my university performs at high level, internationally;
- (Q26) fieldtrip lectures were appropriate for achieving an understanding of planning issues, and;
- (Q29) professors were helpful in providing information on the region before the fieldtrip.

The results of the surveys overlap perfectly well with the findings of the student focus group interviews. The survey results backed up the interview findings indicating international fieldtrips as a significant contribution

to student learning, professional and personal growth, understanding diversity and international issues, having a big picture perspective and building networks of cooperative work with increased student competency and communication abilities. These outcomes perfectly fulfill the objective of the course and the planning program at QUT. On the downside, constraints raised both at the interviews and surveys point out to firstly, room for improvement in the organization of fieldtrips, and secondly, insufficiency of just one international fieldtrip in the entire undergraduate planning education to build student knowledge, skills and confidence to the highest level on the international planning practice.

Professor interviews

The third analysis of the research was conducted to capture the views of the participant professors on the international fieldtrips and at the same time check the validity of student responses collected by focus group interviews and surveys with these professors. The results from both interviews and surveys were shared with the professors from visiting and hosting universities and then informal discussions held with them either face-to-face or over the internet via tele- or video-conferencing in order to record their feedback on and responses to the findings. In total eight professors from the hosting universities and three from QUT participated to this exercise ($n=11$).

In consensus this group of professors confirmed the validity of student responses and agreed on the highly positive contributions of conducted international fieldtrips to student learning and professional and personal growth. The following views, on the contribution of international fieldtrips to student learning outcomes, most adequately summarize the opinions of the professorial group who participated to the informal discussions and provided their feedback.

According to Interviewee #P3 (professor number 3), “[p]lanning exercises jointly conducted with overseas universities are not only teaching our students the cross-cultural dimensions of the discipline, equipping them with techniques on how to better deal with the urbanization problems of the new century, and increasing their job readiness in the highly globalizing world, but also significantly contributing to their personal development by giving them confidence they need when they face new [and unfamiliar] problems, helping them to think out of the box, increasing their curiosity to learn and research, and becoming more open and respectful to the different cultures, traditions, voices, and perspectives of others”.

Interviewee #P8 stated, “[i]n the world we live in today, taking students out of the country for a problem-oriented fieldwork is the new fashion of taking students out of classrooms for learning by experience... This way, the interaction and learning increases exponentially as a result of experience boosted and triggered by the new, foreign and challenging environment. And [as in this joint planning exercise] it leads to better learning outcomes than most of the traditional classroom-based instruction”.

Student performance analysis

The final analysis of the research was the performance analysis. This analysis was conducted in order to check whether the international fieldtrip actually contributed positively to the learning of the students. The research used the marks student received from their three assignments and the final grade of the course as the metrics of learning (similar to Houser *et al.*, 2011). The analysis, for determining the contributions of the international fieldtrips, compared the marks received between the students who participated in an international fieldtrip and their peers who did not. As mentioned earlier, in the first three deliveries (2008-2010) of the regional planning practice course, local projects were assigned to the part of the class who did not participate in the international fieldtrips. Only at the last delivery (2011) of the course students who did not attend to the international fieldtrip were also asked to take the same international project. In all four deliveries of the course the assessment criteria were kept exactly identical regardless of students involvement in an international project or not.

Table 5 below depicts the student achievement differences, concerning three assignments and the final grades, between those who attended ($n=94$) and not attended ($n=243$) to the international fieldtrips between 2008 and 2011. The results, for the four-year average, indicate over a ten percent (10.34%) improved final grade for those who attended to the international fieldtrip. For the four-year average, when each of the three assignment results were put under microscope, the highest mark increase was recorded in the assignment #1 (17.93%) that is most likely due to the nature of the assessment item (regional appraisal) being a fieldtrip report and prepared with intense engagement of students with the case study region. The lowest increase was recorded for the assignment #2 (5.22%). This is again most likely due to the nature of assessment item (regional activity analysis report including a thorough review of the relevant literature) involving literature review that can be conducted equally as good by the students who did not participated to the international fieldtrip. The second highest performance increase was recorded for the assignment #3 (10.60%). This is also can be explained due to the nature of the assessment item (regional development plan proposal) focusing on the preparation of a development plan for the study metropolitan region.

Table 5. Results of the student performance analysis

	Class of 2008	Class of 2009	Class of 2010	Class of 2011	2008-2011 Average
Students who attended to the international fieldtrip	n=16	n=28	n=25	n=25	n=23.50
Assignment #1 (0-100)	87.71	77.77	81.32	76.36	80.79
Assignment #2 (0-100)	90.71	79.73	81.33	77.04	82.20
Assignment #3 (0-100)	66.25	81.96	83.49	77.09	77.20
Final grade (0-100)	81.56	79.82	80.07	76.83	79.57
Students who not attended to the international fieldtrip	n=71	n=57	n=55	n=60	n=60.75
Assignment #1 (0-100)	77.02	66.39	63.33	67.28	68.50
Assignment #2 (0-100)	84.98	78.11	73.49	75.92	78.13
Assignment #3 (0-100)	56.47	80.05	72.65	70.01	69.80
Final grade (0-100)	72.71	74.85	69.82	71.07	72.11
Assignment performance differences between the two groups	n=87	n=85	n=80	n=85	n=84.25
Assignment #1 difference (%)	13.88	17.15	28.41	13.49	17.93
Assignment #2 difference (%)	6.74	2.07	10.67	1.48	5.22
Assignment #3 difference (%)	17.32	2.38	14.91	10.11	10.60
Final grade difference (%)	12.17	6.64	14.67	8.10	10.34

Note: Assignments values are student group averages, final grades are calculated based on equal weighting of each assignment and group performance differences are calculated in percentages instead of numerical differences.

During all four deliveries of the course, the analysis findings point out to quite a high-level assignment score achievement of the students who participated to the international fieldtrip compare their peers who did not (i.e., between 1.48% and 28.41% increase). These findings are very much in line with Houser *et al.*'s (2011) empirical study findings (students participated in international fieldtrip $n=20$ and who did not $n=365$) that is indicating international fieldtrip's significant contribution to improving test performance through engagement and new social networks.

Conclusion

Learnings from the international fieldtrips reported in this paper confirm, in line with the literature findings, that international study collaborations reinforce the realization of the key objective of urban and regional planning courses – i.e., in the case of QUT: providing knowledge, skills and hands on experiences to students for them to be able to work under diverse urban and regional contexts and be able to respond and address complex urban and regional problems. International fieldtrips set a new dimension in the way both visiting and hosting organizations run their degree in planning and conduct courses particularly that have global implications. These international fieldtrips exposed students to various aspects of planning, their complexities, similarities and differences in an international context that have contributed student learning, competency, skills and capabilities.

The interview and survey results of participating students, performance analysis of the international fieldtrip participants in comparison to their peers who did not participated in the fieldtrips, and informal discussions with professors from visiting and hosting universities highlight the benefits of such international fieldtrips in terms of student learning experience and exposure to different cultural contexts. From the student perspective, the experience has proven invaluable in terms of cross-cultural engagement and developing international networks as for most of the students, being involved in an international exercise was a unique experience in their education and professional career and beyond this in their personal growth. From the professors' perspective, the exposure to different planning processes and practices gave students a new outlook on what they knew from their own country as well as some insights on international planning issues and cultural differences and barriers.

The analyses results revealed that, on the one hand, exposure of students to international planning practice is a big opportunity and incorporating international fieldtrips in the planning curriculum is an effective method for achieving a more holistic educational experience and cultivating the pedagogy of experience, while internationalizing the education. On the other, some of the organization and logistics constraints and challenges need attention to increase the student satisfaction and increasing the success level of prospective international fieldtrips.

Lastly, the outcomes of the international fieldtrip experiences have potentials to shed some light on formulation of the 21st Century planning education considering the challenges of the rapidly changing and globalizing world.

References

- Abramson, D., (2005) The studio abroad as a mode of transcultural engagement in urban planning education. *Journal of Planning Education and Research*, 25(1), pp. 89-102
- Afshar, F., (2001) Preparing planners for a globalizing world. *Journal of Planning Education and Research*, 20(3), pp. 339-52.
- Ali, A. & Doan, P., (2006) A survey of undergraduate course syllabi and a hybrid course on global urban topics. *Journal of Planning Education and Research*, 26(2), pp. 222-236
- Alterman, R., (1992) Transatlantic view of planning education and professional practice. *Journal of Planning Education and Research*, 12(1), pp. 39-55.
- Back, K., Davis, D. & Olsen, A., (1996) *Internationalisation and higher education* (Canberra: AGPS Press).
- Coates, H. & Edwards, D., (2009) *The 2008 graduate pathways survey* (Canberra: Australian Council for Educational Research).
- Edwards, J., (2009) Study at home after study abroad, in: M. Hellsten & A. Reid (Eds) *Researching International Pedagogies*, pp. 115-128 (Dordrecht: Springer).
- Frank, A., (2006) Three decades of thought on planning education. *Journal of Planning Literature* 21(1), pp. 15-67.
- Friedmann, J., (1996) The core curriculum in planning revisited. *Journal of Planning Education and Research*, 15(2), pp. 89-104.
- Fuller, I., Edmonson, S., France, D., Higgitt, D., & Ratinen, I. (2006) International perspectives on the effectiveness of geography fieldwork for learning. *Journal of Geography in Higher Education*, 30(1), pp. 89-101.
- Goldstein, H., Bollens, S., Feser, E. & Silver, C., (2006) An experiment in the internationalisation of planning education. *Journal of Planning Education and Research*, 25(4), pp. 349-363
- Hefferan, K., Heywood, N. & Ritter, M., (2002) Integrating fieldtrips and classroom learning into a capstone undergraduate research experience. *Journal of Geography*, 101(1), pp. 183-190.
- Houser, C., Brannstrom, C., Quiring, S. & Lemmons, K., (2011) Study abroad fieldtrip improves test performance through engagement and new social networks. *Journal of Geography in Higher Education*, 35(4), pp. 513-528.
- Hovorka, A. & Wolf, P., (2009) Activating the classroom. *Journal of Geography in Higher Education*, 33(1), pp. 89-102.
- Isoardi, G., (2010) Evaluating the learning outcomes of an international field trip in postgraduate lighting design courses. *Journal of Learning Design*, 3(3), pp. 37-44.
- Khan, S., (2009) Promoting critical perception of the city through acquisition of third place neutrality. Paper presented at the Australian-New Zealand Association of Planning Schools Conference, Brisbane.
- Knight, J. & Wit, H., (1997) *Internationalization of higher education in Asia Pacific countries* (Amsterdam: European Association for International Education).
- Knight, J., (2003) Updated internationalization definition. *International Journal of Higher Education*, 33(1), pp. 2-3.
- Knight, P. & Yorke, M., (2004) *Learning, curriculum and employability in higher education* (London: Routledge).
- McLean, D., Hurd, A. & Rogers, N., (2007) *Kraus's recreation and leisure in modern society* (Sudbury: Jones&Bartlett).
- Pawson, E. & Teather, E., (2002) Geographical expeditions: assessing the benefits of a student-driven fieldwork method. *Journal of Geography in Higher Education*, 26(3), pp. 275-289.
- Reid, A. & Loxton, J., (2004) Internationalisation as a way of thinking about curriculum development and quality. Paper presented at the Australian Universities Quality Forum, Adelaide.
- Stronkhorst, R., (2005) Learning outcomes of international mobility at two Dutch institutions of higher education. *Journal of Studies in International Education*, 9(4), pp. 292-315.

Taylor, S. & Finley, J., (2011) Adding value to the master of accounting curriculum through an international travel experience. *Global Perspectives on Accounting Education*, 8(1), pp. 47-66.

Wende, M., (2001) Internationalization policies: about new trends and contrasting paradigms. *Higher Education Policy*, 14(1), pp. 249-259.

Yigitcanlar, T., (2011) International regional planning education experience. *Procedia Social and Behavioral Sciences*, 12(1), pp. 70-89.

Studios for the Masses: Can student collaboration replace the master-apprentice relationship in design instruction?

Kelly Zuniga

Queensland University of Technology

Abstract

This action research project investigated the use of a collaborative learning approach for addressing issues associated with teaching urban design to large, diverse cohorts. As a case study, I observed two semesters of an urban design unit that I revised between 2011 and 2012 to incorporate collaborative learning activities. Data include instructional materials, participant observations, peer-reviews of collaborative learning activities, feedback from students and instructors and student projects. Themes that emerged through qualitative analysis include the challenge of removing inequalities inherent in the diverse cohort, the challenge of unifying project guidance and marking criteria, and the challenge of providing project guidance for a very large cohort. Most notably, the study revealed a need to clarify learning objectives relating to design principles in order to fully transition to and benefit from a collaborative learning model.

Keywords: Collaborative learning, studio instruction, pedagogy, urban design

Background and Problem

This action research addresses challenges associated with conducting design units with large, diverse student enrolments. Commercialization of education has resulted in much larger and more diverse enrolments for university classrooms (O'Donovan et al., 2002, Haggis, 2006). This trend is likely to continue. For example, Queensland University of Technology (QUT) aims to increase its overall enrollment by 10% over the next four years, and to increase proportions of disadvantaged students to 16% (QUT, 2011). Although one might reasonably expect a corresponding increase in teaching staff and resources to accommodate such expansion, those kinds of structural changes can be delayed or insufficient to meet immediate needs.

Diverse cohorts magnify the importance of a student-centred instructional approach because students come to the classroom with a wide range of previous knowledge that can prevent them from achieving learning objectives, resulting in high attrition rates (Haggis, 2006). As evidenced by recent building infrastructure and faculty training initiatives, QUT's Science and Engineering Faculty (SEF) is promoting a student-centred instructional approach based on a "collaborative learning" pedagogical model¹⁹ that may help to address issues relating to diversity.

Education literature describes collaborative learning as involving "joint intellectual effort by students, or students and teachers together" (Smith and MacGregor, 1992). It is predicated on an understanding of learning as a hands-on, experiential, and social process (Brown et al., 1989, Smith and MacGregor, 1992). Significantly, literature discussing the benefits of collaborative learning often contrasts the instructor's preferable *facilitating* role with the less-preferred, but traditional *lecturing* role (Bruffee, 1999). In collaborative learning environments, an emphasis on students' discussion of and active engagement with unit material calls for instructors to facilitate intellectual experiences rather than directly transmitting expert knowledge (Smith and MacGregor, 1992).

The 'signature' pedagogy of design-related disciplines seems to fall somewhere in the grey area between those alternatives (Shulman, 2005, Shreeve, 2012). The pedagogical approach is commonly referred to as a 'design studio' in reference to the typically flat, open classroom space equipped with large worktables. Similar to the collaborative learning model, design studios typically engage students with unit material through hands-on, creative, project-based assessments, which may involve varying levels of peer collaboration (Lee, 2009, Shreeve, 2012)

¹⁹ In anticipation of the new Science, Technology, Engineering and Maths (STEM) precinct, which is due to open in late 2012, the ___ has engaged selected lecturers and tutors in the Science and Engineering Faculty (SEF) over the past two years in a community of practice both to learn and to promote collaborative learning pedagogical approaches to match the new style of classrooms.

However, studios traditionally rely on small student-teacher ratios with industry-based instructors to achieve what some authors have described as a master-apprentice relationship (Forsyth et al., 1999). Central to that relationship is the critique (crit) in which each student presents and defends creative work at various stages of development throughout the semester and receives formative feedback and guidance from one or more authoritative design experts (Blair, 2006, Orr, 2005, Oak, 1998). Although the crit essentially constitutes a transmittal of expert knowledge, it differs from the traditional lecture by a tacit quality of learning objectives typical to design, which require individualized attention and direction (Orr, 2010b). That attention may be ideal for a very diverse student cohort, but increasing enrollments and scarce resources make small student-teacher ratios and individualized crits impractical (Haggis, 2006, O'Donovan et al., 2002).

This action research project investigated the use of a collaborative learning approach for addressing issues associated with teaching urban design to large, diverse cohorts. As a case study, I observed two semesters of an urban design unit that I redesigned between 2011 and 2012 to transition from a traditional design studio to a collaborative learning model. Data include instructional materials, participant observations, peer-reviews of collaborative learning activities, feedback from students and instructors and student projects. Based on this investigation, I argue for the need to clarify learning objectives relating to design principles in order to fully transition to and benefit from a collaborative learning model. Following a description of my research methods, I discuss three themes that emerged from the analysis to support that assertion and conclude with recommendations for further study.

Methods

Research Design

Out of necessity, I take keen interest in the transition between the traditional studio model and the collaborative learning model for teaching urban design subjects. As a recent recruit to Queensland University of Technology (QUT) School of Urban Development, I experienced the challenges of conducting studio-based units with large, diverse cohorts firsthand. After one chaotic semester of trying to force a square pedagogical peg into a round institutional context, I embraced what I understood to be a 'collaborative learning model' and restructured the unit accordingly.

For this descriptive study, I used a non-experimental, action research approach to investigate structural and substantive revisions that I made to an urban design unit from 2011 to 2012. My observations and interpretations are influenced by my role as the unit coordinator and instructor for the unit as well as my prior experience as both student and instructor in much smaller studio-based design units in the United States. I posit that this vantage point adds value and not only bias to the study. I will attempt to make the more significant influences of my position explicit throughout this discussion.

Data Collection

The long list of data types for this research begins with the instructional materials (syllabus, assessment briefs, CRAs, lesson plans, etc.) that I have developed for the unit over the two years of the study. The content of these documents, including learning objectives and assessment criteria that I authored and revised under the strict bureaucratic guidance of a regulatory committee, provide insight into my evolving perspective of urban design pedagogy.

As the unit coordinator, I kept a journal of reflections each week over two non-consecutive semesters of the class. Certain foci of my reflections reflect concepts from pedagogical seminars that I attended as an early career academic during the first term, while the content from both terms alternates between critical observations of the unit as a whole, and finer-grained observations of tutors, students, classroom activities and projects. In the second term, I hired a peer (with a design background) to record observations of the collaborative learning activities. Her descriptions, photographs and critical feedback provided an invaluable perspective for me as both an instructor and researcher, in part because I could not be everywhere at once.

During the study period, the University conducted LEX surveys, an official opportunity for students to give both quantitative and qualitative feedback about their experience with the unit itself and about the unit as part of the larger planning degree. Augmenting data from the LEX system, I requested written student feedback at three points during the semester (Pre-semester, Mid-semester, and End of semester), that included open-ended questions about satisfaction with various instructional tools used during each term as well as a scaled rating of the students' self-assessed technological skill (for 2012 only). In the second term, I collated the feedback forms by their individual authors so that I could monitor changes in their confidence with technology over time.

I collected feedback from sessional instructors of each class through informal interviews at several points during the semesters and during final coordination of marking. Two of the three instructors for the first iteration of the class returned for the second year. Therefore, I was able to work with a total of four instructors for this study, not including myself.

Finally, I kept students' projects and grading sheets with summative feedback for both cohorts. The instructors' written feedback proved especially valuable as indirect evidence of their perspective of the subject matter, implicit learning objectives, and of student achievement.

Data Analysis

I used an iterative, 'constant comparative' process to read and analyze qualitative data as well as content from instructional materials (Glaser, 1965). As part of that analysis, I organized and reorganized incidents into various combinations of thematic categories, some defined a priori and others that emerged as patterns in the data. This was essentially a grounded theoretical approach that allowed the experience of the investigation and various patterns in the data to shape a central unifying thesis.

Human Subjects and Ethical Considerations

Because this study required me to observe and analyze students' behaviors and responses in a capacity other than their unit coordinator and instructor, it was requisite that I take steps to protect their anonymity as well as their more specific interests as students. I received official ethical clearance for undertaking and reporting findings from this project, and obtained informed consent from the students as research subjects. In accordance with the ethics clearance, I do not use any students' names in this report.

Setting and Participants

UDB 368 is an urban design unit offered through QUT's school of urban development in the science and engineering faculty (as opposed to the faculty and school of design) one time per year in the first semester (February to May). It is a major requirement for third-year students in the urban and regional planning course, and a minor elective for fourth-year students in the bachelor of design, for architecture and landscape architecture. A very small number of students from other urban development courses (e.g. property economics, quantity surveying) occasionally enroll to satisfy a planning minor elective.

The official learning objectives underwent minor revision from 2011 to 2012, but their gist remained the same:

- That students should be aware of issues, objectives, processes and principles associated with design of urban spaces;
- That students should be able to develop urban design recommendations based on appropriate processes, including site assessment and analysis;
- That students should be able to effectively communicate design recommendations and their rationales to appropriate audiences.

In 2011, the post-drop enrollment for the unit was 76 students, with 7 (9.2%) from design. The sessional budget allowed me to hire three part-time, industry-based instructors, and I acted as a fourth instructor so that each studio group had a ratio of approximately 18:1. The unit was allocated one "collaborative learning" flat classroom and two lecture theatres for the same three-hour block. I declined the two lecture theatres and squeezed the four studio groups into the single flat classroom to ensure that I would have contact time with the entire group, and that each tutorial group would have a consistent studio-style learning environment.

In 2012, the post-drop enrollment had increased by 44.7% to 110 students, with 26 (23.6%) from design. The sessional budget decreased by 30%, but still just afforded three part-time, industry-based instructors who each acted as a workshop facilitator in my revised unit structure. I partnered with one of the instructors, which meant that the workshop group ratio had increased to approximately 37:1. The unit was allocated three of the collaborative learning flat classrooms for the same three-hour block. Workshop groups rotated through each of the rooms over the three hours, while facilitators stayed in place and typically repeated a hands-on activity three times.

Key Findings

This action research project revealed three key, interrelated themes associated with the transition to a collaborative learning model and teaching a design unit with a very large student enrollment. The themes include leveling the playing field for diverse cohorts, a need for clear design instruction, and providing project guidance in very large cohorts. I discuss each challenge below, making reference to their relevance in broader pedagogical discourse.

First Theme – Leveling Which Playing Field: Home or Away?

The first theme that emerged was highly context-specific, but relates to a broader issue regarding the diversity of enrollment (Haggis, 2006). Pedagogical literature recognizes certain challenges associated with diverse student cohorts, including a wide and potentially erratic variance in students' levels and prior experience of learning (Haggis, 2006). In the context of this study, the most notable distinction between

students was based on their major course of study and corresponding levels of technical skill-development for graphic communication, including hand drawing and computer-assisted drafting. In brief, the 3rd year planning students' educational backgrounds had little (if any) of the graphic skill development that the 4th year design students had received.

"I guess the 2 plus years they've already had learning to draft and use these programs gives them something of an advantage." (2011 LEX)

Students brought their concern regarding graphics skills to the attention of instructors in both mid-semester and end-of-semester feedback.

"More information about computer programs that could be used for assignments and maybe a basic tutorial would help students that are not so good with computers." (2011 LEX)

"This subject and the course as well should teach students more in depth in how to use design programs including sketchup, indesgin, illustrator etc. as it seems a number of planning subjects require it and in the industry." (2011 LEX)

As an immediate 'patch' response to the concern, I introduced a single ad hoc session of introductory graphics workshops. Introducing more intensive technical instruction would require part-time instructors who felt confident demonstrating the specialized skills. This was a limitation in my 2011 teaching team that I was able to address in the following year. Students responded very positively to the workshops. However, they criticized the token instruction in their end of semester survey, suggesting that they needed much more instruction in those skills in order to succeed in the class and to be able to compete in the workforce.

Specialized Workshops and 'Packaged' Collaborative Learning Activities

For 2012, I restructured the unit into a weekly series of three hour-long workshops to cover design principles (including theoretical design principles and design development), design processes (including site analysis and graphic presentation), and computer applications, respectively, and hired instructors who could fill each role. Each instructor took charge of a specific workshop to run for each group, which gave them a unique area of expertise. In this arrangement, I took my position as both the unit coordinator and the lead urban design expert with one part-time instructor as my associate in the principles workshop.

I developed short, focused collaborative learning activities for each workshop with corresponding short lessons, examples, and step by step instructions for the instructors to use as scaffolding to support collaborative learning. These 'packaged' activities were meant to both directly and indirectly help students complete their semester projects by developing various skills while getting formative feedback. They also aimed to clarifying learning objectives and to de-emphasize the expertise of the part-time instructors by revisioning them as facilitators rather than purveyors of tacit wisdom.

Technological Competence and Perceived Advantage

By prioritizing skill development, two of the workshops and their corresponding collaborative learning activities began to address a deficit that I perceived in the planning students. In general, students' engagement with unit materials as well as end of semester feedback suggested variable satisfaction with the skills-focused unit content. Some students expressed appreciation for the instruction:

"What I've learned so much during the semester was the software and graphic skills (illustrator, Photoshop, SketchUp). Both I think would be very useful for me in future semesters and even in my future career. These skills can give me an advantage in terms of presenting concepts and ideas." (End of Semester feedback 2012)

"I have learnt to use a lot of new applications such as SketchUp, Illustrator, Movie Maker and new appropriate terminology for site context and analysis. I have grown as a designer and I value the lessons learnt, but I feel there is a long way to go before I am fully competent in all these areas." (End of Semester feedback 2012)

As illustrated by these comments, students perceived the basic technical instruction as providing 'advantage' that would distinguish them from others in their class and in their careers, but recognized that their skill-development was far from complete. Those sentiments appeared throughout the written feedback, suggesting broadly felt satisfaction with this part of the unit content.

	Technology				
	ILL	PSD	SKUP	WLMM	PPT
Time Period	Mean change (STDV) on 1-5 rating scale (N)				
First Half (n=43)	0.49 (.62)	0.35 (.56)	0.33 (.52)	1.09 (.85)	0.42 (.59)
Second Half (n=62)	0.42 (.81)	0.15 (.68)	1.00 (1.10)	0.05 (.71)	0.02 (.41)
Full Semester (n=43)	0.81 (.82)	0.47 (.67)	1.19 (.96)	1.30 (.94)	0.58 (.65)

Table 1: Changes in Students' Perceived Confidence with Technology

As indicated by table 1, students' perceived confidence with technology showed moderate increases for each of five technologies – and marked improvement for Windows Live Movie Maker (WLMM), Google SketchUp (SKUP), and Adobe Illustrator (ILL), which were the areas of instructional focus. The most substantial increased included WLMM during the first half of the semester, and SketchUp during the second half of the semester, which aligns with the period of instruction and the assessment requirements for the two main projects. Also noteworthy is the high standard deviations for those items, which suggests that the improvement was concentrated among a smaller proportion of students, most likely those who started the unit with very limited ability and/or confidence. I would have expected the change in ILL to be similar for the second half and full semester measures, since instruction occurred after mid-term. However, students seemed to prefer SketchUp to Illustrator in their final assessment, which may have resulted in more time with the program and a corresponding increase in confidence.

Due to the difference in cohorts between 2012 and 2011, it was not possible to gauge the students' individual improvement through comparison of the completed assessments. It is likely that their actual skills with various technologies improved variably, depending largely on their competence before starting the class. However, evidence from end of semester projects indicated notable overall improvement in graphic presentation in the second year, which may have been influenced by the technical skills instruction.

Ironically, by emphasizing ancillary technical skills, the revised unit actually reinforced the planning students' comparative *disadvantage* to design students in two ways. During coordination of marking in both years of the class, instructors expressed concern about 'seeing past the graphic presentation' to judge projects on design content. By overlooking the glaring gap in graphics skills in 2011, we were able to adjust marks and level the playing field for the otherwise disadvantaged majority of the class. However, by providing basic technical instruction in 2012, the new unit significantly decreased the gap between planners' and designers' graphic presentations. This ultimately constituted an advantage to the design students because they were still able to achieve more refined and compelling graphic presentations; but more importantly because it took them less time to produce them. That allowed them to concentrate on the substantive content of their design proposals and to achieve top marks in both respects.

Second Theme – Ambiguous or Conflicting Guidance

The second emergent theme relates to broader concerns regarding assessment practices in design (Austerlitz et al., 2008, Orr, 2010b). Research regarding design pedagogy recognizes the validity of multiple possible solutions to 'wicked' design problems (Austerlitz et al., 2008, Lang, 1983). However, Austerlitz et al. (2008) note that the ambiguity can appear to indicate arbitrariness or incompetence to students who both seek and expect higher education to provide clarity. In this case, students described the same desire:

"Assessment needs to be more clearly outlined and improved communication between K__ and the tutors (seems strange that that couldn't be achieved with the entire class in one room)." (2011 LEX)

"I'd honestly prefer a self delivered program instead of something that kept you thinking and guessing. But in hindsight, the format made you understand and appreciate the content." (2011 LEX)

Student feedback suggests that they interpreted advice given by different tutors as 'conflicting', which led to uncertainty about assessment requirements and marking criteria.

"A week before the assignment was due we were told to go abstract with our design concept - this was not what D__ had led us to believe earlier (I don't think this is his fault) - and that we had to change our design concept. Half of the information contained in the brief was not applicable to this 'abstract concept'. Many groups, including my own, were then very upset when

during the poster presentation, the favourite concepts of the tutors and K__ were the least abstract - actually they were exactly what most of us had developed prior to being told to go abstract. Where was the communication and clarity?" (2011 LEX notes)

"Greater cohesion between all teaching staff instead of drastic differing opinions between all tutors and lecturer. Everybody had different interpretations of what was required." (2011 LEX notes)

Although students in the 2011 cohort had been assigned to tutorial groups, each with its own specific tutor, they still had the opportunity to compare experiences with their peers either during or outside of class, since we all met in the same large room. That allowed them to hear multiple viewpoints on both graphic presentation strategies as well as substantive design responses.

"Clear consensus between tutors and lecturer instead of differing opinions and interpretations of assessment. Too vague, broad, needs to be clearly defined." (2011 informal feedback re: what could be improved)

"Also more information about how to create a conceptual design and redesigns, what needs to be included would be helpful, rather than the little information you give us and researching it ourselves." (2011 LEX)

As illustrated by these comments, some students found ambiguity disconcerting, preferring specific, detailed instructions. Paradoxically, the feedback also indicates that students who felt confident with their initial work interpreted instructors' efforts to clarify project instructions and terminology such as "abstract concept" with their tutorial groups as vexing changes to assessment requirements.

Contrast between the content of instructors' summative feedback and official learning objectives/marketing criteria seemed to support students' assertions of conflict, reinforcing perceptions of subjectivity in assessment practices. To 'explain' project marks, instructors provided written summative feedback that reinforced informal guidance they had given during crits in class. For example, one instructor wrote:

"Interesting concept – lots of ideas – not all very integrated. Curious as to why ___ wasn't integrated with commercial area. Continuity poor – moving from east to west is obstructed by the landscaping and water feature, where connectivity/legibility and movement are really important here." (2012 Instructor Feedback on Student Project)

In this example, the instructor highlights principles of 'integration', 'continuity', 'connectivity' and 'legibility' as problem areas in the design. These principles appeared throughout this particular instructor's comments. In contrast, another instructor's feedback frequently included 'landmark', 'wayfinding', 'causal surveillance', 'activation', 'connectivity', 'subtropical design', and 'identity'. These concepts do not reflect subjective or arbitrary preferences (e.g. a taste for certain types of designs). However, the variable emphasis of certain criteria over others indicates a lack of consensus regarding which fundamental design principles were prioritized by the unit's learning objectives.

Without clearly defined and attainable goals, students expect to be assessed in competition with their colleagues. Again, the distinction between the educational backgrounds of planning and design students came to be a focus of concern:

"I guess if I WAS studying architecture I might actually have a chance of doing well at the assessment, but quite frankly, up against the architects in this class I haven't got a hope." (2011 LEX)

As this comment illustrates, students perceived 'doing well' to be measured in competition with their classmates, rather than a measure of their personal development. Despite the limited number of design students in the 2011 cohort, planning students expressed concern regarding the use of technology and their comparative disadvantage in the class.

In fact, it was difficult to determine whether each student had demonstrated adequate command of learning objectives to pass the unit or to achieve higher distinctions. As part of final assessment coordination, I led the group of instructors in a debate of thresholds for each marking level, ultimately using a grading curve to ensure that only students who had failed to submit work altogether would have to retake the class.

That challenge reflects the 'tacit' quality of design instruction discussed in pedagogical literature (Orr, 2010b, Orr, 2005, Morgan and Wyatt-Smith, 2000) Orr (2010b) as well as Morgan and Wyatt-Smith (2000) have investigated the nature of tacit practice amongst design instructors and find their 'specialized subjectivity' to be validated through a prolonged relationship with a discrete community of practice. In this study's context, part-time instructors lacked the prolonged relationship that would align their subjective interpretations. Since I could not rely on them to be involved in a community of practice over an extended time, I could not reasonably interpret subjective misalignment as a temporary problem.

Eliminating Conflict Through Specialization

Analysis of instructional materials indicates that unit revisions did little to clarify learning objectives relating to design principles, which resulted in continued reliance upon tacit forms of guidance for assessment projects. Out of 32 possible in-class contact hours with instructors, about half (14) focused on design principles and processes, which suggests a reasonable balance between technical skills and design-related content. However, the design-related contact hours included 11 sessions of individualized guidance (e.g. crits) and only 3 'packaged' collaborative learning activities. That proportion suggests that design principles were conveyed to students individually as an intuitive response to their work in progress, rather than being presented initially to the entire class as explicit and measurable learning objectives.

As further evidence of the need for clarification, student feedback generally indicated that the few collaborative learning activities relating to design principles were only marginally useful as instruction towards their final assessments. Two students mentioned one activity in particular that promised, but failed, to convey these principles in a meaningful context.

"And also looking/deconstructing more exemplars and examples of what works and what doesn't. I think the closest we came to this was a tutorial activity finding examples, but there was no discussion about what they meant or why you would use a certain strategy etc." (End of Semester feedback 2012)

"I feel that some of the tasks given out in tutorials were so easy that you didn't get much from it, for example the Precedents exercise." (End of Semester feedback 2012)

By relying so heavily on the crit as the primary source of design instruction, the revised unit failed to fully transition to a collaborative learning model or to resolve the challenge of teaching design to a large student cohort.

Third Theme – 'I Can't Give Guidance if I Don't Have Work to Guide'

The third theme that emerged in this study was also quite context-specific, developing in part as a side effect of my continued reliance on crits as the primary source of design instruction, and magnified by an extreme increase in the second term enrollment.

Studio-style crits reinforce an 'iterative' design process in which students learn to design by gradually revising their work in successive iterations in response to the feedback they receive (Blair, 2006). As an important part of my own design training, the iterative process is fundamental to my professional and pedagogical worldviews.

Those worldviews shaped my experience of both iterations of this unit, and will no doubt lead me to continue revising my pedagogical approach into the future. In the first year of teaching this class, I found that students resisted using unstructured class time to advance their creative projects or to obtain critical feedback from tutors. Excerpts from my weekly reflective journal illustrate my developing awareness and concern about that problem:

"I went into class on Week 10 prepared to give formative feedback to students regarding their third assessment designs before the guest speakers arrived. Out of 16 students in my tutorial, only D_, H_, N_ and A_ were prepared to show me draft designs, and only N_'s was complete. I gave feedback as well as I could, but felt discouraged about the class afterwards. These students are treating a design project the same way that they would treat any assessment – starting it a week or two before the final deadline." (2011 Reflections)

"They have no experience with iterative design processes, and don't understand the value of 'giving it an early shot' as a part of their learning – or as part of my instruction. I can't give guidance if I don't have work to guide. They don't want to do work without the guidance up front. In the end, they may think I haven't explained it well enough." (2011 Reflections)

As indicated by the latter entry, I interpreted the students' behavior to mean that they were unfamiliar with the 'iterative' process that I assumed was so central to the design process. Notably lacking in that entry is any consideration of why exactly "I can't give guidance if I don't have work to guide". That assertion suggests that latent design principles intuitively arise in response to contextual stimuli (e.g. work in progress) but cannot be articulated otherwise. Pedagogical literature discussing assessment practices in design fields supports that theory (Morgan and Wyatt-Smith, 2000, Orr, 2007).

Studios for the Masses

As I remained convinced of the importance of the iterative process, I intentionally incorporated three sessions of traditional studio-style design crits into the 2012 principles workshop. As I mentioned previously, over one third of in-class contact hours were actually used for this style of instruction. Responding to my

experience in 2011, I made crits compulsory, awarding points to students who came prepared to present their work.

Making those activities mandatory dramatically improved student participation in the second cohort. However, it also magnified the challenge of teaching design to a large class, and ultimately resulted in the same problems that the revised unit had aimed to resolve. Due to a massive increase in enrollment, the design workshop did not have the capacity to handle the individualized attention, and ultimately brought the other instructors and their subjectivities back into the picture. This problem did not go unnoticed by students:

"This was because the small time with each tutor gave a limited time frame to talk to certain ones about issues. In my case I was not able to get advice from lecturer two weeks in a row due to others going first, although I had brought my plans." (End of Semester feedback 2012)

"For me, feedback and guidance were lacking. There were too many students trying to get feedback in such a short amount of time and the best means of communicating is that face-to-face contact. Where you can get clarity instantaneously and you can exchange and reaffirm." (End of Semester feedback 2012)

"I don't know how you could have done it any better. It was such a huge class for a unit that relies heavily on interaction and feedback." (End of Semester feedback 2012)

Since the skill development activities of the other workshops died down in the latter half of the semester, it became both difficult and impractical to prevent the other instructors from giving substantive feedback on students' designs. Students began to strategically seek feedback from whichever instructor they thought would be marking their work, to ensure that they made the 'right' changes based on what they perceived to be subjective opinions. Again, this resulted in perceptions of conflict and ambiguity...

"I feel the main element of a design studio is the relationship you build with YOUR tutor during your studio time. There were many problems through the conflicting messages from different tutors." (End of Semester feedback 2012)

"I feel with the time that I was given I would have been able to complete a much more detailed and visually appealing project if I was not getting advice that lead into different design principles from different tutors." (End of Semester feedback 2012)

Conclusions

This action research project investigated collaborative learning as an alternative to the traditional studio model for achieving key learning objectives in a design unit with a large, diverse enrollment. I observed a case study over two years that experienced significant changes in enrollment in addition to the structural and substantive revisions that I introduced between iterations.

Through this study, I found three interrelated themes associated with teaching a design unit with a very large student enrollment. The first theme was highly context-specific, but relates to broader pedagogical concerns regarding the diversity of enrollment (Haggis, 2006). Using a collaborative learning approach, my revisions to the unit were able to actively address differences in planning students' and architecture students' educational backgrounds. However, by providing that instruction, the revised unit ultimately privileged design students by legitimizing marking practices that favored more refined, technology-enhanced graphic presentations.

The second theme relates to a broader concern in design pedagogy relating to the tacit quality of design instruction (Austerlitz et al., 2008, Orr, 2010b). My revisions to the unit structure aimed to specialize each of the part-time instructors, and to thereby reduce perceptions of subjectivity in assessment marking. Substantive revisions to the class included collaborative learning activities, which aimed to make learning objectives more explicit, and thus further reduce perceptions of subjectivity. However, the activities emphasized technical skill-development and only touched the surface of design principles. Thus, the revised unit still relied heavily on the crit as the primary source of design instruction.

The third theme was also quite context-specific, developing in part as a side effect of my revisions, but magnified by an extreme increase in the second term enrollment. By making crits mandatory, the workshops dramatically improved student participation in the second cohort. However, due to a massive increase in enrollment, the design workshop did not have the capacity to handle the individualized attention, and ultimately brought the other instructors and their subjectivities back into the picture.

These findings provide a strong basis for evaluating and revising the urban design unit's learning objectives and instructional strategies. Most notably, the study revealed a need to clarify learning objectives relating to design principles in order to fully transition to and benefit from a collaborative learning model. The findings also contribute to a broader discourse regarding outcomes-based versus tacit assessment practices (Orr, 2010a, Sadler, 1989, Morgan and Wyatt-Smith, 2000, Eccleston, 1999). While tacit practices have been

described as an accepted norm for design instruction, the individualized attention characteristic of crits limits the reach of scarce resources for providing student-centred instruction to large cohorts.

References

- AUSTERLITZ, N., BLYTHMAN, M., JONES, B. A., JONES, C. A., GROW-WHITE, A., MORGAN, S. J., ORR, S., SHREEVE, A. & VAUGHAN, S. 2008. MIND THE GAP: Expectations, Ambiguity and Pedagogy within Art and Design. In: DREW, L. (ed.) *The Student Experience in Art and Design Higher Education: Drivers for Change*. Cambridge: Jill Rogers Associates Limited.
- BLAIR, B. 2006. 'At the end of a huge crit in the summer, it was "crap" – I'd worked really hard but all she said was "fine" and I was gutted .' *Higher Education*, 5, 83-95.
- BROWN, J. S., COLLINS, A. & DUGUID, P. 1989. Situated Cognition and the Culture of Learning. *Educational Research*, 18, 32-42.
- BRUFFEE, K. A. 1999. Collaborative learning: Higher education, interdependence, and the authority of knowledge, Baltimore, John Hopkins University Press.
- ECCLESTON, K. 1999. Empowering or ensnaring?: The implications of outcome-based assessment in higher education. *Higher Education Quarterly*, 53, 29-48.
- FORSYTH, A., LU, H. & MCGIRR, P. 1999. Inside the Service Learning Studio in Urban Design. *Landscape Journal*.
- GLASER, B. 1965. The Constraint Comparative Method of Qualitative Analysis. *Social Problems*, 12, 436-445.
- HAGGIS, T. 2006. Pedagogies for diversity: retaining critical challenge amidst fears of 'dumbing down'. *Studies in Higher Education*, 31, 521-535.
- LANG, J. 1983. Teaching Planning to City Planning Students. An Argument for the Studio/Workshop Approach. *Journal of Planning Education and Research*, 2, 122-129.
- LEE, N. 2009. Project methods as the vehicle for learning in undergraduate design education: a typology. *Design Studies*, 30, 541-560.
- MORGAN, W. & WYATT-SMITH, C. 2000. Im/proper accountability: Towards a theory of critical literacy and assessment. *Assessment in Education*, 7, 121-142.
- O'DONOVAN, B., PRICE, M. & RUST, C. 2002. Chasing common assessment standards. *Teaching Forum*, 50, 3.
- OAK, A. 1998. Assessment and Understanding: An Analysis of Talk in the Design Studio Critique. In: WERTHEIM, S., BAILEY, A. & CORSTON-OIVER, M. (eds.) *Engendering Communication - Proceedings from the 5th Berkeley Women and Language Conference*. Berkeley: University of California.
- ORR, S. 2005. 'Justify 66 to me!' An investigation into the Social Practice of Agreeing Marks in an HE Art and Design Department. In: RUST, C. (ed.) *Improving Student Learning Through Assessment, Proceedings of the 2005 13th International Symposium*. Oxford: Oxford Brookes University Press.
- ORR, S. 2007. Assessment moderation: constructing the marks and constructing the students. *Assessment & Evaluation in Higher Education*, 32, 645-656.
- ORR, S. 2010a. 'We kind of try to merge our own experience with the objectivity of the criteria ': The role of connoisseurship and tacit practice in undergraduate fine art assessment. *Intellect*, 9, 5-19.
- ORR, S. 2010b. 'We kind of try to merge our own experience with the objectivity of the criteria': The role of connoisseurship and tacit practice in undergraduate fine art assessment. *Intellect*, 9, 5-19.
- QUT 2011. Blueprint 3 2011–2016.
- SADLER, D. 1989. Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119-144.
- SHREEVE, A. 2012. Signature Pedagogies in Design: Linking Teaching, Learning and Practice. *Journal of Workplace Learning*, 41-51.
- SHULMAN, L. S. 2005. Signature pedagogies in the professions. *Daedalus*, 134, 52-59.
- SMITH & MACGREGOR 1992. What is Collaborative Learning? In: GOODSSELL, A., MAHER, M., TINTO, V., SMITH, B. L. & MACGREGOR, J. (eds.) *Collaborative Learning: A Sourcebook for Higher Education*. University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment.

Existing Experiential Learning Practice in Australian and New Zealand Planning Programs

Johanna Rosier, Claudia Baldwin, Christine Slade

University of the Sunshine Coast

Introduction

Professional planning education needs to evolve differently over the next fifty years if the discipline is to co-exist with other academic disciplines that prepare environmental management professionals for professional practice in three years. Because planning is an evaluative profession, the practice of planning requires a variety of core competencies in a number of different decision-making contexts. Therefore, flexibility is stressed here as an important aspect of setting standards for the education of planners in professionally accredited programs. Flexibility of program content and teaching/course delivery modes enables each program to develop its individual character while meeting standards of best practice in delivery of professionally accredited planning programs which meet ‘competencies’ set by the profession. There is also a general higher education trend to incorporate a component of experiential learning into curricula and programs, particularly in fields of urban and regional planning, geography, nursing, teaching, social work, engineering and management (Trigwell & Reid 1998, Elwood 2004, Davis 2006, Fowler 2008). Driving this trend is the need to foster lifelong learning behaviour through continuing professional development, and to facilitate adaptation to the rapidly changing work environment (Guile & Griffiths 2001).

Whatever its form, name, or extent – studios, virtual planning, service, practice, outreach, engagement, ‘co-operative’ education, or workplace learning; experiential learning is seen as a means to broaden students’ learning experiences by placing them in a new context for learning in and from the world outside the university. The benefits of experiential learning are detailed in Table One.

Table One: General Benefits of Experiential Education

<ul style="list-style-type: none">• Skill development – both hard and soft skills• Reflection and self-assessment occur• Academia develops connections to the community• Students gain experience and knowledge of actual practice, increasing their employability• Allows for different learning styles• Those students whose undergraduate education incorporated experiential learning are more likely to continue their education in postgraduate programs

Sources: Kolb 1984; Barnett 1995; Cantor 1995; Boud 1999;

Experiential education is not problem-free. Questions of how to assess students (Baldwin 2000); supervision (Davys & Beddoe 2000) and who plans and organises the experience (Baum 1997; Niebanck 1998) are frequent. Ellis (1995) considers two other important issues: firstly, the project selected needs to suit the education programme; and secondly, students should not be considered as means to achieve cheap labour. In addition, if incorporated into a regular semester of courses, students often experience increased workloads – a problem not usually addressed in literature (Roakes & Norris-Tirrell 2000; Petkus 2000).

The Australian Experiential Learning Context

The Planning Institute of Australia (PIA), which accredits planning programs in Australia, is also an important stakeholder because it judges how well planning schools generally meet professional and disciplinary requirements. The PIA is also concerned about measuring how well students understand needs of professional practice. The PIA, in developing the 2010 accreditation policy (PIA 2010) reflects similar developments occurring in the Royal Town Planning Institute (RTPI 2004) and the American Planning Association (APA 2006), in that all professional institutes expect planning programs to establish relationships with professional planners and provide a variety of practical experience opportunities which may result in “professional placements” (RTPI) or “internships” (APA). All professional institutes recognize that work experience may not always be available. However, it is expected that a good planning program should be able to offer a range of different types of practical experience within the program.

In Australia, there is also an on-going dialogue between planning lecturers, PIA, and prospective planning employers about translating theory into practice, and integrating practice-based experiences into curriculum. A National Inquiry into Planning Education and Employment (PIA 2004) recommended increasing planner professionalism through matching skill gaps with training; bringing planning educators and practitioners closer together; and increasing collaboration between planning schools and PIA. It identified the need for improved skills in project management, development assessment, understanding the private sector, negotiation and communication and urban design, as well as new content areas such as social, environmental and transport planning. All of these skill areas can be enhanced through experiential learning. The report encouraged workplace placements to rural/regional areas and the private sector and involvement in education by professional planners. PIA, as the accrediting body for planning schools, endorses a combination of academic planning education and appropriate models of work experience (PIA 2010).

This research builds on previous research (Eyler et al. 1999, Coiacetto 2008, Billett 2011) which demonstrated the benefits of experiential learning; including positive social, personal and learning outcomes for students, improved skill development, enhanced relationships between students, faculties and community - improving student retention rates. Previous ALTC-funded projects confirmed that “practice-based learning exchanges” are highly valued by both staff and students alike. They have the potential to achieve positive outcomes for students, such as greater understanding of their discipline; development of higher order generic skills; creation of nurturing professional relationships; and enhanced graduate employability (Barraket et al. 2009, Billett 2011). This research project builds on recommendations by the ALTC built environment and design discipline leaders about strategies to improve transition-to-work (Savage et al. 2010). This project is also important because it provides the necessary cross-institutional support to improve assessment literacy of academic staff, an issue highlighted as essential by Jones et al. (2009a). Likewise it builds on their conclusions by providing resources to support an identified need for the role of work-integrated learning activities in achieving “fitness to practice” in accord with the requirements of professional accrediting bodies (Jones et al. 2009b).

The additional demands on faculty in implementing experiential learning approaches in courses have also been identified by Jones et al. (2009 a & b) in an ALTC funded project on developing academic standards for work integrated learning in planning, and supported by other research (Freestone & Wood 2006; Steiner & Posch 2006). Jones et al. (2009a) refer to a continuum of experiences ranging from predominantly university-based to predominantly workplace-based learning that occur in planning institutions across Australia. The continuum reflects the level of university “control” over the curriculum and learning experience. In their review of 43 PIA accredited planning degrees in Australia, 11 undergraduate qualifications containing a form of work practice were investigated in greater depth. They identified the need for revised academic standards and assessment practices (Jones et al, 2009b), and certain principles to guide the enhancement of assessment practices and academic standards, which are reflected in the principles below. However, they, as well as Freestone et al. (2007), focused on work-based learning, rather than a wider range of experiential learning activities within the continuum, and no advice was given about changing curriculum activities and assessment materials.

The Experiential Learning in Planning Education Project

This current ALTC funded project is led by Johanna Rosier and Claudia Baldwin (University of the Sunshine Coast) in partnership with Trevor Budge (La Trobe University), Tim Perkins (Edith Cowan University), Edo Coiacetto (Griffith University), Michael Lockwood (University of Tasmania) and Cathy Towers (PIA). The project evolved during the development of the four year planning program at USC and a preliminary project, funded by an internal USC learning and teaching grant in 2009, and the experience of two researchers who in different contexts were trying to incorporate experiential learning into their University teaching (Rosier 2001; Baldwin & Rosier 2009).

The overarching aim of this project is to develop an integrated package of resources that will serve to promote and enable delivery of good practice experiential learning in Australian planning education. This will, in turn, contribute to improved student learning outcomes. The project responds to the identified need to increase planner professionalism through matching skill gaps with training; bringing planning educators and practitioners closer together; and increasing collaboration between planning schools and PIA as discussed previously by the PIA (PIA 2004). The project meets the following needs identified by previous reviews of planning education:

- Forward thinking planning graduates with new skill areas and creative qualities, many of which can be enhanced through experiential learning.
- Resource materials to assist educators to improve delivery and assessment of a broad range of experiential learning activities, which have not been provided through the previous work on enhancing the skill base in planning schools which was limited to work placement.
- Collaborative development and testing of a consistent policy and evaluation framework based on experiential learning theory – improving uptake and benefits of varied experiential learning opportunities in planning programs across Australia and New Zealand.

The aims of this paper are to present the principles which have been developed to guide the improvement of experiential learning experiences used in planning education, and to report on the preliminary findings from the initial stage of the project in which the researchers, using a survey, collected baseline data about existing experiential learning practices in tertiary planning schools across Australia and New Zealand. For the purpose of this research, the different modes of experiential learning may include: case studies, studios, simulations, problem-based learning, service learning, practicums and fieldtrips which are guided by principles in Table Two: the draft of which were originally presented in 2009 at ANZAPS conference (Baldwin & Rosier 2009).

Table Two: Principles to Guide improvement across the Experiential Learning Continuum

	Brief encounters	Studio-project-based work	Structured work practicum	Work experience
Purposeful	Whether it is a game, role play, guest, simulated exercise, speaker, design or research project – the purpose of the experiential activity needs to be explained, within the context of the overall course or program Clear goals and expectations have been established.			
Student-centered	Each year, increased levels of complexity are built in to the curriculum to build student capacity for self-directed (or self-regulated) learning. It involves active learning whereby the student takes an active role in formulating, negotiating, implementing, modifying and evaluating his/her own study plan and taking action to achieve agreed goals			
Application of theory/classroom	The experience needs to build on and draw from the student's existing understanding of planning concepts from regular coursework and offer sufficient			

knowledge	breadth to allow generalization beyond the environment of the learning experience.
The 'real world' context	The "real-world" context – Students are increasingly exposed to real world situations over the four years of their degree. Settings become less controlled by faculty, problems become more complex, and working with others is required much of the time. Students believe this learning has immediate relevance, can improve employment prospects, and clarify their career path.
Guided practice	The experience should be facilitated with on-going faculty staff involvement in all phases of the experiential learning process. Identify the importance of close collaboration on learning needs and experience with both employers and students featuring close work supervision, mentoring, and coaching.
Reflection	Opportunities for reflection are essential in order to move beyond current understanding. It is necessary for students to think about their actions, why they do what they do, critically explore learning, what might be improved or done differently, how they use intuition and knowledge when learnt rules of procedure do not readily fit a situation, and how to apply the learning to a different situation.
Evaluation	Evaluation should be based on what the students learn and how they demonstrate meeting their learning goals. Such "situated learning" needs to be complemented with "situated assessment". The learner can thus situate his or her own intended growth as an outcome of a learning experience, and the instructor can assess learning outcomes (cognitive levels) during and after the experience
Community-university partnership	A partnership between university community organisations or industries should be mutually beneficial, facilitating the experiential learning needs of students, while students expand workplace capacity, providing a needed resource, and contributing current knowledge with support of academics

A survey (USC Ethics Approval No A/11/348) was carried out in late 2011 and early 2012 of all accredited Australian and New Zealand University planning schools to gauge the current use and practice of experiential learning in planning schools. The survey is based on the continuum of experiential learning activities; from predominantly university-based through to predominantly workplace-based. The questions seek to determine the extent to which experiential learning is used through these different activities, whether the tasks are assessed, how they are assessed, and the types of evaluation tools used.

The survey yielded 104 course responses from 51 coordinators across 18 universities. The feedback indicates that many lecturers are already enthusiastic about experiential learning. Preliminary data analysis detailed in Table Three shows that a guest lecture is the most common task used (n=76) but less than half (n=34) were used in the assessment process. Ten courses used informal work experience but only half were assessed. Eight courses undertook regional and/or international field studies with five of them being assessed.

Table Three: Preliminary Description of Current Experiential Learning Practice from Survey

Task Description	No. Courses Using Task (n=104)	No. Courses Assessing Task (n=104)
Guest Speakers	76	34
Field Trips	39	31
Studio Project-based	19	18
Simulated Development at Real Site	34	32
Track Development Application	16	11
Role Play	24	21
Work on Project for Client	15	12
Informal Work Experience	10	5
Regional or International Field Studies	8	5
Formal Work Placement	13	11

The analysis also examined the assessment types and evaluation tools used within the courses using assessment practices. The most common assessment types were examinations, assignments, presentations, group projects and reports with a smaller representation of reflective practices. Evaluation tools focused on grades and pass/fail with formative processes included with the guest lectures, field trips, simulated development at a real site and in role play tasks. These results flag the difficulty in assessing experiential learning and the need for more innovative resources to capture not only the summative requirements but the richer transformational learning that students experience in these tasks.

What next?

The multi-University research team are now developing an agreed understanding how the principles of experiential learning should be applied when developing experiential learning activities and student assessment tasks. This solid grounding will be the theoretical basis of all our work. After we have prepared these templates for the various types of experiential learning activity, the research team will then address other issues, such as whether all of the principles need to be met in order for something to be experiential, for example “Does it need to be evaluated, or is reflection enough?” but “ What if there is no reflection?” Or “Are there certain core principles that must be met for something to be called experiential learning?” which create a link between theory and practice. Or maybe some of the principles are not really principles but standards.

The package of resources will be available to University planning lecturers and to the planning industry in 2014. Following further debate, it is hoped that the Accreditation Policy of the PIA will be varied to enhance the description of competencies required by the profession and include experiential learning techniques which may enhance student learning relevant to the profession.

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To find out more information about this project or to receive future project newsletters please email the project manager, Christine Slade - cslade@usc.edu.au

References

APA Planning Accreditation Board 2006. The Accreditation Document. Criteria and procedures of the Planning Accreditation Program. American Planning Association (APA) November 2006. Available at: [http://www.planningaccreditationboard.org/2006_Nov_AD_may_09_\[2\]](http://www.planningaccreditationboard.org/2006_Nov_AD_may_09_[2])

(accessed 20 January 2010).

Baldwin C. and Rosier J. 2009. *Evaluating the Effectiveness of Experiential Learning in Preparing Planning Graduates*, Presentation at ANZAPS, Brisbane, August 2009.

Baldwin, M. 2000. Does Self-Assessment in a Group Help Students Learn? *Social Work Education* 19(5): 451-462

Barnett, R. 1995. What effects? What outcomes? In *Learning to Effect*. Barnett, R. (ed.), p. 3-20. Open University Press.

Barraket, J, Melville, R, Wright, S, Scott, M, Richardson, S, Carey, G, Thornton, S, and Hodge, P. 2009. *Engaging with Learning: Understanding the Impact of Practice Based Learning Exchange: Final Report*, ALTC September 2009.

Baum, H.S. 1997. Teaching Practice. *Journal of Planning Education and Research* 17(1): 21-29.

Billett, 2011. *Curriculum and pedagogic bases for effectively integrating practice-based experiences: Final Report*, ALTC.

Boud, D 1999. Avoiding the traps: seeking good practice in the use of self assessment and reflection in professional courses. *Social Work Education: The International Journal* 18(2): 121-132.

Cantor, J.A. 1995. *Experiential Learning in Higher Education: Linking Classroom and Community*, ASHE-ERIC Higher Education Report series 95-7 (Volume 24-7).

Coiacetto, E. 2008. Learning from Project Based Learning: A land development studio account of practice. *Australian Planner* 45(4): 28-34.

Davis G. 2006. The role of case studies for the integration of sustainable development into the education of engineers. *World Transactions on Engineering and Technology Education*. 5(1): 159-163.

Davys, A. and Beddoe, L. 2000. Supervision of Students: A Map and a Model for the Decade to Come to Develop their use of Theory in Practice. *Social Work Education* 19 (4): 387-401.

Ellis, R. 1995. An action-focus curriculum for the interpersonal professions. In, *Learning to Effect*. Barnett, R. (ed.), pp. 3-20. Open University Press.

Elwood, S. 2004. Experiential learning, Spatial Practice and Critical Urban Geographies. *The Journal of Geography* 103(2): 55-63.

Eyler, J, Giles, D and Gray, C.1999. *Research at a Glance: What we know about the effects of service learning on students, Faculty, Institutions and Communities 1993-1999*. Vanderbilt University (Acquired online 5 August 2009).

Fowler J. 2008. Experiential Learning and its Facilitation. *Nurse Education Today*. 28:427-433.

- Freestone, R and Wood, D. 2006. Exploring Strategies for Linking Research and Teaching. *Journal for Education in the Built Environment* 1(1): 94-111.
- Freestone, R, Williams, P, Thomson, S, and Trembath, K. 2007. A quantitative approach to assessment of work-based learning outcomes: an urban planning application. *Higher Education Research and Development* 26(4): 347-361.
- Guile, D and Griffiths, T. 2001. Learning through Work Experience. *Journal of Education and Work*. 4(1):113-131.
- Jones, M, Jackson, J, Coiacetto, E, Budge, T, Coote, M, Steele, W, Gall, S and Kennedy, M. 2009a. Generating Academic Learning Outcomes: an urban planning application. *Higher Education Research and Development* 26(4): 347-361.
- Jones, M, Coiacetto, E, Jackson, J, Coote, M, Steele, W, Budge, T and Gall S, 2009b. Generating academic standards and assessment practices in work integrated learning: A case-study from urban and regional planning. *Asia-Pacific Journal of Cooperative Education*, 10(3): 203-215.
- Kolb, D. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs: NJ, Prentice-Hall.
- Niebanck, P. 1998. Undergraduate Education with a Purpose: A Planning Program at the University of Ozawa. In C.P. & Seltzer, E.P. 1999. Taking our Bearings: Mapping a Relationship among Planning Programs.
- Petkus, E. 2000. A Theoretical and Practical Framework for Service-Learning in Marketing: Kolb's Experiential Learning Cycle. *Journal of Marketing Education*. 22(1): 64-70.
- Planning Institute Australia (PIA), 2004. *Findings and Recommendations of the National Inquiry into Planning Education and Employment*.
- PIA 2010. Accreditation Policy for the recognition of Australian Planning Qualifications: urban and regional planning chapter.
- Roakes, S.L. and Norris-Tirell, D. 2000. Community Service Learning in Planning Education: A Framework for Course Development. *Journal of Planning Education and Research*. 20: 100-110.
- Rosier, D.J. 1999. The Three-Year Undergraduate Planning Program and . . . Practice! Practice!
- Rosier, J. 2001, Professional Apprenticeships in Undergraduate Planning Programs, Presentation at World Planning Schools Congress, Shanghai 2001.
- RTPI 2004. *Policy Statement on Initial Planning Education*. The Royal Town Planning Institute. London UK. Available at: <http://www.rtpi.org.uk/download/237/Policy-Statement-on-Initial-Planning-Education.pdf> (accessed 20 January 2010).
- Savage, S, Davis, R and Miller, E. 2010. *Professional Education in Built Environment and Design*. Final Report ALTC, January 2010
- Steiner, G and Posche, A. 2006. Higher Education for Sustainability by means of trans-disciplinary case studies: An innovative approach for solving complex real world problems, *Journal of Cleaner Production*. 14(6): 877-890.
- Trigwell, K and Reid, A, 1998. Introduction: Work-based Learning and the Students Perspective, *Higher Education Research and Development*. 17(2): 141-154.

Understanding Everyday Teaching Experiences: the Institutions, the Students and Possibilities for the Studio

Caryl Bosman, Aysin Dedekorkut-Howes and Ruth Potts

Griffith University

Higher education institutions are placing importance on the first year experience (FYE) achieved through student engagement strategies targeted at inculcating successful learning outcomes. FYE strategies are in response to the current cohort of Gen Y students and institutional pressures: larger classes, less staff and student retention. In this context appropriate and effective pedagogies become critical. This paper looks at the planning studio, as a site of learning and teaching, to investigate possible responses to everyday teaching experiences in these changing student and institutional contexts. Studio pedagogy is intrinsic to most education programs within the built environment higher education sector. We draw upon literature relating to the FYE and studio pedagogies as a means to understand and respond to Gen Y's learning and teaching tendencies. In doing so we develop a pedagogy that addresses the institutional call for economic and efficient teaching models that deliver excellence teaching and learning outcomes.

How the Corner Store Milk Bar transformed into the Service Station and the Coffee Shop: Life and Community Loss in Suburban Bendigo

Trevor Budge

La Trobe University Bendigo

Commencing with a forty year review of the suburb where I now live, and extending to a survey of the whole of the regional city of Bendigo, this study examines the demise of an Australian icon; the corner store milk bar, with its traditional community support role, and its systematic replacement by new forms of retailing. Understanding these social and land use changes is an important element in planning for urban Australia and for student education. The evolving urban form is in part driven by retailing and is in part a response to it. What role did the humble milk bar play in the local community and has its disappearance worked against suburban living? Children no longer walk or cycle to the corner shop, rather they are driven to shopping centres. Take away food chains provide anonymous places to pick up food as distinct from the friendly local shop. Contrasting Bendigo in the early 1970s with the contemporary scene, this paper explores research by the author and two students of a changing land use and its social and planning consequences.

The Value of International Study Tours for Planning Education: Content or Transformation?

Trevor Budge

La Trobe University, Bendigo

The traditional view of undergraduate education is that it transforms students through the acquisition of knowledge and skills. Could it be that taking planning students out of their 'comfort zone' on an international study tour program may not only be a valuable and significant education experience but that its real value is the transformative effect of the life experiences gained from such an activity? This paper commences with an examination of the literature about the impacts and effects of international study tours on students. This concept is explored further through a series of in-depth interviews of students from the undergraduate planning program at the Bendigo campus of La Trobe University who through have participated in international study tours conducted by the program. In particular the paper looks at the learnings from study tours to the developing country of Sri Lanka and a series of joint projects with planning students from the Town and Country Planning program at the University of Moratuwa.

Preliminary review of the relationship between Aboriginal 'sense of place' and the regional landscape in the context of value-led regional planning

Rachael Cole-Hawthorne & Darryl Low Choy

Griffith University

A contemporary trend towards a values-led planning approach has resulted in research identifying compatible regional indigenous landscape values to be incorporated within regional planning, as exemplified by work currently being undertaken in relation to the South East Queensland Region (Low Choy, 2009). This and other relevant research similarly themed, noted a relationship between regional landscape values and connection to country and which can be understood by and is analogous to, the western concept of 'sense of place'. Whilst "sense of place" has been given increasing weight in recent regional planning documents, a clear conceptual framework for identification and analyses of principal elements has yet to be developed. Previous research has shown the relationship between Aboriginal 'value' and 'regional traditional landscape' as analogous to 'sense of place' but the relationship between Aboriginal 'sense of place' and 'regional landscape' still needs to be reviewed, and not limited to their traditional regional landscape. This paper seeks to provide further understanding of Aboriginal regional values and their relationship to their traditional regional landscape. In the first instance it will provide a preliminary review on the relationship between Aboriginal 'sense of place' and 'regional landscape' by drawing upon relevant literature. The paper will conclude with a preliminary consideration of the strength of that relationship under circumstances of physical separation from traditional lands

Marine Spatial Planning – Are the Skills and Knowledge Really Different?

Hamish Rennie

Lincoln University

Marine spatial planning (MSP) is somewhat fashionable due to EU directives and new planning legislation in the UK and the USA that at the very least promotes it. However, as has been argued elsewhere (Makgill and Rennie 2012) New Zealand has required the development of marine spatial plans for all of its territorial sea since 1991. The author has practised marine spatial planning since 1990, and has taught marine spatial planning at Waikato and Lincoln Universities since the mid 1990s. This paper draws on reflections on that experience and a conceptual analysis of the requirements of marine spatial planning to discuss whether the teaching of MSP needs to incorporate skills and knowledge that are distinctly different from those that are required for traditional land-based planning

The Rural Difference – Education outcomes sought by rural planners

Angus Witherby

Wakefield Planning

This paper outlines the author's experience across both the public and private sector in working with recent planning graduates who are working in rural and regional planning situations. This involves graduates both within private practice and within local government. A guided discussion methodology was utilised to review experiences. The paper outlines the main workplace challenges that these planners experience in translating a generally urban-based planning education to the rural context. The paper highlights, in particular, the skills sets needed and relates these to the recently reviewed PIA accreditation criteria.

Regional planning as survival: the unrecognized Bedouin villages in Israel/Palestine

Oren Yiftachel

Ben-Gurion University, Israel

The lecture will analyze the making of an alternative regional plan for dozens of unrecognized indigenous Bedouin Arab villages in southern Israel and the West bank, Palestine. Following years of neglect and marginalization, the villages took initiative 'from below', together with professionals associated with several NGOs, and prepared a professional master plan for recognition in all Bedouin villages. The plan aimed to counter government moves to forcefully relocate most Bedouins from their ancestor's lands into new planned townships. Both government and alternative plans are now debated in the public arena. The lecture will analyze this unique planning exercise, and pay special attention to the role of planning authorities and the involvement of students in the preparation of alternative plans. The lecture will conclude with lessons for planning education in comparable cases, such as Australia and New Zealand.