THE PROCEEDINGS

FROM THE

RODNEY DAVIES

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BACK to the FUTURE 2015

FOREWORD

The late Rodney Davies with the NZPI President Hester den Ouden at the presentation of his Life Fellow award.

For some years Jan Crawford, a planning consultant and researcher with the *Planning Under a Collaborative Mandate Project*, has been running a research symposium at the annual NZPI conference to facilitate and encourage the presentation of planning research produced in New Zealand. In recent years that research symposium has been used to honour the long planning career of the late Rod Davies, an Auckland planning consultant and architect who had been an active member of the NZPI including time as President. He was also a person who could critically assess not only his own work, but the work and direction of the profession as a whole. This ability to critique what was around him proved to be of great assistance to me when I was writing a history of the NZPI. It was Rod's interest in the development of planning that made it appropriate that this research symposium be named after him. The intention of the symposium is to bring planning researchers together to share their research with each other and with practitioners.

The papers presented in these Proceedings cover a range of issues that face current planning practitioners. The first paper by Wendy Saunders and Emily Grace of GNS Science

addresses the issue of how practitioners have responded through the plans they write, to the challenges posed in addressing the real and potential effects of natural hazards. In post-Christchurch earthquakes New Zealand, this is important research as planners and communities struggle with the need to address these issues in a meaningful way and in a way that will offer some long term security to those communities.

The second paper by Imran Muhammad and John Yin of Massey University and Jane Pearce of the University of Canterbury, addresses another vexatious urban problem — promoting the use of public transport - in this case, in an increasingly multi-ethnic Auckland. Based on the results of monitoring Chinese language blogs for comments on public transport experiences it identifies some opportunities to improve users experience of Auckland's public transport. This is followed by a paper by Jo Ross also of Massey University, which takes a more theoretical approach in its exploration of planning's current focus on urban containment. While such policies are often justified on sustainability grounds, Jo's paper looks what those policies might mean if they were explored in terms of legitimacy and their ability to assist in creating a 'just city'.

While New Zealanders all have an attachment to suburban living and having detached homes set on a section, we rarely if ever consider where that attachment might have come from. Roy Montgomery from Lincoln University uses insights from human ecology and environmental psychology to explore why we may so attached to this style of living and what that means for the plans and policy we create. The final paper from Dory Reeves from the University of Auckland looks at a very fundamental question of 'what makes early career planners effective in the workplace'. Based on an international survey this work provides some insights into this question and what that means for processes such as mentoring that are so central to our efforts to retain people within the profession.

While these papers appear to address some very diverse themes, they are all drawn from the issues that face planners on a daily basis — how to plan in an increasingly complex New Zealand. As such, these papers demonstrate that the academic planning community in New Zealand is strongly rooted in the everyday concerns of practitioners. These papers are also of interest to practitioners as much as well as planning students and other academics and I'd encourage everyone to take the time to read them.

Associate Professor Caroline Miller
Convenor, Rodney Davies Research Symposium 2015

All papers presented at the Symposium and included in these Proceedings have been fully refereed and have met the requirements for quality assurance.

A case study of best practice natural hazard planning provisions in New Zealand

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Abstract

A research project has recently been completed that, for the first time, analysed the natural hazard provisions in all operative regional policy statements, territorial authority plans, and civil defence emergency management plans (99 plans in total). Three types of analysis were used to collect a robust data set to answer the question: What is the state of land use planning for natural hazards in New Zealand? These were a plan content analysis of all 99 plans, a case study analysis of 10 RMA plans, and a survey of Council staff addresses capability and capacity issues. This paper focuses on the results of the case study analysis, and what the results of that part of the study can tell us about best practice planning for natural hazards. Examples of best practice, as well as opportunities for improving practice, are discussed.

Introduction

This paper presents some of the outcomes of a plan evaluation project focused on natural hazard provisions, involving all operative district plans, regional policy statements (RPS) and civil defence emergency management plans in New Zealand. Prior to this research, no comprehensive assessment of natural hazard provisions in all operative plans had been undertaken in New Zealand. While a plan evaluation assessment was completed in the 1990's (Berke et al., 1999, Ericksen et al., 2003), its scope was limited to a specified number of plans, and was broader than just looking at natural hazard provisions. Now, with this study, data exist that provide a baseline from which to measure future trends in the quality of natural hazard provisions.

Primarily a desk top study, the project was divided into four key parts (as shown in Figure 1):

- Part 1 was a content analysis that used 127 questions to assess all 99 operative district plans, RPSs and civil defence emergency management plans in New Zealand.

- Part 2 was a case study analysis of 10 RMA plans (including operative and proposed) to identify examples of good practice in planning for natural hazards.

- Part 3 was a survey that investigated the capability and capacity of council staff (regional and district/city) for natural hazard planning.

- Part 4 used the key findings of the three parts to answer one key question: what is the state of planning for natural hazards in New Zealand?

The design of the project was not to 'name and shame' plans that were assessed as having poor plan quality; rather, it was to identify areas where national direction may be required to improve how natural hazards are managed by plans.

This paper will focus on the outcomes of the case study analysis (Part 2) and discuss what they tell us of best practice in planning for natural hazards in New Zealand. Based on international plan evaluation practice (Berke and Godschalk, 2009, Smith, 2011, Lyles et al., 2012, Lyles and Stevens, 2014), further detail on the methodology used for each part of the project, the results of each part, and more detailed discussions, can be downloaded from the International Journal of Disaster Risk Science at http://link.springer.com/article/10.1007/s13753-015-0039-4, or from the series of GNS reports on the project (Saunders and Ruske, 2014, Saunders et al., 2014 (in prep),, Saunders et al., 2014a, Saunders et al., 2014b).
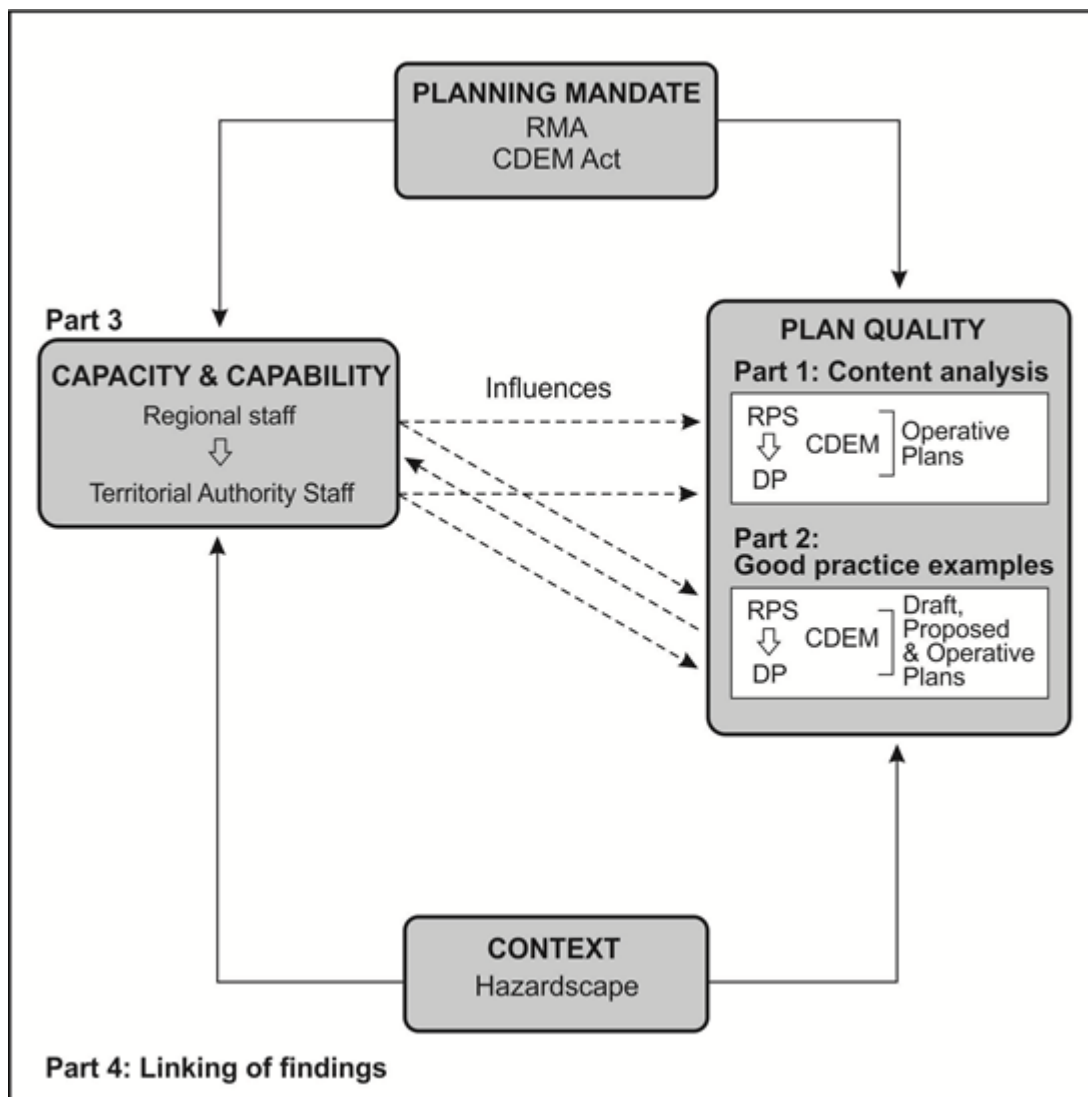
Figure 1 **Framework for project, linking mandate, plan quality, capacity, capability, context, and influences** (adapted from Berke, et al., 1999, p. 647). RMA – Resource Management Act 1991, CDEM – Civil Defence Emergency Management; RPS – Regional Policy Statement; DP – District Plan.

Case study analysis of best practice

Ten RMA plans were selected for detailed case study analysis to determine what they could offer as guidance on best practice for land use planning for natural hazards. The plans selected met the following criteria:

- Scoring highly in the Part 1 analysis

- Including both operative and proposed planning documents

- Including RPS, unitary plans and district plans

- Including one RPS and district plan from the same region

- Including a combination of urban and rural-based plans, geographically spread across New Zealand, and covering a range of hazards.

These criteria allowed for observations to be made on the following matters:

1. Identification of good practice in all three types of RMA planning documents considered in this study – RPSs, district plans, and unitary plans.

2. Comparison between operative plans and proposed plans, to see how good practice has advanced over time.

3. Comparison between unitary plans, prepared by an authority with jurisdiction over both regional and district functions, and RPSs and district plans, which are prepared by single jurisdiction authorities, to see if these different jurisdictional arrangements have any effect on hazard management.

4. Comparisons between an RPS and a district plan in the same region, to see how the planning hierarchy set out in the RMA is given effect to for hazards management.

This paper provides a discussion of our findings across each of these matters.

The following plans were selected as case studies: Greater Wellington Regional Policy Statement; West Coast Regional Policy Statement; Hurunui District Plan; Thames-Coromandel District Plan; New Plymouth District Plan; Gisborne District Council Unitary Plan; Tasman District Council Unitary Plan; Proposed Thames-Coromandel District Plan; Proposed Waikato RPS; Proposed Invercargill District Plan.

Nine categories of best practice indicators were used in the analysis. These categories were selected as being indicators of general best planning practice, as well as best practice for natural hazard planning. In particular, indicators of a risk-based approach were used, as this approach is considered best practice for natural hazard planning (Quality Planning, 2013). A risk-based approach focuses on the consequences of a natural hazard event, rather than just the likelihood of a particular event occurring, in order to determine the level of risk posed (for example, tolerable or intolerable). The principles underlying the approach are that accurate hazard information should be gathered and used as the basis of decisions, development and subdivision within hazard areas should be avoided or mitigation measures used where avoidance is not possible, and in already developed areas, there should be no increase in the level of risk. For further explanation of the risk-based approach see Quality Planning (2013) and Saunders et al, (2013).

The nine categories were:

- Planning framework (e.g. linkages between issues, objectives, policies, methods)

- Monitoring and evaluation

- Uncertainty

- Cumulative and cascading hazards

- Mapping

- Roles and responsibilities

- Interaction with Civil Defence Emergency Management (CDEM) Plans

- Information base/management

- Definition of risk

The following two sections of this paper address examples of good practice in RPSs and district and unitary plans. Rather than addressing all of the nine categories in the limited space available, these sections will focus on the categories of planning framework, monitoring and evaluation, mapping, roles and responsibilities, and definition of risk.

Discussion of good practice examples in RPSs

A number of examples of good practice in the category of 'planning framework' were identified. For example, tables that show linkages between issues, objectives, policies, and implementation methods appear to improve ease of use, transparency and accessibility of an RPS, especially when natural hazard provisions are spread across different chapters/sections of an RPS (such as in the Wellington RPS). We found that policies and implementation methods that are directive towards the content of regional coastal plans, regional plans, and district plans set a clear hierarchy and can ensure that the objectives of the RPS are given effect to in other documents. Directive policies also ensure consistency between regional and territorial plans. We found that explicitly taking a risk-based approach, using concise and directive language, as in the Proposed Waikato RPS, provides clear policy direction to territorial authorities.

For the 'monitoring and evaluation' category, we found that the inclusion of hazard-specific anticipated environmental results sets clear monitoring parameters. Including timeframes with these results makes the monitoring requirements even clearer.

RPSs have a key role in setting out roles and responsibilities for hazard management. Not only is this task assigned to an RPS by section 62 of the RMA, but an RPS applies in multiple districts/cities and must be 'given effect to' by regional and district plans. Therefore, an RPS has the unique ability among RMA plans to be very directive as to the content of regional

and district plans, helping create consistency in hazard management within a region. We found that policies clarifying the roles and responsibilities of regional and territorial authorities in hazard management are helpful in providing clear direction and for efficient use of resources (i.e. avoidance of doubling up of function). In addition, in the Proposed Waikato RPS it assigned responsibility to the regional plan to manage risk to existing developments, thereby overcoming the restriction imposed by s10 (existing use rights) of the RMA on district plans doing this.

Definitions provide certainty and help achieve consistent application of the planning framework. We found that the Proposed Waikato RPS included definitions of levels of risk (intolerable, tolerable and acceptable), as well as of other risk-related terms. These definitions provided strong support for the policies and implementation methods, and should help achieve consistent application of the planning framework.

Discussion of good practice examples in district and unitary plans

We found that a planning framework with a set of general risk management and/or 'all hazard' objective(s) and policies, alongside hazard-specific methods and rules, is a common framework in district plans. Policies that address specific hazards are not common. While general policies allows for a consistent outcome to be sought for all hazards, including hazards for which there is little information, this will not occur unless an activity first needs a resource consent. An 'all hazard' approach without specific methods or rules can therefore lead to a weak policy framework. Rules are essential for controlling land use activities – the greater the range of hazards for which rules are included, and/or that are mapped, the greater the control.

As for the RPSs, we found that a policy framework that uses directive language provides clarity and certainty to plan users. Examples include use of phrases such as "to avoid", "to limit", and "shall". We found that direction on when to 'avoid' and when to 'mitigate' provides a stronger policy framework than when the two terms are used together in the same policy, without guidance on when to apply which. Use of prohibited activity status in mapped areas of 'high' hazard appears to be an effective way to implement policies requiring 'avoidance'. In addition, we found that the use of three activity categories in rules (e.g. permitted, restricted discretionary, non-complying/prohibited) provides a meaningful range of controls that provide a stronger link to policies, and provides greater certainty for plan users, than just two categories (e.g. permitted and discretionary). Reliance on discretionary activity categories retains a high degree of discretion with the decision-makers. As a result, little certainty is provided to plan users on the likely outcomes of resource consent applications, and inconsistency in the way the policy framework is applied is likely. Such a framework may be appropriate for situations where the risks associated with a hazard are very uncertain. However, where information on risk is available, such a framework should be avoided.

There is a large amount of variance in the way mapping of natural hazards is undertaken in district plans. We found that the scales used vary greatly, the amount of information contained in maps varies, and the strength of the link between maps and rules also varies. As an example of good practice, we found that hazard maps that incorporate potential consequence information, rather than just hazard extent, provide a strong link to objectives, policies and rules that focus on risk. It allows for more accurate matching of activity status with levels of hazard, and provides for more informed decision making. For example, the Thames Coromandel District Plan (both operative and proposed) includes flood hazard maps based on depth, velocity, and potential harm to property and life. The maps create four categories of flood hazard: high, medium, low, and defended areas. These are linked to the flooding rules, which assign more restrictive activity categories (non-complying, discretionary, and restricted discretionary) within the higher hazard risk areas, or when specified standards cannot be complied with. The detail in the maps is reflected in the detail in the rules, and so the policy framework for managing risk is implemented in a comprehensive way.

Mapping of uncertainty can also provide strong links to policies and rule addressing uncertainty. We found good practice examples of mapping of fault traces that acknowledge uncertainty, which allows a cautious approach to controlling land use near these features. Both the Hurunui District Plan and Tasman Resource Management Plan use categories to define areas of varying uncertainly as to fault location. For example, the Hurunui District Plan uses 'definite active fault trace', 'definite fault trace' and 'possible minor or propagating fault trace', with rules imposing restrictions corresponding to the mapped degree of uncertainty.

Our findings for the category 'monitoring and evaluation' in district and unitary plans were comparable to those for the RPSs – that is, that clear identification of matters to be monitored, information to be gathered, the information source, and the frequency of review is best practice in monitoring provisions.

We noted two district plans that recorded roles and responsibilities of both the regional and district council. While we have highlighted above the key role for RPSs for identifying roles and responsibilities, we found that district plans that reinforce these roles help provide consistency and clarity to the overall planning hierarchy.

None of the district or unitary plans assessed in the case study analysis included a definition of risk. This was expected after the plan analysis part of the project found that only nine of the 69 district and unitary plans included a definition of risk. As discussed above for RPSs, definitions provide certainty and help achieve consistent application of the planning framework. Increased use of definitions of risk therefore presents an opportunity to improve planning practice for natural hazards.

Discussion of how good practice has changed over time

One proposed RPS and two proposed district plans were assessed in the case study analysis, to see how good practice has advanced over time.

Advances in good practice in RPSs were clear in three of the categories considered – roles and responsibilities, interaction with CDEM plans, and definitions. These are discussed below. Advances were less clear in the other indicators, as the older West Coast RPS measures up in a similar way to the more recent Wellington and Proposed Waikato RPSs. For example, both the West Coast RPS and the Proposed Waikato RPS seek to manage risk from natural hazards. Both set the level of risk to be managed (acceptable, in both cases). Both provide guidance on how to determine what an acceptable level of risk is, with the West Coast RPS emphasising the need to involve the community. The guidance provided by the Proposed Waikato RPS is more detailed than that provided in the West Coast RPS. This represents a progression in good practice.

We found that explicit links between RPSs and district plans and CDEM Plans and Groups is an example of progression of good practice over time – CDEM Plans (among other things) identify and priorities hazards within a region. Integration with other hazard management activities in a region is therefore more likely if RPSs and district plans are linked to CDEM Plans. Both the Proposed Waikato RPS and Wellington RPS referenced the corresponding CDEM Plan and/or Group functions, whereas the West Coast RPS only refers to emergency response functions, and it is unclear whether this reference is consistent with the corresponding CDEM Plan or not.

The importance of definitions of risk and related terms has been discussed above. We observed more recent RPSs including such definitions where older RPSs did not, but this trend was not replicated in district plans. This improvement in good practice in RPSs should be replicated in district plans as more district plans are required to give effect to newer RPSs that include definitions.

Specifically for district plans, advances in good practice were noted in the categories of planning framework and cumulative and cascading hazards. These are discussed further below. We found it difficult to identify advances in good practice in the other categories based on the plans selected, as being more recent in time did not appear to be a guarantee of being 'better'.

We did find that more recent district plans were more explicit in their intention to manage risk from natural hazards. They used risk management language as opposed to trying to frame risk management using the more traditional 'avoid, remedy or mitigate the adverse effects of natural hazards'. We found that the use of risk management language results in a clearer and more direct policy framework.

Setting a level of risk for risk management, such as 'acceptable' or 'tolerable', is a recent occurrence in RPSs and district plans. A common alternative is to focus on 'not increasing' or 'reducing' risk. Comparing the two approaches, providing a level for risk management appears to provide for a more comprehensive framework for risk management. It is more specific and seems to allow a greater level of detail of control to be exerted, rather than the more blanket types of control that may result from a more generic approach of 'not increasing' risk. However, opportunity exists to further consider how land use rules can link more explicitly with policy direction to achieve a specified level of risk (such as acceptable or tolerable). The Proposed Thames Coromandel District Plan includes such policies, but it is unclear whether the rules are set up to achieve the specified level of risk or not. That plan does not include definitions of the levels of risk, and this causes an issue with how the rules link to the policies. It creates an anomaly in the policy framework that greatly reduces the clarity and consistency with which could be potentially be implemented and applied.

Cumulative hazards are multiple, unrelated natural hazards that impact on the same area. The area therefore has a higher likelihood of being impacted by a natural hazard event. Cascading hazards are those different types of hazards all triggered by the same event. When the trigger event occurs, the area will therefore be subject to more than one hazard at the same/similar time. Addressing cumulative and cascading hazards in a plan allows a more sophisticated approach to be taken to the management of risk. However, the concepts are generally poorly represented in district plans. We did find an example of a proposed plan the included a policy on cumulative and cascading hazards, which represents an advance in good practice. However, there is an opportunity to further develop means of addressing this issue in policies, rules, and maps.

Discussion of jurisdictional differences

Both the Tasman Resource Management Plan (TRMP) and the Gisborne District Plan are unitary plans, addressing both regional and territorial matters. Review of these plans identified a number of benefits of the 'combined' unitary plan approach over the more common two-tiered regional and district plan approach.

We found that a unitary plan had a greater ability to integrate hazard management over a larger area than a district plan, and across both regional and district-level functions. For example, the Gisborne District Plan identifies all of its hazards rules as being regional rules. This allows greater integration across regional and district matters in hazard management (e.g. land use in coastal and river environments), overcomes restrictions imposed by s10 RMA on rebuilding in hazard zones (as discussed above in the context of the Proposed Waikato RPS), and applies hazard rules equally to designations (e.g. schools, infrastructure) as to other land use activities. We note that these same outcomes could be achieved under the two-tiered structure if RPSs assign these responsibilities to regional plans (as the

Proposed Waikato PRS does). This is not commonly done at present, but worth considering for areas that would benefit from more consistent hazard management and/or have existing development within hazardous areas.

Unitary plans also appear better able to address cumulative hazards than district plans, particularly in the coastal environment. Coastal hazard mapping in particular was based on one 'zone' that was inclusive of all coastal hazards. This allows for more comprehensive management of this group of hazards – one set of rules applies. We also noted a similar approach was taken in the Proposed Invercargill District Plan, so it is not a practice limited to unitary plans.

Discussion of how the planning hierarchy is implemented

To consider how the planning hierarchy works for natural hazard management, we reviewed both the Proposed Waikato RPS and the Proposed Thames-Coromandel District Plan (Proposed TCDP). Although the Proposed Waikato RPS was not operative at the time the Proposed TCDP was notified, there had been a time period of 13 months since decisions on the Waikato RPS were notified, and three years since it was first notified. We therefore considered there had been sufficient time for the Proposed TCDP to have taken account of the contents of the Proposed Waikato RPS.

In addition, and as noted above, the risk management framework in the Proposed Waikato RPS is very directive towards district plans, which we consider represents good practice for the planning framework. There are a number of policies and implementation methods that state "district plans shall …". It provides details on levels of risk to be managed in particular circumstances (acceptable, tolerable, intolerable). It is therefore a useful case study to consider the influence such a directive framework has on a district plan, especially when the outcomes sought by the RPS are so clear.

Generally, we considered that the Proposed TCDP did implement risk management as required by the Proposed Waikato RPS. There is an explanation for the risk-based approach, including a risk table that illustrates how acceptable, tolerable and intolerable levels can be determined. The planning maps in the Proposed TCDP do identify the coastal, high risk flood, and residual risk areas that are specifically required by the RPS, and there are rules that apply within these areas to control subdivision, use and development. It appears that the directive policy framework in the Proposed Waikato RPS has resulted in a district plan that achieves the type of risk management intended by the RPS, at least at the policy level.

What we found less clear is whether the rules manage risk in accordance with the levels set in the Proposed Waikato RPS and the policy of the Proposed TCDP. While there are rules that manage risk for a range of hazards (flooding, coastal erosion, and tsunami), as we noted earlier, it is not possible, on the information contained in the plan, to understand if

these rules are managing risk in a way that meets the policy requirements. We have already discussed the opportunity that exists to improving the links between rules and levels of risk specified in the policy.

Conclusions

The case study analysis summarised in this paper has provided useful examples of best practice for planning for natural hazards occurring in RMA plans in New Zealand. It has also allowed identification of areas where practice could be improved.

We have found that basic good practice for writing plans (such as directive language, linkages between provisions, use of definitions) leads to best-practice planning frameworks for managing natural hazards, including implementation through the planning hierachy. It is clear to us that RPSs have a key role in not only setting the high level risk management framework, but also in addressing the management of existing developments within hazard areas. We found that greater clarity and certainty is provided to plan users, and stronger links are provided between rules and policies, when district plans use three, rather than two, activity statuses for rules – this allows a more specific degree of control to be exerted and avoids the high degree of uncertainty that results from councils retaining a high degree of discretion. However, it appears that such a framework will not be so successful where hazard knowledge is low. Maps that are strongly linked to rules also illustrate best practice. We have found that managing risk is becoming more explicit in RPSs and district plans, and a recent advance is to specify levels of risk, such as tolerable and acceptable. This appears to provide for a more comprehensive framework for risk management, although we have identified an opportunity to further consider how land use rules can link more explicitly with policy direction to achieve a specified level of risk.

We identified benefits of a unitary plan over the more common two-tiered regional and district plan approach for the management of natural hazards, particularly for consistency in hazard management over a large area, management of existing developments within hazard areas, and for management of cumulative hazards. These benefits can be achieved in the two-tiered approach, due to the powers given to RPSs by the RMA.

The overall project, which includes the content analysis and the capability and capacity survey, has provided robust data to answer the question: What is the state of planning for natural hazards in New Zealand? Drawing on results from those other parts of the project (not reported in this paper), we are able to conclude that overall, the quality of land use planning for natural hazards appears to be improving. All RPSs and land use plans have provisions to manage natural hazards. The results have highlighted ways in which plan-making can be improved, some of which are discussed in this paper. In addition, planners themselves, through the capability and capacity survey, have identified that improvements in their capability and capacity are required. It appears that programs for the up-skilling of

planners, in both risk management and general good practice plan preparation, would be well received.

Uptake of the improvements in plan-making suggested in this study should ensure the trend for risk-based, rather than hazard-based, planning for natural hazards, and the quality of plans, continues to improve. Looking forward, there are many opportunities to further analyse the data gathered from the plan analysis stage and cross-tabulate it with the case studies and capability survey.

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Bios

For the last 10 years Wendy has worked in the Social Science Team at GNS Science, where she specialises in land use planning for natural hazard risk reduction. Over this time she has produced numerous guidance and tools for local government. In 2012 Wendy graduated with her PhD, which underpinned the risk-based land use planning framework for natural hazards (available at http://www.gns.cri.nz/risk-based-planning). Funded by Envirolink and the Natural Hazards Research Platform, this framework enables decision makers to follow a transparent process to determine levels of risk, with an associated community engagement process at every step.

Emily is a land use planning with 12 years' experience specialising in land use planning and impact assessment. She has experience in local government, consultancy, and now at GNS undertaking natural hazards research. Emily has been involved in projects providing RMA advice to a variety of clients, and has undertaken RMA policy analysis for central government and local authorities.

Asian Migrants' Experiences of Public Transport in Auckland

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Abstract

Transport research finds that the ethnicity is a critical factor in explaining travel behaviour. New Zealand cities have become increasingly ethnically diverse, and transport planning can benefit from drawing on the plurality of cultures and values that underpin the social fabric of those ethnic communities. The growing Asian population in Auckland provides an opportunity to transform an automobile-dependent city into a public transport friendly city, as in most Asian countries people make extensive use of public transport. This research explores the opportunities for improving Auckland's public transport by studying the everyday experience and aspirations of the city's Asian communities. This paper reports data collected from Chineese community social media to explore the community's daily experience of public transport in Auckland. The research identifies communication,expectation and perception gaps between Asian users of existing and future public transport systems and institutional practices.

Introduction – Public transport in multicultural cities

Studying the everyday experiences and aspirations of Auckland's Asian communities is one way of exploring opportunities for improving Auckland's public transport system. Auckland is one of the world's most car-dependent cities, with car travel making up nearly 80% of

total trips. More than six decades of road-oriented development has resulted in a sprawling urban form with an inefficient and underutilised public transport system (Imran and Pearce, 2015). In 2012/13, only 3.7% of trips in Auckland were made by public transport, while the estimated congestion cost amounted to $1.25 billion per annum (Auckland Transport, 2013).

The obduracy of Auckland's transport problems contrasts with rapid change in the city's population. Traditionally known for its unique combination of European and Maori-Polynesian cultures, in the last 30 years, Asia has become the main source of migrants to Auckland , now making up 20% of the city's population (Statistics New Zealand, 2013). This Asian influence presents an opportunity for transformation from an automobile dependent city to a public transport friendly city, as in most Asian countries people make extensive use of public transport.

Public policies and projects need to recognise and reflect the cultural and racial diversity of multicultural cities (Qadeer, 1997; Sandercock, 2000). Sandercock (2000) argues that for a society to be functionally as well as formally multiculturalist planning policies must reflect and accommodate a diversity of values, practices and customs, drawing on the plurality of cultures and values that underpin the social fabric of communities. Burby (2003) finds that by bringing together different stakeholders, pluralistic planning can facilitate the integration of scientific and lay knowledge and build social capital, leading to improved planning outcomes. Understanding immigrant communities is also important, because they are a force, reshaping the physical and socio-economic structure of cities. This can be seen in the emergence of ethnic enclaves, shops and places of worship in many world cities, with consequences for the provision of services and facilities, including transport infrastructure (Pestieau & Wallace, 2003).

Transport planning faces increasing challenges in recognising and providing for the diverse travel needs of the communities it serves (Axhausen & Schonfelder, 2010). Wang and Lo (2007) argue that a person's cultural background can be an important determinant of their travel behaviour. For instance, they show that Chinese immigrants in Toronto prefer to shop at more distant ethnic stores rather than mainstream stores closer-by, even if the products that they seek are available at both. Such cultural behaviours influence spatial relationships and travel patterns in Toronto.

A growing body of literature has indicated that ethnicity is an important determinant of public transport usage, even in highly motorised Western countries. People migrate for multiple reasons including as involuntary migrants and refugees. Consequent socio-economic status will impact upon whether public transport use is a preferred or forced option. However, planned skilled migration is growing in Canada, USA, Australia, New Zealand and many northern European countries and forced option to use public transport

become unimportant. A study from Norway by Uteng (2009), shows that public transport makes up 32% of the daily trips undertaken by immigrants from non-Western backgrounds, compared to 8% for the native Norwegians. Meanwhile, only 41% of trips made by these immigrants are by car, compared to 66% for the natives. In a US study, Blumenberg and Smart (2010), find that immigrants are 2.8 times more likely to commute by public transport than native-born Americans. They also point out that the immigrant population has a considerably lower car ownership rate (604 per 1000 persons) than the native-born (765 per 1,000 persons). In another example, from Australia, Klocker and Head (2013) observe that 74% of foreign-born workers commute by car, which is markedly lower than the figure of 84% for the native-born.

Blumenberg and Smart (2010) argue that immigrants are often subject to the process of transportation assimilation, suggesting their preference for public transport may be time-bound. Over a period of 15 to 20 years, immigrants' travel behaviour tends to converge with that of the native-born population. Such an assimilation process has been documented by Heisz and Schellenberg (2004) showing recent immigrants to Canada (arrived in less than 10 years) exhibit significantly higher propensity to use public transport than long-term immigrants (arrived more than 20 years go), even when controlled for other variables such as age and income. Heisz and Schellenberg (2004) assert that higher use of public transport is mainly a result of the changing composition of immigrant source countries, with increasing immigration from countries of Asia and Africa.

Lack of understanding of local language and culture presents both opportunities and challenges for transport planners in growing public transport usage in migrant populations. Chatman and Klein (2013) observe that this may contribute to the lower driving rates among immigrants, especially upon initial arrival. However, Raje (2004) argues that language/cultural factors may discourage immigrants from using public transport, with lack of English proficiency, rendering it difficult "to navigate the transit system" (Blumenberg, 2008 p.39). Consequently, Chatman and Kelin (2013) emphasise achieving a critical mass of non-English speaking public transport users important in making it easier for new immigrants to learn about the transit system. Thus, Burayidi (2003) suggests that transport planners need to develop ethnic sensitivity to formulate policies which ultimately help public transport patronage.

The planning literature emphasises creating transparent, inclusive and democratic systems of plan-making by adopting open exchange of ideas and knowledge between expert planners, engineers and communities (Healey 1997). Mees (2010) argues that the transport planning successes of Vancouver and Zurich were made possible by high levels of democracy and deliberation in strategic plan-making. Although, the transport planning process in Auckland has, in line with procedures, provided multiple platforms for consultation, there has been little debate on setting transport priorities. The mobilities

paradigm focuses on the subjective factors which shape people's everyday experiences of community (Urry, 2006; Cresswell, 2010). It is very hard to measure or quantify subjective factors but they are crucial in understanding individual (im)mobilities. Studying everyday mobility experiences provides a valuable conceptual framework, not only for improving public transport in Auckland, but also empowering Asian migrant communities, and improving fairness in transport provision. This qualitative analysis identifies Asian communities' perceptions, biases and experiences, leading to their varied and variable use of public transport in Auckland. We are therefore, interested in unpacking their value-structures and feelings about what they regard as desirable public transport solutions. This will help in reducing the gap between Asian communities' aspirations for public transport and the proposed projects of the Auckland Council.

Methodology

While this research investigates Asian communities' everyday experience and aspirations for Auckland's public transport, this paper specifically focuses on Chinese communities living, or with experience of living in Auckland. Social media has been used as the primary data source. According to Zafarani, Abbasi and Liu (2014), the rapid growth of social media as a communication channel has created a "novel source of rich data" (p.6), enabling researchers to study human behaviour. In this research, the views of the Chinese were studied based on online comments collected from three sources:

a) Skykiwi forum: a New Zealand website targeting the country's Chinese-speaking population. The website receives 75,000 unique IP visits per day, and is the 56th most viewed website in New Zealand. Its forum is home to the largest online Chinese community in New Zealand with over 200,000 registered members, of whom 83% live within the Auckland region;
b) Skykiwi news section: a popular news portal covering the latest New Zealand news in Chinese. A group of active readers leave comments under the news articles; and
c) Sina Weibo: a Chinese microblogging website very popular with the Chinese communities worldwide, with over 50 million active daily users, including many living in New Zealand.

Relevant forum threads, news comments and microblog postings between January 2010 and June 2014 were identified by keyword searches. Thematic analysis identified "the recurring messages that pervade the situation about which the critic writes" (Eisner, 1998, p. 104).

The use of social media allows researchers to access hard to reach and empirically underrepresented groups (Golder & Macy, 2014; Leng, 2013). However, researchers do need to be aware of limitations on the generalizability of findings, and validity concerns relating to anonymity and low accountability (Leng, 2013). Concerns regarding

generalizability stem from perceptions that internet access and use may be centred on a younger demographic than the general population, and thus not representative, but these differences are diminishing over time (Leng, 2013), and according to Golder and Macy do not warrant the 'widely used distinction between the web and the real world' (2014 p. 143). Further, the high level of use of the selected social media sites by the Chinese population increases its representativeness. It is also argued that social media participants comment on threads close to their experience, thus reducing distortion and increasing validity. In addition, if participants have relative anonymity their comments may be more freely expressed, hence again increasing validity. Nonetheless, Leng does suggest that social media users who share a common identity, such as membership of an ethnic community, may feel pressured to be consistent with group norms and expectations, to some extent countering the positive impacts on validity gained from anonymity. Evidence of emotive or vitriolic responses to postings (Golder & Macy, 2014) may also indicate that discussions are not necessarily representative of 'real world' behaviours. The researchers are aware of these limitations, but recognise that social media is becoming increasingly representative, and useful for collecting data concerning the viewpoints of hard to reach groups such as the Chinese community in Auckland. The data does not attempt to provide comprehensive coverage of the views held by Chinese community organisations in Auckland, but it is expected that the general position of those Chinese communities on the issue of public transport will be reflected in the data.

Results

The Chinese are the largest Asian ethnic group in Auckland, making up over 8% of the region's total population (Statistics New Zealand, 2013). As of Census 2013, the Chinese population in New Zealand had reached 171,000, 69%, or 118,230 living in Auckland. The Chinese exhibit a low median income of $16,000, significantly below the national median of $28,500, and low labour force participation. Only 52% of Chinese over the age of 15 were employed in 2013, 10% below than national average. A reason for this may be that 28% of working-age Chinese were engaged in full- or part-time study, compared to 15% of the total New Zealand population.

The Chinese population in Auckland is highly concentrated in the CBD, Mt Eden, Avondale, Howick, Pakuranga, Takapuna and Birkenhead. In many neighbourhoods in these areas, more than 20% of residents identify themselves as Chinese (Statistics New Zealand, 2013).The Chinese population exhibits high car ownership rates compared to the national average, with the number of households owning two or more private vehicles being higher than that of the total national population. Nevertheless, as of 2013, public transport accounted for 8.5% of commuter trips by the Chinese, compared to 6.5% for the total Auckland population (Statistics New Zealand, 2013).

In total, 184 online comments were gathered for social media analysis. They were divided into three main themes: public transport infrastructure (48 comments), public transport services (129 comments) and public transport planning processes (seven comments). This paper focuses on the comments related to public transport infrastructure and services.

Public transport infrastructure

The City Rail Link (CRL) and Waitematā Harbour Crossing (AWHC) proposals are the most frequently discussed issues, making up 26% of infrastructure comments, and 19% of total comments across all three themes, with 69% of CRL infrastructure comments being negative. Concerns about the CRL centre around its economic and financial viability, potential profitability, and the debt burden it is expected to impose on Auckland's population. For instance comments include:

> With Auckland's small population, the question is how the CRL could possibly run profitably and generate a positive return on the investment?

A second area of concern is whether the built environment is suitable for rail:

> Auckland has low population density. Rail only benefits a minority of people where it goes. It is infeasible for the majority to use rail.

Thirdly, the usefulness of light rail is debated:

> Investment in the bus system and bus only lanes is superior than rail investment.

Support for the CRL sis also expressed:

> Singapore and Hong Kong have much lower car ownership rates than New Zealand … because the public transport system is so excellent … From this point of view, Len Brown's proposal is a step in the right direction.

The AWHC received greater support with 77% of the relevant comments favouring the project, particularly the tunnel option including rail between CBD and the North Shore. Dissenters were again mainly concerned with the cost implications of the project.

Public transport services

The 129 comments made about public transport services have been subdivided into issues of i) affordability, ii) reliability, frequency, and operating hours, and iii) customer service.

Affordability

This is the most common theme making up 29% of comments, the overwhelming majority (78%) considering the fares to be excessive, and a major deterrent to public transport use:

> When public transport becomes too expensive, then it doesn't deserve to be called 'public' transport.

18% of the comments consider public transport costs to be equivalent to or more expensive than driving, and a major disincentive. Several users even made detailed calculations to support such claims. For those who considered public transport to be fairly priced, most cited the lower relative cost of public transport compared to driving as the primary rationale; for example:

> Bus is cheaper than driving if you take into account the costs of owning, maintaining, insuring and parking your car.

One user argued that Auckland's public transport providers could justifiably charge higher ticket prices due to the level of crowding being less than in Chinese cities.

Comments suggest the Chinese community's negative perception of public transport affordability is influenced by constrained socioeconomic status.

Reliability, frequency, and operating hours

Reliability is the second most discussed theme, making up 22% of comments. The overwhelming majority (90%) view public transport services as unreliable. Lack of punctuality is the main issue, including a claim that:

> In recent months, my bus has never arrived on time.

Most of the negative reliability comments relate to bus services; views on trains being more divided. Some consider trains more reliable than buses because "they do not get stuck in traffic jam". Others argue that trains are also often late and sometimes experience mechanical problems. Reliability issues are seen to increase journey time, imposing a substantial opportunity cost on public transport users:

> … today it took me an hour to get into the city by bus, compared to just 45 minutes by car. In conclusion, I will never travel to the city by bus again.

The issue of poor punctuality is compounded by low off-peak frequency and short operating hours. For instance:

> the unpunctuality, low frequency and early finishing times of certain [bus] routes upset me more [than the high costs].

However, satisfaction was also expressed with public transport frequency during peak hours:

> The bus service in the North Shore is ok. During morning and evening peak hours, there is a bus every 5-10 minutes.

The ticketing system also seen to undermine the reliability of public transport in Auckland. For example:

> The Hop Card technology is too immature…There are often issues (with the ticketing system)... For that reason I have been prevented from boarding the bus for several times.

Customer service

The data shows strong evidence of poor customer service and information deficiency limiting access to public transport. An overwhelming number of comments describe the unfriendly and rude behaviour of bus drivers. For instance:

> Once I only had a $20 note when I got on the bus, so the driver asked me to go to the dairy shop nearby to get change. But once I got off the bus, he shut the door and drove away. I felt cheated.

A large number of the postings on the SkyKiwi forum inquire about public transport schedules and routes. System complexity and ticketing changes have caused considerable confusion. Some posts also clearly suggest language barriers to be an issue in using public transport. For example:

> I'm new to Auckland and need to catch a bus. My English is not good. Can anyone please tell me after I get my bus card, whether I only swipe it when I board the bus, or do I need to swipe it again when I get off?

Discussion and conclusion

This section discusses the two main themes, public transport infrastructure and public transport services, identified in the analysis of the Chinese community social media comments and draws conclusions from the analysis.

Auckland Council's proposed public transport projects including the CRL and AWHC have sparked fierce debate within the Chinese community, the majority of comments about CRL being negative. Key concerns relate to the project's high construction cost and limited utility. By contrast, the AWHC proposal has received strong support, with many emphasising the need for the crossing to effectively incorporate public transport.

Tal and Handy (2010) argue that residential location may have a role in explaining opinions such as those of the Chinese community on the two projects. There is a large Chinese community living in or near the CBD, but also in many other suburbs, many of which – particularly on the North Shore that do not have access to rail. The benefit of the CRL is likely to be heavily discounted by residents from these areas. The additional harbour crossing increases connectivity between the North Shore and the rest of the city, and is more positively received, as it benefits a wider population, a point not focused upon in the Council's prioritisation of the CRL over the AWHC.

It should be noted that many Chinese who are against the CRL are not fundamentally opposed to rail development per se. Rather, they consider it a poor fit with the low density characteristics of Auckland's existing urban landscape, which limits accessibility to rail for the wider population and thus the profitability of train services. From this perspective, the Council's strategy of promoting intensification may, overtime, increase the acceptability of the CRL, and increase public transport patronage.

There is a common perception among the Chinese that Auckland's public transport is overpriced. This may relate to the community's relatively low socioeconomic status, often as students and/or new immigrants, who are less able to afford public transport. This status and strong affordability concerns tend to support the literature arguing that ethnic travel behaviour relates to socioeconomic profile, and may differ from that of mainstream society.

The perception that fares are expensive is not limited to the travel behaviour of those on lower incomes; many commenters describe public transport as "expensive" (rather than "unaffordable"), making it an unattractive alternative to driving. Although there is no consensus about whether public transport is cheaper than driving, what emerges from the data is a prevailing view that high bus and train fares, in conjunction with poor reliability, renders public transport poor *value* compared to driving. This has led many to claim that for convenience they would rather spend more to drive their own car.

The Auckland Plan (2012) describes affordable living, including transport, as a guiding principle in the Council's efforts to attain a well-connected and accessible city. However, in

giving effect to this principle, Council sees public transport as a means to reduce the cost of living, usually in conjunction with affordable housing policies. By framing public transport as a positive, cost-saving modal choice within the broader context of rising house prices and costs of living, Council has avoided having to address the issue raised by the Chinese regarding the perceived high costs of public transport.

Reliability, low frequency and operating hours of services are all major shortcoming of Auckland's public transport for the Chinese. While a few users comment favourably on the peak hour services, many consider the frequency of services unsatisfactory, especially during off-peak hours and on weekends. Claims of having to wait for up to an hour for buses were relatively common. Chinese communities' perceptions about public transport services in Auckland are consistent with other residents of the city. According to the market perception survey, 58% people in Auckland think that public transport did not provide an appropriate choice 'to get where I want, when I want' (AT 2014, P. 6). While further confirmation is required, the low level of satisfaction with frequency suggests that there is strong demand for off-peak services and network planning (Imran and Matthews, 2015).

Such demand is not unexpected considering the Chinese population's low labour force participation rate, with only 35% working full-time, suggesting that these individuals (despite the overall car ownership levels within the Chinese population) may be less likely to have access to a car, and/or travel at peak hours. This possible link between the socioeconomic makeup of the Chinese population and their travel demands for off-peak services is supported by international studies by Lovejoy and Handy (2008). Auckland Council's proposal to create a modern, efficient transport system, and Auckland Transport's new network will no doubt help improve the reliability and frequency of public transport. Auckland Transport (2014) market perceptions survey shows that 59% respondents feel that public transport in Auckland is improving as compared to last year.

Public transport customer service is also regarded as needing improvement. The research suggests that some Chinese bus users find Auckland bus drivers to be unfriendly and/or impatient. While customer service related issues appear to be of less significance than other matters such as affordability and reliability, they could still undermine Chinese public transport patronage. Limited English proficiency may further restrict access to information and compromise use of the complex and potentially confusing public transport network in Auckland. Incidences of missing bus stops or catching the wrong bus appear to be common among the Chinese in Auckland, especially for new immigrants. These findings coincide with the views of Raje (2004) that cultural shock and language barriers may reduce the accessibility of public transport to ethnic communities. The findings are also consistent with Syam (2014) that there is a significant difference between the travel needs, attitudes, and perceptions of transport modes among different ethnic communities in Auckland. Asians travel noticeably less than people of other ethnicities (Europeans, Maori and Pacific

Islanders) both in terms of number of trips and distance travelled. Failure to acknowledge the transport needs of these communities is likely to lead to inadequate infrastructure and service provision, creating barriers to people fully participating in society.

This paper has explored the everyday public transport experiences and aspirations of the Asian communities in Auckland. This research shows that at least some members of the Chinese community would like to see improvements in existing public transport services, rather than a focus on public transport mega projects as advanced by the Council. To have a voice in the creation of improvements, the inclusive and participatory planning systems advocated in the literature need to be put in place in the setting of transport priorities.

Affordability, reliability and low frequency are key factors deterring people from using public transport; a situation which can be fixed in the short-term, ultimately improving patronage (Imran and Matthews, 2015). Other issues include poor customer service, a complex and confusing network and language barriers. Auckland Transport addresses some of the issues identified in their new network design including public transport efficiency, reliability and connectivity. However, customer service and language barriers have so far been largely neglected. Perhaps more bilingual staff and drivers might help improve this situation.

This paper has exposed opportunities for improvement in Auckland's future transport planning and policy, as Sandercock (2000) suggests, multicultural planning can facilitate institutional change. This study of Chinese perspectives on Auckland's public transport has uncovered many issues, including affordability and language barriers, which Auckland Transport should consider. The Auckland Plan has placed a strong emphasis on social inclusion. However, its strategy for this relies predominantly on improving the physical access of communities to public transport, and ignores the socioeconomic factors that restrict people's access to public transport. With the affordability issue of public transport left unaddressed, the mobility of low-income Asian immigrants in general and Chinese families in particular is likely to continue to be limited, which prevents them from fully participating in New Zealand society. This paper concludes that transport policy and planning would benefit from engaging with a greater diversity of its residents to bring fresh ideas and additional perspectives to the formulation of public transport solutions.

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Bio

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The legitimacy of urban containment and planned residential intensification in the market state

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Abstract

Controlling the outward expansion of urban areas is a key problem facing planners, particularly as they seek to provide appropriately for housing in growth regions. The legitimacy of planning for a compact city is based on a wide acceptance that it is environmentally, economically and socially sustainable. Legitimacy suggests inclusive decision-making and acceptance of the political system as being appropriate, proper and just, by those bound by its decisions. However, the legitimacy of compact cities is contested. An inherent tension exists between the pursuit of a compact city and the neo-liberal view that planning interventions unnecessarily constrain the market. Some suggest that residential intensification and urban containment artificially restricts housing supply, reducing affordability and causing inequitable housing distribution. The intent of a 'just' city is to achieve outcomes that reflect democracy, diversity and equality. This paper explores the legitimacy of planning for a just city, as opposed to planning with a focus on a compact city. It describes how a neo-liberal ideology with an emphasis on competitiveness, deregulation, privatisation and a devolved style of governance influences the development of a city. The paper concludes with thoughts on how legitimacy and justness are key concepts to help policy makers address unintended distributive inequalities of urban growth.

Introduction

Controlling the outward expansion of urban areas is a key problem facing planners, particularly as they seek to provide appropriately for housing in growth regions. The legitimacy of planning for a compact city is often based on the notion that it is environmentally, economically and socially sustainable. However, the legitimacy of a compact city is contested, particularly as it relates to the social consequences of planned urban containment and residential intensification. This paper explores the role for planning in addressing the social consequences of planned urban growth, and striving for a just city. It begins by exploring definitions of planning and justice, before describing key attributes of a

just city. It then explores the basis of planning a compact city, and describes how the legitimacy of policies pursuing compactness could be used as a tool to measure of 'justness'. This paper concludes that there is a role for planning to strive for the, albeit utopian, ideal of a 'just city'. However, to achieve a world that is 'just' relies on an understanding of how citizens are participating in planning, how local authorities are responding, and the distributional effects of outcomes – the legitimacy of planning policy.

Planning, justice and the just city

Planning, as a discipline, is complex and interpreted variously. As a noun, its purpose and meaning is hard to pin down definitively, and adjectives describing it include "amorphous and slippery" (Campbell, Tait, & Watkins, 2014) and even "schizophrenic" (Eisenschitz, 2008). Auster (1989) suggests the notion of planning is so broad as to "recommend itself in practically every field of national endeavour" (p. 131). Fairly unanimously agreed is that the planning discipline seeks the achievement of a set of goals that transforms knowledge into action, and has a spatial component relating to the physical outcomes in the built environment (Campbell, 2006; Fainstein, 2014; Hall, 2010). In achieving those goals, planned interventions in the market are legitimised on the basis that restrictions of property rights are necessary for the public interest and will result in better outcomes than would have occurred without the intervention (Campbell & Marshall, 2002; Campbell et al., 2014). In their role as place makers (Campbell, 2006) and "champions of the public interest" (Friedmann, 2011, p. 144), planners have an influence deciding what is good or bad, right or wrong (Campbell, 2006).

Yet, given that planners are "regularly dealing with conflicts and fracas arising from conflicting human aspirations as to how we should create a better future" (Gunder, 2006, p. 18) it is interesting to reflect on whose interests are being served by planning. Friedmann (2011) suggests that, in the past, "[t]he public interest was essentially an a-political construction empty of specific content, at best a vague imaginary of suburban, middle-class life" (p.144). So the question needs to be asked, whose interests are served by planning.

For many, planning is an activity seeking to achieve better outcomes for those in need. Greed (1999) writing about social town planning in the UK, highlights the physical / social dualism of planning. She argues that the point of planning is not just the physical planning of buildings and spaces, but that planners are only concerned in the physical, built environment is because it enhances human welfare (Greed, 1999). In its inception, urban planning had a clear focus on this social / physical dualism.

The beginnings of urban planning are often associated with the governmental response to inadequacies of the physical environment arising from capitalism and associated economic expansion in the 19th century and as such it is grounded in socialist and social democratic ideology (Gleeson & Low, 2000a; Gurran, 2011). In particular, it sought to ameliorate the

overcrowded and unsanitary housing conditions as a result of rapid industrialisation (Frieden & Morris, 1968). At this time legislation requiring specific development controls emerged and following the depression of the 1930s, and the subsequent World War, further legislative controls were introduced to deal with the rapid expansion of urban environments (Gurran, 2011). The emphasis on social planning declined in the decades following the 1950s as planning became procedurally oriented, and by the 1980s, which saw the rise of neo-liberalism, it was significantly marginalised (Taylor, 1998). Since then however, there has been a move towards a more communicative style of planning, where planning is seen as being interactive activity, and the role of the planning is to facilitate processes of deliberation (Fischler, 2000; Innes, 1995; Legacy, 2012). The idea that planning is required to achieve better outcomes for those in need is emphasised by Gleeson and Low (2000a) who state that planning should be "the activity of governance required to make sure that all services people need in a city are provided when and where the need occurs" (Gleeson & Low, 2000a, p. 12).

Hence, central to the idea of urban planning is the idea that the distribution of resources is not a natural phenomenon (Burton, 2000), but rather is a result of intervention through policy. In practice, highly contestable decisions about what is right or wrong for a particular area are made, meaning that "planning is profoundly concerned with justice" (Campbell et al., 2014, p. 240). Decisions made, and legitimised, on the assumption that collective intervention will result in benefits for the greater good reflect a utilitarian view of justice. However, other interpretations of justice might also have equal legitimacy.

Defining justice
The question, 'what is justice?' has been debated for centuries. For example Socrates asks this very question in *The Republic*, and Plato suggests that justice is the most important virtue for humans "living together in ever-larger communities, cities, and nation-states" (Solomon & Murphy, 1990, p. 3). Unfortunately these early Greek philosophers did not answer the question 'what is justice', or provide any criteria to evaluates the 'justness' of a policy (Solomon & Murphy, 1990). Since then, many other philosophers and theorists have explored justice and interpreted it variously. Although they did not specifically apply their work to the planning context (Campbell, 2006), many planning theorists have drawn from this body of literature. There are too many theories of justice to explore within this paper. However, planning by its very nature is concerned with social justice, and this paper, by necessity, focuses on only three theories of justice. Utilitarianism, libertarianism and liberal equality have been included as they provide a starting point to from which to understand justice and its application to (or by) planning.

As noted already, the idea that planning interventions are justified on the basis that they achieve the greatest good for the greatest number is a utilitarian interpretation of justice. Utilitarian's define 'justice' as being found "in whatever decisions or actions produced the

most good" (Drake, 2001, p. 61). Utilitarianism has long been seen as being a "universal standard for evaluating public policy" (Low & Gleeson, 1998, p. 73). Over time it has evolved into what is known as cost-benefit analysis (Howe, 1990), and its ability to empirically calculate consequences a key attraction, particularly to planners in the 60s and 70s (Campbell & Marshall, 2002; Harper & Stein, 1992). However, cost-benefit analysis, and therefore utilitarianism, is criticised on the grounds it fails to take into account the distributive aspects of choices being made (Campbell & Marshall, 2002; Howe, 1990).

In contrast, a libertarian view of justice is an approach that stresses individual liberties, the benefits of market forces, and promotes minimal intervention by government (Chakravorty, 1999; Lai, 2002; Sorensen & Day, 1981). In planning, libertarianism became increasingly prominent under Thatcherism and Reaganism (Chakravorty, 1999). At this time, measures were introduced to "prune, bypass or replace the planning system" which reflected key characteristics of Thatcherism including "'market principles', 'authoritarian decentralism' and 'anti-bureaucratic sentiments'" (Thornley, 1990 & 1991, cited in Hague, 1991, p. 304). At this time, the economic growth and competitive discourse in planning arose. Libertarianism has been described as being 'strikingly anti-distributive' (Cohen, 1986, p. 35), and under it any attempt to force a person to contribute part of their legitimate holdings for the welfare of others is "a violation of that person's property rights, whether it is undertaken by private individuals or the state" (Cohen, 1986, p. 35).

A third theory of justice is liberal equality (also known as Rawls's theory of justice). Rawls' view of social justice is concerned with "the way in which the major social institutions distribute fundamental rights and duties and determine the division of advantages from social cooperation" (Rawls, 1999, p. 6). His work has been described as being "among the most influential political philosophy writings of the past century" which "has constituted the most highly developed challenge of the utilitarian conception of the good and the right" (Basta, 2015, p. 4). Unlike the focus of utilitarianism on "'aggregated' happiness" (Basta, 2015, p. 5), Rawls' focus is on 'justice as fairness' (Rawls, 1999). Recognising that society favours certain inevitable circumstances, he notes that the principles of social justice must apply first to inequalities arising from these factors (Rawls, 1999). Rawls formulated two principles of justice – the first is the principle of liberty where "each person is to have an equal right to the most extensive scheme of equal basic liberties compatible with a similar scheme of liberties for others" (Rawls, 1999, p. 53).

The second principle is that "social and economic inequalities are to be arranged so that they are both: (a) reasonably expected to be to everyone's advantage, and (b) attached to positions and offices open to all" (Rawls, 1999, p. 53). What separates Rawls from others, particularly from a libertarian view of justice, is that he was concerned with both process and outcomes of processes (Drake, 2001), making it particularly relevant for urban when considering the physical / social dualism of planning discussed earlier.

The importance of understanding justice is highlighted by Fainstein who describes 'justice' as one of the principal elements of a good city, but notes that it is also one of the "most often transgressed elements" (Fainstein, 2009, p. 20) in planning practice. This transgression, in her view, is caused by the growing emphasis on economic competitiveness and the prioritisation of growth, and she calls for a sustained discussion on the meaning of justice if it is to become central to the activity of planning (Fainstein, 2009, p. 20).

The just city

The call for planning to strive for the ideal of a 'just city' is a potentially unachievable, utopian ideal given the degree of variation in interpretations of justice. However, Friedmann (2011) highlights the importance of striving for utopian ideals, referring to the need for a 'concrete imagery' to "propose steps that would bring us closer to a world we would consider 'just'" (p.147). There is a growing body of literature debating what constitutes a 'just city', often drawing on Rawls's theory of justice as fairness.

Fainstein (2010), in her book '*The Just City*', derives a model of a 'just city' as being one where "public investment and regulation would produce equitable outcomes rather than support those already well off" (Fainstein, 2010, p. 3). Drawing on Rawls' theory of justice, she considers that disadvantaging those who already have less, or excluding those households from entitlements that are enjoyed by others who are no more deserving, is unjust (Fainstein, 2010). In '*The Just City*' she seeks to "lessen the focus on process that has become dominant within planning theory, and redirect practitioners from their obsession with economic development to a concern with social equity" (Fainstein, 2010, p. 19). She refers to democracy, equity and diversity as "forming the moral basis of planning and policy" (p.63) and being the three primary qualities constituting urban justice (Fainstein, 2010).

Other discussions on the just city reflect these three qualities. For example, Uitermark (2009) writing about Amsterdam and the Netherlands, views a 'just city' as one in which 'exploitation and alienation are absent' (Uitermark, 2009, p. 350). More narrowly focussed than Fainstein (2010), he suggests that equity is at the heart of a just city and its realisation requires two preconditions (Uitermark, 2009). The first of these is the 'fair distribution of scarcity' – making the city accessible to everyone, regardless of their purchasing power (Uitermark, 2009). The second is "that residents have control over their living environment, that is, they engage with the polity of which they form part" (Uitermark, 2009, p. 350). Similarly Burton (2000), who researched whether a compact city is just or just compact, draws on the notion of justice as fairness. She also used social equity as a measure of justice, stating that "for a city to be deemed to be fair or unfair, it must be assumed that it delivers a range of costs and benefits to its inhabitants, and it is the manner in which these are distributed that governs whether or not it promotes equity" (p. 1970).

Each of these scholars highlights the role of distributive justice in seeking a just city. To this end understanding patterns of distribution is key to understanding the 'just-ness' of a city. Writing about social disadvantage and planning in the Australian context, Gleeson and Randolph (2002) identify the need for greater understanding of the patterns and causes of urban disadvantage so that policy makers and urban scholars can "generate locally appropriate policy responses" (p. 102). Wood, Berry, Taylor, and Nygaard (2008) also discuss the role for planners in addressing social exclusion and suggest that this role is "typically neglected, yet it helps shape the economic opportunities available to communities in its attempts to influence the geographical location of urban services, infrastructure and jobs" (p.274). Hence, understanding the social consequences of policies seeking urban containment and residential intensification is important if planners are to plan a just city.

Plato's view that justice is the most important virtue for humans 'living together in ever-larger communities, cities, and nation-states' (in Solomon & Murphy, 1990) is increasingly relevant in today's society. Urban growth is often managed by controlling the outward expansion of urban areas and seeking higher densities, as local authorities pursue a compact city. However the 'justness' of outcomes associated with this approach are contested.

The social consequences of a compact city

There is wide acceptance of higher density urban environments, the compact city, as being sustainable (Ghosh & Head, 2009) thus legitimising urban containment and residential intensification. Higher population densities and mixed uses are often seen as being synonymous with sustainable urban form (Dixon & Dupuis, 2003; Gordon & Richardson, 1997; Williams, 1999), providing for all three pillars of sustainability – social, economic and environmental. Environmentally, compact cities are deemed sustainable for reasons including: they conserve rural land; reduce transport emissions through reducing the need to travel by car; provide better access to services and facilities; and make more efficient use of existing infrastructure (Burton, 2003). Economically, compact cities are considered more efficient. Socially, some suggest that compact cities offer vitality, solidarity and a common sense of place / safety amongst residents, providing more opportunities for social interaction, participation and community, and characterised by equity, with no intergroup conflict and conspicuous spatial segregation (Bramley, Dempsey, Power, Brown, & Watkins, 2009; Chiu, 2002; Dempsey, 2010; Yiftachel & Hedgcock, 1993).

However, a growing number of researchers point to contradictions associated with the notion of compact cities. The positive and negative externalities of a compact city have been widely discussed, and critiqued, highlighting that it is a contested notion. For example, Burton (2000) explored the validity of claims that higher-density urban form promoted social equity in medium-sized English cities (i.e. cities with a population between 80,000 to 220,000). In the context of her research she found that compactness offered benefits relating to improved public transport use, reduced social segregation and better access to

facilities (Burton, 2000). However, she also found that compactness is likely to have negative effects on domestic living space, affordable housing, crime levels, and walking and cycling (Burton, 2000). She notes that the effects of policy are positive for some and negative for others, and concludes by suggesting that if a compact city is to be pursued it should be implemented to achieve the maximum benefit, considering 'solutions based not just on the needs of the majority but on the plight of the least advantaged' (Burton, 2000, p. 1988). Similarly Breheny (1997) found that the compact city does have its merits, but his research notes a 'clear clash between the high-density compactionists and the desires of local communities to protect their quality of life' (p. 216). Couch and Karecha (2006), commenting on the Liverpool experience of controlling urban sprawl, found there was a continued demand for housing at the periphery. Yet, as a consequence of urban containment, they concluded that this would likely lead to increasing prices within the existing housing stock resulting in "processes of spatial social segregation as these locations become home to an ever narrower social elite at the top end of the income scale" (Couch & Karecha, 2006). This argument that urban containment and residential intensification artificially restricts housing supply, reducing affordability and causing inequitable housing distribution, is a serious negative externality associated with the pursuit of a compact city.

Internationally, much has been written about the effect of urban containment through urban growth boundaries, and particularly on how in a market economy, such measures artificially restrict housing supply causing a lack of affordability and inequitable housing distribution. For example, referring to the Australian context, Beer, Kearins, and Pieters (2007) comment that urban growth boundaries present a particular challenge for planners, as many Australians have articulated the view that escalating house prices and diminishing access to home ownership are a result of planning failures. Gurran and Phibb (2013), also writing about the Australian context, note that the extent to which this is the effect of land use planning is difficult to determine given the complexity of the housing market, however, such sentiment does reflect wider neo-liberal challenges to the legitimacy of land use planning.

A neo-liberal ideology seeks minimal intervention by government (such as planning regulation), and gives priority to market forces affecting supply and demand (Sager, 2011). It is characterised by "fewer restrictions on business operations, extended property rights, privatisation, deregulation, erosion of the welfare state, devolution of central government, uneven economic development and increasing social polarisation" (Sager, 2011, pp. 148-149). For planning, this results in focus on economic efficiency and competitiveness, reduced opportunities for citizen engagement, and an indifference to social inequality (Sager, 2011) and Gleeson and Low (2000b) suggest that the neoliberal desire for deregulation and outsourcing brushes aside the purpose of planning "in favour of a new

minimalist form of spatial regulation whose chief purpose is to facilitate development" (p. 135).

Yet there are those that consider a neoliberal approach to urban growth does not preclude a focus on social justice within planning. Gurran and Whitehead (2011), writing about housing affordability in Australia, refer to a "widening chasm" between housing demand and supply and that this is blamed on the land use planning system, but that planning can also contribute to the achievement of affordable housing production (p. 1193). Similarly, Beer et al. (2007), also writing about the Australian context, note that consideration of the housing needs of the most vulnerable is absent in discussions about planning and its impact on housing affordability. They comment that,

> Planning clearly represents a rich field of opportunity for the development of housing affordability policies that are informed by neo-liberalism as planning is, of necessity, an intervention in the market; planning policies do not carry significant costs of central government and, indeed, planning policies can be used to transfer costs to the private sector (Beer et al., 2007, p. 14).

Understanding how planning can make a contribution to a more 'just' city (including how it could contribute to the production of affordable housing) requires a better understanding of the social consequences of the compact city approach and any patterns of urban disadvantage it creates. There is no correct answer in terms of what constitutes a 'just' city, given the multitude of definitions of justice that could be applied. Nor is there a 'formula available through which the right and the good may be calculated" (Campbell, 2006, p. 92). However, if the legitimacy of planning interventions rests on assumptions such as the utilitarian premise of the greatest good for the greatest number, or some other interpretation of justice, then it is posited that understanding the legitimacy of planning decisions could be used as a measure of a 'just city'.

Legitimacy as a tool to measure 'justness'

Like planning and justice, legitimacy is also an "elusive concept" (Lövbrand, Rindefjäll, & Nordqvist, 2009). A concept central to democratic theory it relates to the acceptance of, and belief in political systems as being appropriate, proper and just, by those who are bound by its decisions (Falleth, Hanssen, & Saglie, 2010; Patty & Penn, 2011). For planning, legitimacy is particularly important given the recent criticisms levelled against such interventions.

Legitimacy can be divided into three distinct parts: process (input legitimacy), transparency and accountability in decision making (throughput legitimacy), and outcomes (output legitimacy) (Falleth et al., 2010; Lövbrand et al., 2009). Exploring the input, throughput and output legitimacy of planning decisions and provisions relating to urban containment and

residential intensification may be useful in determining whether a compact city is 'just' as it would provide quantifiable expressions of its democracy, diversity and equity.

Input legitimacy relates to the democratic quality of the rule-making process (Lövbrand et al., 2009). It measures the quality of the process of policy and rule making (Scharpf, 1999 as cited in Lövbrand et al., 2009), and in a deliberative democracy is seen as resulting from "informed and authoritative input and scrutiny of decisions by ordinary citizens" (Smith and Wales, 1999, p.304, as cited in Cheyne & Comrie, 2002). Inclusive decision making and effective democratic citizen participation in planning processes and decision making is a cornerstone of social equity (Davis & Hatuka, 2011; Deakin, 1999; Uitermark, 2009; WCED, 1987), and as such, ties implicitly back to the definition of a just city. In relation to planning, input legitimacy is dependent on both the participation of citizens in planning processes, and through the election of local authority Councillors (Falleth et al., 2010), and legitimate rules "are those that result from a transparent and accountable decision process and effectively achieve collective goals' process" (Lövbrand et al., 2009, p. 75).

Throughput legitimacy relates to the need for transparency and accountability in decision making procedures (Falleth et al., 2010). Three key components of throughput legitimacy have been identified by Risse and Kleine (2007): legality, clarity of responsibility for decision making, and the quality of the process. In terms of the latter they note that, "processes that systematically allow for arguing, reason-giving and mutual learning" will lead to better outcomes" (Risse & Kleine, 2007). This resonates with a communicative style of planning. Through argument and reason-giving the validity of participants interests can be challenged and the factual basis for policies checked (Risse & Kleine, 2007), which is of critical importance in the case of the pursuit of the compact city given its contestability.

The final type of legitimacy is how effective the policy has been in terms of its tangible outcomes, the 'ultimate judgement for local politicians' (Falleth et al., 2010, p. 748). This is termed 'output legitimacy, which measures the degree to which the solutions to planning problems have been effective and efficient in achieving collective goals (Falleth et al., 2010; Lövbrand et al., 2009). In terms of understanding the 'justness' of the compact city, output legitimacy is perhaps the most important measure. Assessing the output legitimacy can provide concrete imagery of the patterns of distribution of resources, and in particularly any patterns of disadvantage.

The move towards inclusive planning processes are often based on the perception that if the legitimacy of decisions is not in question they will be easier to implement (Legacy, 2012). However, the earlier discussion on the contested nature of the compact city suggests a legitimacy deficit. Understanding the input, throughput and output legitimacy of decisions relating to the pursuit of a compact city may help to identify whether a city is a just in terms of meeting those three key principles of a just city: democracy, diversity and equity.

Alternatively, such an exploration of legitimacy may reflect a more libertarian or utilitarian view of justice. In any case, it would usefully open the door to a discussion on the meaning of justice in relation to the activity of planning.

Conclusion

The 'just city' is a utopian vision, its realisation fraught by the multiple interpretations of justice. However, this does not discredit the idea. Instead, as Friedmann (2011) states, "utopian thinking can help us choose a path into the future that we believe is justified, because its concrete imagery is informed by values that are precious to us" (p. 146). Such a path, justified and informed by those that were bound to it, would be a legitimate one. This paper argues that there is a role for planning (and planners) to understand the distributive effects of planning policy pursuing a compact city if they are to realise a just city; one which reflects the fair distribution of resources – a Rawlsian view of justice as opposed to a utilitarian or libertarian view of justice. A neoliberal approach to urban growth does not preclude this focus on social justice within planning, and the starting point for this is for planners to understand patterns of distributions better. To this end, measuring legitimacy can help. Measuring the input, throughput and output legitimacy of planning measures seeking a compact city can provide that concrete spatial imagery highlighting what citizens are saying where, how local authorities are responding, and the distributional effects of outcomes. Then, with an understanding of those patterns, planned steps can be taken to realise a city that is 'just', or at the very least, a discussion initiated on the meaning of justice as it relates to the activity of planning.

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Bio

Joanna Ross is a Lecturer and PhD Candidate in the Resource & Environmental Planning Programme at Massey University. With experience as a planning practitioner in NZ and the UK, she teaches professional practice and supervises postgraduate research on a number of topics related to planning practice. Her research interest relates to residential environments and, in particular, the debate between the compact city and urban sprawl, housing affordability and the legitimacy of planning practice.

Spread your risk: reconsidering the "quarter acre" dream from an evolutionary perspective

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Abstract

Throughout changing economic and political circumstances private home ownership has been an aspirational constant in New Zealand since the start of European settlement. Housing shortages and lack of ready supplies of land for housing development have dominated public debate and government policies periodically over the past century and we appear to be in one of those pressure periods at the present time, especially in Auckland. Is it simply a matter of matching policies with social and market trends? According to Quotable Value New Zealand data average house size was 131.7m2 in 1900, falling back to 117.5m2 in 1950, due mainly to war-time and recessionary effects, and by 2010 this had increased to 205.3m2 (Quotable Value New Zealand, 2011). This trend towards increased dwelling size has not been accompanied by a growth in average section size: "In the same time period, average section size has dramatically shrunk. As a proportion of land use, the typical 1970s single story 120m2 house on a 1012m2 section (11.85% site coverage), has evolved into a house around 210m2 on a 450m2 site, (46% site coverage)." (Marriage, 2010, p. 1).

The "quarter acre" home ownership dream may have morphed into a "more house less land" aspiration but the attraction to privately owned property has not abated. Yet the nuclear family now seems an artefact of the twentieth century. What do trends in plot and dwelling size tell us? Are we now merely at the mercy of exorbitant land prices, slavish consumerism, demographic shifts, misguided land-use regulations, the future-proofing financial tactics of individual buyers? Alternatively, and changing site coverage ratios notwithstanding, do people aspire to private ownership of discrete land parcels as a way of spreading individual and collective risk because it makes sense from an evolutionary perspective? This paper argues for the latter interpretation. The paper also suggests that planning practice should take more seriously the concepts of prospect, refuge, hazard, affordance, complexity, coherence, legibility and mystery when setting rules and guidelines for the construction of both private and public "habitat."

Introduction

Throughout changing economic and political circumstances private home ownership has been an aspirational constant in New Zealand since the start of European settlement. Housing shortages and lack of ready supplies of land for housing development have dominated public debate and government policies periodically over the past century and we appear to be in one of those pressure periods at the present time, especially in Auckland. Is it simply a matter of matching policies with social and market trends? According to Quotable Value New Zealand data average house size was 131.7m2 in 1900, falling back to 117.5m2 in 1950, due mainly to war-time and recessionary effects, and by 2010 this had increased to 205.3m2 (Quotable Value New Zealand, 2011). This trend towards increased dwelling size has not been accompanied by a growth in average section size: "In the same time period, average section size has dramatically shrunk. As a proportion of land use, the typical 1970s single story 120m2 house on a 1012m2 section (11.85% site coverage), has evolved into a house around 210m2 on a 450m2 site, (46% site coverage)." (Marriage, 2010, p. 1).

The "quarter acre" home ownership dream may have morphed into a "more house less land" aspiration but the attraction to privately owned property has not abated. Yet the nuclear family now seems an artefact of the twentieth century. What do trends in plot and dwelling size tell us? Are we now merely at the mercy of exorbitant land prices, slavish consumerism, demographic shifts, misguided land-use regulations, the future-proofing financial tactics of individual buyers? Alternatively, and changing site coverage ratios notwithstanding, do people aspire to private ownership of discrete land parcels as a way of spreading individual and collective risk because it makes sense from an evolutionary perspective? This paper argues for the latter interpretation. The paper also suggests that planning practice should take more seriously the concepts of prospect, refuge, hazard, affordance, complexity, coherence, legibility and mystery when setting rules and guidelines for the construction of both private and public "habitat."

Habitat Theory

The Palaeolithic era and the Pleistocene geological epoch are usually described as beginning some 2.6 million years before the present (BP) and ending 12000 years BP. This period is naturally of great interest to evolutionary biologists and anthropologists but rarely is it mined for understanding human psychology in the present as it relates to, say, housing choices and land purchase preferences. Exceptions are in the areas of evolutionary psychology and human behavioural ecology and there is a growing literature around the concept of "biophilia" and instinctive human associations with nature (Wilson, 1984, Kellert and Wilson, 1993). A useful starting point for considering our instinctual needs for territory is the so-called "savannah hypothesis." Biologist Edward Wilson provides a useful précis:

> First, the savannah by itself, with nothing more added, offered an abundance of animal and plant food to which the omnivorous hominids were well adapted, as well as the clear view needed to detect animals and rival bands at long distances. Second, some topographic relief was desirable. Cliffs, hillocks and ridges were the vantage points from which to make a still more distant surveillance, while their overhangs served as natural shelters overnight. During longer marches, the scattered clumps of trees provided auxiliary retreats sheltering bodies of drinking water. Finally, lakes and rivers offered fish, molluscs, and new kinds of edible plants. Because few natural enemies of man [sic] can cross deep water, the shorelines became natural perimeters of defense.
>
> Put these three elements together: it seems whenever people are given a free choice, they move to open tree-studded land on prominences overlooking water. (Wilson, 1984, p.110).

Real estate agents would no doubt observe that there is nothing new in that last statement; this is exactly what most people would choose if they could.

In terms of drawing further direct behavioural connections between our hominid ancestors and our present needs and actions the most notable advocate is Gordon Orians. Along with Judith Heerwagen he has argued that our reading of landscapes, and therefore space *per se*, is based on early human evolution (Orians and Heerwagen, 1992) (Orians, 2014). Orians has taken up anthropologist Raymond Dart's claim, further refined by Robert Ardrey (Ardrey, 1970), that the era of modern humans begins with a move from predominantly vertical habitats (trees and forests) to the horizontal environment of the tropical savannah. This has led to the "savannah hypothesis," referred to above, which argues that our best environmental "fit" is the relatively open woodland where our dependence on visual

reconnaissance and bipedal locomotive capability are an advantage rather than a limitation.

Geographer Jay Appleton has developed this line of thinking into what he describes as "habitat theory." He first articulated habitat theory in the mid-1970s in *The Experience of Landscape*. By analysing European landscape paintings of the past few centuries he proposes that certain landscapes appeal to human beings because of their representation of elements necessary for human survival at a biological level:

> All this leads to the proposition that aesthetic satisfaction, experienced in the contemplation of landscape, stems from the spontaneous perception of landscape features which, in their shapes, colours, spatial arrangements and other visible attributes, act as sign-stimuli indicative of environmental conditions favourable for survival, whether they really *are* [emphasis in original] or not. (Appleton, 1996, p.62)

Appleton develops his argument further in the book by use of the terms "prospect," "refuge'" and "hazard." In landscape painting, for example, the most preferred or popular scenes offer opportunities for seeing without being seen or a balance between prospect and refuge. Water plays an important part in the prospect schema because of its centrality to biological survival. That is why people prefer both scenes and actual habitats with water. As noted earlier, this is why river-front, lake-front and coastal real estate commands such a premium in certain societies. Attraction to, or ambivalence around, hazards in the environment rather than sheer terror and avoidance reflects the importance of risk in sharpening human survival capability. One could argue that the alarming statistics for drowning in the island archipelago of New Zealand reflects the ambiguous status of water as resource, amenity **and** hazard.

In subsequent revisions Appleton has added other variables to the equation or drawn parallels with authors in other fields. For example, he uses Gibson's notion of "affordance" in evolutionary biology i.e., we constantly scan environments for what they afford us (See Gibson, 1979), and links this back to savannah theory (Appleton, 1996, p.239). Further reinforcement, according to Appleton, is to be found in the work of psychologists Rachel Kaplan and Steven Kaplan and architect Grant Hildebrand (Appleton, 1996, op. cit. pp. 239-253). Through numerous studies of preferred working, play, learning, recuperative and therapeutic environments the Kaplans have identified four critical qualities of "coherence," "complexity," "legibility" and "mystery" as essential for optimal functioning (Kaplan and Kaplan, 1982a, Kaplan and Kaplan, 1989, Kaplan and Kaplan, 1982b). A good example of the tacit acknowledgement of some of these principles is the children's adventure playground

and it is interesting to see the words "hazard" and "risk" used as design principles in the recent renaissance of the "wild play" movement in Europe.[1]

In essence, then, an environment is unconsciously "preferred" and is in turn beneficial to the individual when it reflects a balance of these elements: prospect; refuge; hazard; affordance; coherence; complexity; legibility, and; mystery. This is perhaps relatively straightforward in the absence of a sedentary human existence; if a particular place does not suit or is too risky one simply moves on. But the vast majority of modern humans are no longer nomadic foragers. Most of us live together more or less permanently in very close proximity to one another. So what is the relevance of this theory to our most vital private habitat, the home?

The role of Prospect-Refuge-Hazard Theory in architecture

For planners and landscape architects raised on seminal works such as Gordon Cullen's *Townscape* (Cullen, 1961) and Kevin Lynch's *The Image of the City* (Lynch, 1960) some of these elements will be familiar already in the context of public space, especially with regard to "legibility" in the case of Lynch. To date, much of the work around prospect-refuge-hazard theory has been applied to natural and modified landscapes, particularly parks and public spaces. Hildebrand, on the other hand, turns the theory towards the domestic architecture of Frank Lloyd Wright, arguing that what makes his buildings 'work' in their sometimes precarious environments is his innate ability to harmonise prospect, refuge and hazard. This, according to Hildebrand, is demonstrated best in one of Wright's most famous commissions, 'Falling Water' where an elaborate design does not simply sit beside a tumbling watercourse, it straddles it (Hildebrand, 1991).

The same analysis can be applied to quasi-public architecture such as educational buildings. For example, the Arts Centre in Christchurch, formerly Canterbury University College, has become an iconic local and international attraction for the city. One can argue that the Arts Centre "succeeds" as built form not because Gothic Revival is a superior architectural style but because Benjamin Mountfort and later architects working on that site managed to balance proportions of prospect, refuge, hazard, affordance, complexity, coherence, legibility and mystery (Montgomery, 2010). Similarly, the late Ian Athfield's own house, a sprawling hillside dwelling in the suburb of Khandallah in Wellington can be seen as an exemplar of this alignment of the eight basic elements identified above. And Roger Walker's 1970s houses, particularly the Britten House, which seems like a sophisticated children's play fort, make the same point. Athfield and Walker show that in the New Zealand context one can start with obviously precipitous or hazardous environments and turn them to

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[1] See http://www.npr.org/blogs/ed/2015/04/03/395797459/the-value-of-wild-risky-play-fire-mud-hammers-and-nails. Accessed 4 April 2015.

advantage in terms of prospect and refuge: these dwellings are comprised of multiple refuges offering a myriad of perspectives.[2]

Suburbia as individualised evolutionary adaptation

It is one thing to argue that individual house or dwelling form could and should reflect evolutionary constants. It is another to try to fit this within the practical confines of house and land ownership in a market economy and the relatively entrenched typologies of private land settlement. In New Zealand, as with many other developed economies, the standard typology of "urbanisation" is in fact the private residential suburb. The literature on suburbia is vast and much of it is highly critical both from environmental and social perspectives (See Jacobs, 1961, Kunstler, 1993, Duany et al., 2000).

A few authors have tried to assess the actual effects of sprawl and they are generally more sanguine about its impacts and its perceived irrationality. Kenneth Jackson's *Crabgrass Frontier: the Suburbanization of the United States* (Jackson, 1985), Robert Bruegmann's *Sprawl: A Compact History* (Bruegmann, 2005) and Witold Rybczynski's *Last Harvest* and *Makeshift Metropolis* (Rybczynski, 2007, Rybczynski, 2010) and others (See Garreau, 1991, Rusk, 1995) interpret decentralisation as a more or less logical consequence of the rapid urbanisation trends of the past few centuries. They acknowledge the need to limit sprawl in certain circumstances but they do not think it the scourge that others claim it to be. The most scholarly refutation of the "suburban malaise" or "little boxes" argument can be found in Herbert Gans' *The Levittowners* (Gans, 1967). As a sociologist Gans had previously studied neighbourhood life and urban renewal efforts in Boston (Gans, 1962) but in the mid-1960s he turned his attention to suburbia. He purchased a house in Levittown, New Jersey and used participant observation methods to determine what the ways of life there were and whether they differed that much from urban America. His conclusion was that there was not a great deal of difference but that, having moved there, most suburbanites felt that they had made a positive choice.

Yet the matter of whether the form of suburban housing routinely reflects the eight dimensions described above would seem, on the face of it, to be answered most easily in the negative. Suburbia seems to be the antithesis of complexity. It has a certain legibility: clear demarcation of cul-de-sac roading, malls, office-parks and schools. It has coherence insofar as most of the housing looks very similar. But prospect (there are often few tall landmarks or vantage points), mystery (one might get lost in a maze of streets when driving but that is a mystery few would seek) and hazards in terms of raw nature at work seem very limited. Perhaps its greatest contribution is its guarantee of a degree of undisturbed refuge

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[2] Despite daring and playful design, keeping an iconic Athfield or Walker house from the 1970s weather-tight has often proven problematic. Such inconvenience, if not direct hazard, merely adds to the mystery and excitement of ownership one could argue.

and this reflects the economic reality with which many people are faced; money is spent first and foremost on securing a refuge. The prospect elements are paid for by those who can afford it and they are unlikely to opt for the standard middle-class version of the suburb in any case.

Still, demonstrating that suburban living in detached dwellings is no more harmful to individuals than living in more densely populated urban areas does not provide proof of the evolutionary logic of the private house on a private plot. And it is too much to claim that suburban dwellers live where they do completely under sufferance through lack of necessary income i.e., they are simply making do with second best. Collective exchanges of prospect, refuge, affordance and hazard operate even at the street level. One inhabitant may act as sentry or provide a place of retreat in extreme circumstances. Intruder surveillance can be managed well if the form of individual properties is well understood along with routine patterns of behaviour and there is a collective street welfare entity such as Neighbourhood Watch or a body corporate. One could argue that the age of television and its digital variants provide some of the lost prospect options by operating as relays for remote sensing e.g., news and weather. But such factors are a possibility not a given so there must be another driving influence.

Suburbia as a broader defensive adaptation

The sheer disparateness or low population density of the horizontal settlement for many, but not all, offers greater advantage than, say, a fortified town or city which might otherwise satisfy the criteria described above. The sources that drive this risk adaptation can be both "natural" and directly human-induced. With regard to the former source the unpredictable nature of natural hazard events, particularly in terms of locality and scale, make it highly risky to concentrate human populations in very high densities if there is a choice to do otherwise as is the case with spatially well-endowed countries such as New Zealand, Australia and North America.

The Canterbury Earthquakes of 2010-2012 afford some insight on this matter. 185 people lost their lives as a result of the February 22, 2011 aftershock. Loss of life and serious injury was largely confined to the Central Business District. Of the sixteen fatalities that occurred in the suburbs only five occurred on private suburban residential sections and two of these were from slip or trip fall injuries rather than injury by housing or outdoor materials. Two people died from rock-fall injuries while other from the internal collapse of chimney breastwork onto their sleeping area.[3]

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[3] Wai Fong Lau, 87, died in bed in the suburb of Redcliffs after rock-fall caused her bedroom to collapse on her. Don Cowey, 82, also of Redcliffs, died when rocks fell on him while gardening. Baxter Gowland, 5 months old, died in the suburb of St Albans when chimney bricks collapsed on his cot.

It is clear that there were many near misses in terms of house collapse and rockfall in the hill suburbs of Christchurch and as a consequence 714 residential hill properties, including a number at the bottom of unstable cliffs, have now been declared unfit for habitation and have been or are soon to be demolished.[4] This has been formalised through "red zoning" and central government buy-outs of red-zoned properties. Some 7349 properties have been red-zoned on flat land[5] suburban areas but this has less to do with risk to life calculations than with infrastructure, servicing and insurance costs from return events i.e., people would probably survive future seismic and flooding events if allowed to repair or rebuild their homes but the potential disruption in social and economic terms is seen as too high to avoid market and regulatory intervention.

In terms of behavioural response most of those who have been forced to relocate have opted, where insurance or government compensation has permitted, the same housing typology as they previously occupied – a stand-alone property on a stand-alone parcel of land. Although 2013 Census data shows a loss of population in Christchurch City both Selwyn District and Waimakariri District have experienced growth (well ahead of national trends in the case of Selwyn District) (Statistics New Zealand, 2014, p.6). In other words, most people displaced by the earthquakes seemed to have "re-suburbed" to the southwest and to a lesser extent north of the city and they have done this within an entity which has been referred to as "Greater Christchurch" for several years.

Furthermore, the extra delays and difficulties associated with financial settlements around apartments and multi-unit dwellings experienced by many homeowners over the past five years may have made the detached dwelling more attractive and be seen to lower financial risk in the event of future earthquakes or other natural hazard events such as floods. These upheavals, protracted insurance claim settlements and the legacy of trauma associated with the deaths and injuries experienced in the central city continue to challenge citizens and agencies alike. Yet viewed from a distance one could reasonably conclude that as a dispersed, highly suburbanised city of more than 340000 inhabitants Christchurch got off lightly in percentage mortality terms given the severity of the earthquakes and most survivors have opted to move or return to a suburban lifestyle where they can.

The other dimension of adaptive "fit" in suburbia, as mentioned earlier, has to do with human-to-human threats. Prior to the Second World War sustained aerial or rocket-powered bombardment posed little threat to urban inhabitants. Historian of science Peter Galison argues in *War Against the Center* that post-war military analysis by America focussed on the failure of Allied bombing campaigns to destroy German economic and military production (Galison, 2000). The conclusion drawn by military analysts was that

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[4] http://cera.govt.nz/port-hills accessed 1 April 2015.
[5] http://cera.govt.nz/news/2014/recovery-milestone-reached-today-with-final-flat-land-red-zone-settlements-31-january-2014 accessed 1 April 2015.

because Germany had decentralised its production of industrial and military materials and components and other aspects of its economy and moved some of these away from large cities it was impossible to deliver fatal blows by massive aerial bombardment. According to geographer Matthew Farish, whether this analysis was accurate or not it clearly influenced the planning of cities and towns in the U.S. during the Cold War era (Farish, 2003). As both Galison and Farish point out there is an ideological and political convenience with a pro-decentralisation stance because it was often assumed that cities were the breeding grounds for political unrest and revolution. As if to affirm this position William Levitt, the principal agent behind Levittown was once quoted as saying: "No man who owns his house and lot can be a Communist. He has too much to do." (William Levitt quoted in Sugrue, 2010, p.176).

The above commentaries point towards an arbitrary ideological rationale for post-war suburban form. However, this does not necessarily mean that when potential for damage from armed conflict is considered the un-centred form does not provide a defensive advantage. Nor is intensive aerial bombardment out of the question in the future, even in places such as New Zealand. If an urban area is too dispersed for aerial bombardment to succeed then street-to-street fighting is the customary alternative. In such contexts the advantage usually resides with defenders as the history of civil and guerrilla warfare can demonstrate. Suburban warfare is expensive.

The private residential plot as territorial "affordance" space

Some would argue that natural disasters remain a relatively minor threat to life in New Zealand. The same is true of large-scale armed combat. Even combined, these not enough to promote suburbia as a positive adaptation, particularly in a "peak oil" world. The past hundred years have produced only three significant loss-of-life events on the land surface: the 1931 Hawkes Bay earthquake, the Ruapehu lahar Tangiwai rail disaster of 1953 and the recent Canterbury earthquakes. Only rarely is New Zealand seen as a belligerent nation state and never in a stand-alone context. What other benefits does the private detached residential plot offer then?

Answers lie in a reconsideration of the spatial qualities of the house and land combination. The refuge element of the home has already been dealt with above but is worth reinforcing how fundamental this sense of home as refuge is by calling up a historical quote that many assume to be quite recent:

> For a man's house is his castle, *et domus sua cuique est tutissimum refugium* [and each man's home is his safest refuge].(Coke et al., 1628, p.162)

Beyond the house-as-refuge principle one has to consider the opportunity set or affordance quality of the suburban section tempered by the conventions, rules and regulations that

have evolved over time and often with good reason. For example, Christchurch City Council outlines some of these parameters in a ten-page document entitled *City Plan: Summary of Rules for Residential Units in Living 1 Zone* (Christchurch City Council, 2010). Critical matters such as residential site density (minimum 450m2), open space (60% as an average), building height (8m) sunlight and aspect (2.3m combined with recession plane), separation from neighbour's boundary (1.8m), street scene (4.5m setback) and outdoor living space (90m2 minimum) are covered and they clearly demonstrate that intrinsic and extrinsic welfare, if not survival, factors have been considered.

Those factors notwithstanding, it is worth considering the spatial opportunity set for those typically inhabiting a suburban site. Starting with the domestic dwelling structure, according to Quotable Value New Zealand figures for the year to February 2015 the average building floor area was 185m2 on a section size between 450m2 and 500m2. Nominally, a family of four would have 46.25m2 internal space per person if they lived separate lives (thinking of it in terms of a 6.7m x 6.7m area, slightly larger than the average double garage gives an idea of individualised space). But families rarely lead separate lives so, assuming, for argument's sake, the availability of a separate bedroom of 12m2 for each individual then they must share constantly the remaining 137m2 (say, a 10m x 13m internal space to illustrate the area as a whole). In terms of outdoor space, and assuming a relatively generous 500m2 standard suburban land unit, a four-person household would have just over 91m2 (9m x 10m) if individualised or 365m2 collectively (say, 20m x 18m or slightly less than the playing area of an outdoor netball court). Of course space is three dimensional so the total volume of space can be manipulated for functionality and enjoyment to increase the affordance set e.g., multi-level construction, but when looked at in terms of raw square metres the private spatial domain of the individual does not look especially large.

Even if one could argue that such spatial allocations are excessive, it is important to note that "affordance" also connotes future potential and this has been normalised in the past by the ability of people to subdivide larger residential plots to create autonomous sub-parcels of land. The opportunity to expand, contract or remake one's territory without having to relocate out of it, and our enthusiasm for doing it by way of "home improvements" and subdividing, although often subsumed to economic rationalisations, reflects the underlying imperatives around maintaining prospect, refuge, hazard affordance and the other four factors mentioned earlier.

Conclusion and implications of Habitat Theory for planning

Planners have to deal with reality and, ultimately, regulate human behaviour in a way that does not breach basic individual rights and entitlements. So what is the relevance and applicability of Prospect Refuge Hazard Theory as outlined above? In respect to housing

there are already many planning and construction rules that seek to guarantee safe dwelling or refuge spaces if nothing else. Is that as far as things can be taken?

One answer comes from the planning profession itself. In 2005 the Ministry for the Environment produced the *Urban Design Protocol* (Ministry for the Environment, 2005). The basis for good urban design, according to this document, is respect for, and adherence to a set of particular qualities, the so-called "Seven Cs": context; character; choice; connections; creativity; custodianship, and; collaboration. One could debate the degrees of overlap between the seven Cs and the eight evolutionary principles discussed above. Collaboration seems to have no fit, for example. But "connection" and "legibility" are clearly linked. "Creativity" might be translated into imaginative ways of maximising "prospect" and "refuge" dimensions. If nothing else, bearing in mind that the existing protocol is aimed principally at construction of larger projects that will sit in the public domain, a suburban version could be crafted. It could be adapted to suit the 450m2 norm but also scaled to suit market and environmental trends e.g., tailored versions for the emerging "tiny house" or "eco-house" sectors. A version for renters, with an emphasis on temporary, non-invasive adaptations, could be produced.

Another answer comes from work begun several years ago, but apparently now deferred indefinitely, by Statistics New Zealand in the *Housing Statistics Strategy* (Statistics New Zealand, 2002). A framework of Housing Adequacy is set out in Appendix One which has as its core the following six dimensions: affordability; suitability; habitability; crowding; discrimination, and; tenure security (ibid. p.30). Balancing these dimensions requires "local focus" attention in such areas as household amenity, healthy housing, spatial adequacy, design flexibility and other matters. While it appears that the Department's own work on this strategy has stalled it seems well-conceived and could be given new impetus through more fine-grained connections being drawn between, say, "spatial adequacy" or "habitability" and the eight evolutionary factors.

At present, much of the policy and academic discourse is around affordability and crowding. Appleton's Habitat Theory could be used to moderate both the discourse and the solutions i.e., if the given habitat for a person or household carries these constraints then what other opportunities can be maximised within that context? For planners this means finding a way structured way through a scenario where someone might start by re-conceiving their quarter-acre, or, more realistically, eighth or sixteenth-acre section, as a folly—cum-fortress and attempt to do this on the cheap and perhaps recklessly – thus producing an impoverished version of an Athfield or Wright design. Suburbia spreads risk but it is under-developed. Having guidelines that can assist suburbanites to better reflect their evolutionary needs would be a good beginning. Every home an adventure playground!

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Bio

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What makes early career planners effective?

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Abstract

This paper investigates the capabilities and attributes needed by planning practitioners to manage themselves during their early career phase. These are the attributes that complement an early career professional's technical skills and knowledge. Five established capability scales were used: (1) personal; (2) interpersonal; (3) generic (4) intellectual and (5) profession-specific knowledge. 53 attributes were identified. This paper focusses in particular on the implications of the differences between managers of early career planners and the early career planners themselves. The paper also brings to the fore the importance of life-wide learning in developing these capabilities as the early career planner progresses from graduation.

Introduction and context

Organisations, in both the public and private sectors, need early career professionals to contribute as soon as possible to the public good and the bottom line respectively. The research on which this paper is drawn, identifies the attributes that complement a professional's technical skills and knowledge. It focusses on the differences between managers of early career planners and early career planners themselves. The underlying premise is that people can learn to become effective; it is therefore important that early career planners know what attributes will make them effective and to recognise that not everything needs to be learnt, or is best learnt, as part of a formal programme of study.

Previous research an overview

The study was motivated by: a) a lack of up to date research setting out the skills needed by planning practitioners to manage themselves in the early career phase and b) the fact that

multi-disciplinary studies have tended not to include the profession of planning (Scott and Yates, 2002, Scott, 2008; 2009; Wells, Gerbic, Kranenburg, Bygrave, 2009). Most of the studies in the planning field have focussed on the technical and professional skills and knowledge needed by planners at all levels. For instance, Ernest Alexander's classification of profession specific skills, common across jurisdictions, distinguishes between planning contexts (Alexander, 2005). The skills needed for employment are limited in scope (McLoughlin, 2012).

Arendt (2010; 2011) is one of very few planners who have addressed the non-technical attributes which help make a planner effective particularly in the community field arena. However most planning specific studies which do focus on the attributes which make planners effective are not recent enough to be useful, and those that do exist have tended to focus on the senior management tiers (Kitchen, 2007; Zucker, 1998) or be very specific for instance to sustainability (Wiek, Withycombe and Redman, 2011). The Royal Town Planning Institute's (RTPI) commissioned study, 'Shifting the Gaze' was published in the mid-nineties to raise the profile of the management dimension of professional practice (Higgins, Prior, Boyack and Howard 1994). This short report, sought to distinguish the general competencies required by planners at different stages in their careers. Based on the Local Government Training Board work 'Managing Tomorrow' by Clarke and Stewart (1988), it is of its time and predates the major developments in Information Communication Technology (ICT). It does not distinguish sectors or acknowledge the education and research sector as a distinct career path. The UK, Egan Committee Review (2004) focussed on the skills needed to deliver sustainable communities across the urban professions and the recent study by Sheppard and Smith (2014) focuses on the needs of students of planning rather than early career planners.

Definition of terms

Early career planner

Some studies interpret the early career professional as someone who has been working for between two and six years in their chosen professional area (Rochester, Kilstoff et al., 2005)

or three to five years (Scott, 2009). This study includes planners who have recently started on their planning career, i.e. 0-5 years post qualification. Five years is consistent with previous studies. Within this time frame, an early career planner would be eligible to become a corporate member of their professional body if they have graduated from an accredited planning programme.

Although it is clear, from the membership profile of professional bodies that graduate planners tend to fall into the twenty – twenty-five years age band, this average conceals variations which are often gender or culturally determined. Mature entrants are mostly made up of a combination of career changers and women returners. Age becomes significant since it often correlates positively with life skills and experience.

Effective planners

Effective planners are those regarded as high performing by their employers or those who have self-identified as being effective; providing high levels of client, supervisor and colleague satisfaction with their work as well as delivery of projects on time and to a high standard (Scott and Yates, 2002).

Life-wide learning

Life-wide learning forms an important component of lifelong learning. Developed by the Swedish National Institute for Education, it is defined as learning that takes place in simultaneous places (Jackson, 2012) or in a range of different environments (Skolverket, 2000) and is not contained in dedicated spaces and places (Redecker, 2014). Life-wide learning recognises that a formal programme of study cannot develop all the attributes which make a professional effective in the work – place and builds on the concept of non-formal learning developed by Eraut (2000). Nonetheless, programmes can highlight the attributes which are particularly important and suggest ways in which these can be developed. Life-wide learning continues to be important in the work place as the training programmes of organisations and professional institutes are unlikely to address all the attributes required of every professional. The early career planner needs to look beyond

their work place and further study to recognise other opportunities in their day to day life to develop the necessary attributes.

Method

How to measure effectiveness

Competency and capability frameworks have become widely recognised ways of identifying, structuring and codifying the attributes which make someone effective at their job or in their assigned roles within an organisation. Based on the work of (Boyatzis, 1982; Eraut, 1994; Boyatzis and Saatcioglu, 2008) organisations such as Auckland Council have adopted frameworks identifying the behavioural competencies of planners working in particular roles, see Table 1 (Perkins, 2012; Auckland Council, 2014).

Table 1 Behavioural and technical competencies required of a successful council officer

| Behavioural	Technical
Collaboration	General knowledge and application
Customer Service	Interpretation
Effective Communication	Preparation, scoping and research
Effective Decision Making	Analysis and judgement
Integrity	Writing
Managing conflict	Presentation
Negotiation	
Problem solving	
Risk management	
Time management	

Source: Perkins (2012)

These frameworks recognise that a highly effective planner will not only have the relevant skills and knowledge, that is have the competency to know how to do something; they will also have the capability to use their knowledge and skills appropriately. If competence is about doing the job right, then capability can be understood as doing the right job. It's all

very well having the knowledge and technical skills of a discipline; it is another matter entirely knowing when and how to use them. Capability is knowing when, and when not, to draw on specific skills and knowledge. Capability informed standards look for depth of practical knowledge indicating a potential to work across the profession.

Original research

Based on research in Australia and New Zealand which included the nursing, engineering and accountancy professions, this study involved the use of five established capability scales: (1) personal; (2) interpersonal; (3) generic (4) intellectual and (5) profession-specific knowledge, see Figure 1 (Scott, 2008; 2009; Scott and Yates, 2002; Wells et al 2009).

Figure 1 - The Five Capabilities
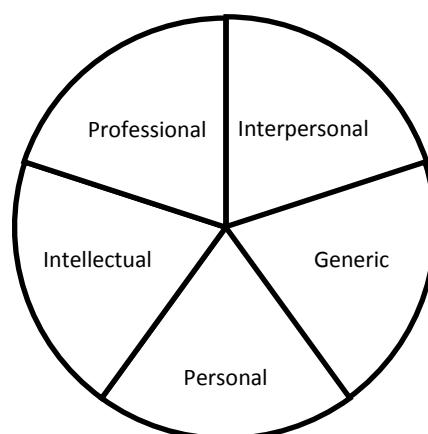
Source: Author's study

The attributes making up these capabilities numbered in excess of 40. A planning specific effectiveness scale was developed through a combination of desk research, meetings and correspondence with a network of early career planners and their managers. This involved removing attributes specific to the other profession of nursing and accountancy and adding those which are specific to planning. A two-phased approach was used: (a) phase one involved a face to face interview or online survey of managers of early career planners to establish the validity of the categories and scales and to establish the importance of the attributes in terms of the effectiveness of early career planners (b) phase two involved

testing the capability categories with early career planners to see what they felt had contributed to their effectiveness.

A survey was conducted between 2012-2013 with participants from UK (England, Scotland and N. Ireland) New Zealand, Australia, US, The Pacific Islands, Nigeria, Kenya, European Union and Indonesia. The study involved managers and planning practitioners and in total, over 100 participants took part, either face to face or online , see Table 2. These responses are consistent with other studies.

Results and points for discussion

Table 2 Responses by early career and managers

Parts to the questionnaire - capabilities	Number of responses Early career planners	Number of responses Managers
1 Personal	91	53
2 Interpersonal	77	52
3 Intellectual	68	51
4 Profession specific	64	49
5 Generic	62	47

Source: Author's Study

A total of 53 attributes across the 5 capabilities have been validated by the study, see Appendix 1. What is striking, and in a sense reassuring, is that overall the findings showed more agreement than differences between early career planners and their managers – a positive outcome see Table 3 and Figure 2. There are indications that this is the case in different countries – although there will always be some cultural differences.

Differences between managers and early career planners

Table 3 Overall pattern of capabilities from managers and early career planners

Managers capabilities based on ranking	Early career planners capabilities based on ranking
Personal	Interpersonal
Interpersonal	Generic
Generic	Personal
Intellectual	Intellectual
Profession specific	Profession Specific

Source: Author's study

Figure 2 Radar diagram comparing managers and early career planners
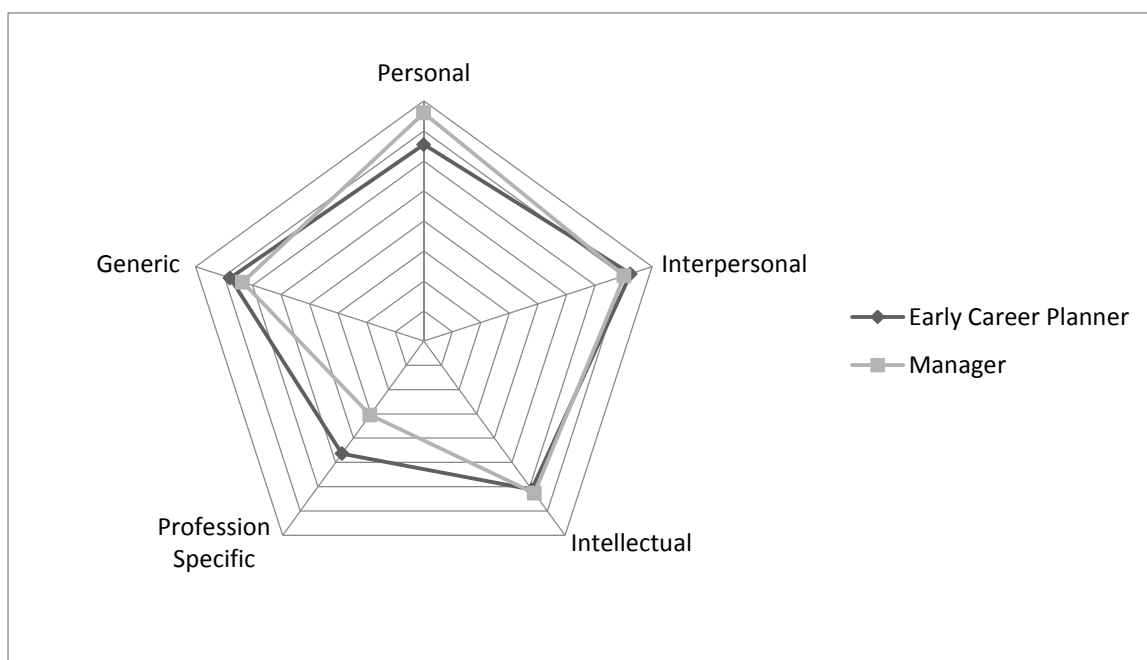
Source: Author's study

The managers Top 5 include 2 Personal and 3 Interpersonal attributes. The survey results showed that managers look for a person fit to the organisation and have an eye on the financial implications. They want an early career planner who provides value for money,

makes the recruitment process cost effective and quickly contributes to the bottom line. The 4th and 5th Interpersonal attributes reflect that managers need to know what the early career planner is capable of and their ability to empathise with colleagues and clients.

The survey showed that, the first two are closely mirrored by early career planners although "saying when they don't know something" was ranked much lower, at 15. Why is this? Is it because they believe they are expected to know everything? Is it because schools and universities mark down for not knowing and so it is not something to draw attention to? Are early career planners unconfident about owning up to not knowing?

Table 4: Managers' five top attributes

Top 5 attributes of Managers	Early Career Planner Ranking
Learning from mistakes and errors (Personal)	1
Doing as good a job as possible (Personal)	4
Say when they don't know something (Interpersonal)	15
Willingness to listen to different points of view (Interpersonal)	18
Empathise (Interpersonal)	19

Source: Author's study

Table 5 Early career planners top five attributes

Top 5 attributes of Early Career Planners	Managers' Ranking
Learning from mistakes and errors (Personal)	1
Able to interact positively with the public (Interpersonal)	6
Develop and use networks (Interpersonal)	14
Doing as good a job as possible (Personal)	2
Able to organise and manage time effectively (Profession)	8

Source: Author's study

Owning up to not knowing is a strength, as it provides a firm base for learning. Managers can help here by emphasising this in inductions and creating the right environment that encourages early career planners to feel comfortable in speaking up.

Managers rank another Personal attribute "willingness to persevere when things are not working out as anticipated", at number 7, whilst the early career planners place it at number 37. It is not clear why this is the case. Is it because early career planners expect instant results, or feel their managers expect instant results? Is it because they don't see it as their responsibility if a project is not going to plan?

Perseverance is important when things are not working out and this is when an understanding of CPR can help. CPR relates to Content Process and Relationship and is a conceptual training tool which draws attention to the need to achieve a balance between these aspects of the day to day work. A planner in the US, failed to get any response when a consultation document was mailed out for comment to a local indigenous tribe. Learning about the importance of achieving a balance between Content Process and Relationship (CPR) and how to put the model into practice, meant the planner was able to become more proactive and make the effort to build relationships as a first priority. This personal contact was what the indigenous people expected and needed and it opened the way to getting a response and more importantly a constructive long term relationship.

There are some similarities with this attribute of perseverance and "being able to defer judgement", yet another Personal attribute, which managers rank at number 13 with early career planners ranking it near the bottom, No 49. This may suggest that early career planners want immediate success and are not being trained to be more thoughtful and to take things a step at a time. Why might this be? Perhaps a world of instant access to information can have its downsides or tight deadlines for assignments create the impression that decisions and deadlines are set in stone

Only 2 Intellectual capabilities were identified in the Managers top 20 and these are "being open minded to achieving a goal" (11) and "understanding the need to respond to clients in

a timely way" (15). Early career planners see these as 26 and 10 respectively. It is interesting that the need for open mindedness is valued much more highly by managers. Why is this? Is it because managers believe early career planners are too sure of themselves? Is there something to do with the training of planners which doesn't value open mindedness?

The early career planners Top 5 does put a higher value on networks and networking and managers may not appreciate the extent to which early career planners assist each other through those early years.

Notably, early career planners list 6 attributes in their Top 20, which are not listed by managers in their Top 20.

- Willing to take responsibility for projects (Personal)
- Understanding how the organisation works (Personal)
- Understanding how different groups that make up an organisation work (Inter Personal)
- Know where to look for information (Intellectual)
- Able to set and justify priorities (Intellectual)
- Ability to work with senior staff without being intimidated (Interpersonal)

It would seem that this could highlight some differences in perception between managers and early career planners. Managers could take note of these when inducting staff and spend time explaining the workings, structure and culture of the organisation – above and below the surface. It indicates there may be benefits in detailing clearly the responsibilities and priorities early career planners will have at the start of their careers. Dealing with these issues early on has the benefit of easing stress, and goes some way to satisfying the interpersonal aspects, important to early career planners, thereby providing that all important base for future learning and development.

Life-wide learning

The personal, interpersonal and generic attributes highlighted in this study are not all covered on professional planning programmes and Universities cannot realistically cover everything that is needed. They can however use the results of studies like this to highlight to students the kinds of attributes that are important and valued. Universities can be more aware of, and acknowledge the life-wide learning opportunities students can tap into before entering the workplace. This study identified a wide range of life-wide opportunities, for learning and developing the necessary attributes, in every-day life. Day to day family experience may help develop communication and conflict-resolution skills. In terms of the attributes making up the generic capability, early career planners agree that overall, life-wide learning has helped develop time management, communication and technology skills and participation in a Toastmasters group was identified as helping develop those all-important speaking and chairing skills.

A reflective practice tool such as critical incident analysis can help ensure that the life-wide experience is recognised, processed and translated into the work setting.

Conclusion and points for discussion

This study has highlighted the attributes which contribute to making early career planners effective in the work place. It highlights some important differences in perception between early career planners and their managers.

It is time to once again take a long hard look at how our planners are trained and recognise explicitly that Universities can do more to highlight the attributes needed which are better developed as part of a life-wide approach to learning.

What students learn outside the University is likely to be equally important and equip them with many of the personal and interpersonal attributes which will actually influence effectiveness at work.

Studies such as this, can identify the attributes needed and identify ways in which these attributes can be developed through a life-wide approach. Perhaps one day Universities will be willing and able to more formally acknowledge this life-wide learning.

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Appendix 1 Personal, Interpersonal, Generic, Intellectual and Profession Specific Attributes validated by the study

Note: plain text items identified from previous studies.

Bold items identified a planning specific items

Personal

1. Willing to face and learn from errors and listen openly to feedback

2. Understanding personal strengths and limitations

3. Confident to take calculated risks and take on new projects

4. Able to remain calm under pressure or when things go wrong

5. Ability to defer judgement and not to jump in too quickly to resolve a problem

6. Willingness to persevere when things are not working out as anticipated

7. Wanting to produce as good a job as possible

8. Willing to take responsibility for projects, including how they turn out

9. Ability to make a hard decision

10. Willingness to pitch in and undertake menial tasks when needed

11. A sense of humour and being able to keep work in perspective

12. Shows the courage and persistence to follow a course of action to its conclusion

13. Willing to say when they don't know something

14. Able to maintain a work-life balance and maintain personal well being

Interpersonal

15. Able to empathize with and work productively with people from a wide range of

backgrounds

16. Willingness to listen to different points of view before coming to a decision

17. Able to develop and use networks of colleagues to help solve key workplace problems

18. Understanding how the different groups that make up organization operate and how much influence they have in different situations

19. Able to work with senior staff without being intimidated

20. Able to give constructive feedback to work colleagues and others without engaging in personal blame

21. Able to motivate others to achieve great things

22. Able to develop and contribute positively to team-based projects

23. Able to interact positively with the public, citizens and communities

Intellectual

24. Knowing that there is never a fixed set of steps for solving workplace problems or carrying out a project

25. Able to identify from a mass of detail the core issue in any situation

26. The ability to use previous experience to figure out what is going on when a current situation takes an unexpected turn

27. Able to diagnose what is really causing a problem and then to test this out in action

28. Able to trace out and assess the consequences of alternative courses of action and, from this, pick the one most suitable

29. Able to readjust a plan of action in the light of what happens as it is implemented

30. Able to see how apparently unconnected activities are linked and make up an overall picture

31. Able to set and justify priorities

32. Able to recognize patterns in a complex situation

33. Understands and responds to client's requirements in a timely manner

34. Knows when to look for relevant information

35. Is open minded to different ways of achieving a goal

36. Is able to keep an eye on the big picture

37. Is able to apply creative problem solving techniques

Profession-specific

38. Having a high level of current technical expertise relevant to the work area

39. Understanding the role of risk management and litigation in current professional work

40. Understands how organisations like their current one operates

41. Has an understanding of the current issues in their professional fields

42. Able to communicate and undertake a range of services offered by the organisation

43. Thinks and acts on behalf of the organisation

44. Has an understanding of and is able to address gender inequality and women's empowerment

45. Able to work with politicians to find the technically right and politically acceptable solution

Generic

46. Able to use IT effectively to communicate and perform key work functions

47. Able to adapt their approach and style of communication according to the audience

48. Able to manage my own ongoing professional learning and development

49. Able to chair and participate constructively in meetings

50. Able to make effective presentations to clients

51. Knowing how to manage projects into successful implementation

52. Able to help others learn in the workplace

53. Able to organize work and manage time effectively

(Adapted from Scott, Yates 2002: 366-377)