Integrating the applied behavioural sciences to improve community engagement processes in Victorian strategic land use planning practice

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Abstract: Community engagement processes are an important part of strategic land use planning practice in order to facilitate good governance. However, local governments in particular, are recognising that statutory driven community consultation processes and more conventional engagement practices have proven inadequate when managing emotive and conflict-filled situations with communities opposed to contentious policy directions. While local governments are committing more resources to engagement processes, many of these practices are based on assumptions about human behaviour that do not always align with contemporary applied behavioural research. The applied behavioural sciences are increasingly being used by governments across Australia and internationally to inform public policy in recognition that previous approaches might be drawing on misplaced assumptions about human behaviour. In particular, the integration of an understanding of how people process information and make decisions within community engagement processes has the potential to assist with constructive participation objectives and land use planning policy development. This paper draws upon the applied behavioural sciences and examines a number of ways they could be used to improve the efficacy of community engagement practice focusing on the Victorian strategic land use planning context.

Introduction
There is sustained focus on community engagement processes by governments, academics, and practitioners alike, particularly in relation to land use planning. Indeed the current Victorian State government has positioned community engagement processes centrally to their policy platform, and has recently gazetted the Recognising Objectors Bill 2015 (State Government of Victoria, 2015) so that community concern, as measured by quantity of objections, will be taken into account by decision makers in the development application process. This legislative reform effectively elevates popular community opinion as a relevant matter to be considered.

Whilst this legislative change might appear to respond to the numerous, sometimes impassioned, community led opposition protests against proposals in the State of Victoria, not all agree that the change addresses concerns with community engagement processes that exist. For example, the prominent Victorian planning consultant, Rob Milner (2015), questioned the need for this legislative reform, pointing to the various sections of the Planning and Environment Act (State Government of Victoria, 1987) which provide opportunities for third party involvement. Instead, he argued that the system ought to take into account the voices that are currently not being heard.

The authors agree with this observation and contend that communities are not ubiquitous but instead are made up of many communities. We consider that the question remains how to improve processes so that a more representative portion of the population can participate and be heard. By facilitating a more representative section of affected populations in deliberative engagement processes, then diverse views can be heard and the views of those who have potentially dominated debate in the past by claiming to speak for the many can be tested.

Whilst Milner pointed to regulations which explicitly exclude third party processes as one part of the equation that ought to be addressed to improve engagement opportunities, the authors consider that it is through the strategic plan making process that communities can most effectively be engaged – engage early and meaningfully, so that plans are owned by the many, and not opposed by the noisy few. It is our view that the applied behavioural sciences offer a considerable opportunity to assist with the improvement of the effectiveness of community engagement processes by enabling planners to use known behavioural influences to facilitate deliberative processes which can in turn help establish greater ownership of plans. The behavioural economists Thaler and Sunstein (2008) famously challenged the assumption that people make choices in their own best interest, and drew on a range of behavioural theories associated with decision making to develop the area which is known as “nudge” or “choice architecture”. This emerging field of social science has been widely applied to a range of public policy areas (World Bank, 2015). We similarly argue that much planning and community engagement practice and discourse are based on a false assumption that people
deliberately weigh up the pros and cons of different choices based on their own self-interest”, and believe there is great scope to apply the behavioural sciences to improve community engagement processes. Drawing on John et al. (2011):

“...policy-makers may be successful in nudging citizens into civic behavior if they take into account the cognitive architecture of choice that faces citizens and work with, rather than against, the grain of biases, hunches and heuristics” (p 11).

This paper begins by considering the importance of effective community engagement processes to public policy and good governance generally, as well as land use planning explicitly. This is followed by an examination of what the applied behavioural sciences say about human thinking and decision making, and a brief discussion of how this is being used by behavioural insights teams within Australia and internationally. The paper concludes with an analysis of how the applied behavioural sciences could be used to contribute to the improvement of community engagement processes by acknowledging and working with underlying assumptions of human behaviour, and adjusting engagement strategies and techniques to incorporate the applied behavioural science knowledge base. This paper forms the first of a series of papers, which explore the efficacy of applying behavioural sciences to community engagement processes in strategic land use planning projects focusing on the Victorian planning system for context.

The continuing importance of community engagement in public policy and land use planning

Benefits of community engagement in planning and criticism of practice

Interest in community engagement or public participation processes sits within an international public policy agenda (OECD, 2001). Nelson, Babon, Berry, and Keath (2008) defined community engagement as structured processes that involve citizens in decisions that are made on public problems.

Public participation is seen as central to good governance and public policy development. Bell and Hindmoor (2009) argued for the continued importance and centrality of the state in governance processes and see an important role for partnerships with citizens and stakeholders using community engagement processes. In relation to urban governance, Minnery (2007) similarly noted that the formal role of government has been extended to integrate relationships with other actors such as “the private sector and the community sector in urban development and change” (p 326). Australian governments, Adams and Hess (2001) asserted, have embraced the idea of community as an important element of policy making and implementation to improve public relations and reflect the polity’s preferences. Healey (2006) also suggested that local interest in environmental issues and pressure from active citizen groups has driven practices for including citizen participation in planning processes.

Others argue citizen participation and deliberation is a cornerstone of democracy and deliberative democratic processes play a central role – processes which engender authentic deliberation and communicate preferences in a non-coercive manner (Dryzek, 2010). Societal problems have become so complex that innovations in participatory governance are required to facilitate representative democratic ends (Fung & Wright, 2001). It is also commonly argued that citizens have a right to be consulted in relation to issues and decisions which will affect them, and governments should take their views seriously (Stewart & Lithgow, 2015).

Decision-making processes, and the ability of citizens to influence decisions is central to arguments put forward by proponents of community engagement. Dryzek (2010) argued that decisions can be perceived as more legitimate if they have been achieved through deliberative processes which engage citizens through “communication that encourages reflection upon preferences without coercion” (p 8). Others have argued that decision-making can be improved by acknowledging local knowledge. Rydin (2007) contended that there are multiple forms of knowledge that should be recognized in planning policy development. Innes and Booher (2010) similarly considered that local knowledge is often contextual, experience based, and can fill information gaps. It can provide pragmatic solutions, challenge professional views, and contribute to the “resilience of our systems” (p 170).
The potential for well executed community engagement processes to contribute to widely supported planning policy was noted by Mees (2011). He described the difference (and apparent success or failure) of metropolitan strategies as a consequence of community engagement strategies. Melbourne has seen a number of metropolitan strategies over the last decade, yet in relation to the metropolitan strategy for Greater Vancouver, Mees (2011) stated “the community engagement process of the early 1990s was so successful that it has set planning directions which have persisted for two decades”.

In relation to the now superseded Melbourne 2030, Mees (2011) noted that despite extensive consultation, the strategy was not influenced by the results of the consultation process, and was written by bureaucrats within the Victorian State Government. This was a key criticism of the strategy made by Councils and members of the community as noted by the Audit Expert Group in their review of the plan five years later (Moodie, Whitney, Wright, & McAfee, 2008). They stated: “Ideally, planning processes should start with broad public discussion about the choices and consequences of key directions. This approach goes well beyond discussion with vocal stakeholders or the most powerful groups. It engages the less vocal and less visible majority of community members and contributes to subsequent buy-in by stakeholders.”

The Group developed a set of community engagement guidelines for future use which recommended focusing consultation on “addressing difficult choices” to “provide guidance for real life decisions when difficult funding and development choices must be made” (p 33).

Davison (2011) and Donegan (2015) both drew on Canadian case studies where engagement with citizens involved making difficult trade-offs as part of the decision-making process, something that they considered necessary to allow tough decisions to be widely accepted and have longevity. Indeed engagement processes in land use planning which do not provide clarity as to how consultation will inform decision making are often seen as tokenistic (Brackertz & Meredyth, 2009). Nelson et al. (2008) argued that “participants feel like they are being asked to approve predetermined plans” (p 40), and that widely used engagement processes persist in failing to adequately include communities in decision-making. Brackertz and Meredyth (2009) suggested that some confusion in relation to expectations of process and outcomes may be attributed to the use of language and definitions. They stated:

“there is seldom clarity at the outset of a public participation process about which outcomes are being pursued, how far the processes are required to be representative, and how results will inform decision-making.” (p 153).

Whilst some traction has been gained in relation to improved engagement processes within the Australian context since the early 2000s, including the increasing use of the IAP2 Spectrum (International Association for Public Participation Australasia, 2014), Legacy, Curtis, and Neuman (2014) argued:

“where ‘decide-announce-defend’ mentalities pervade planning departments in … jurisdictions, frequent attempts at innovative engagement techniques such as community deliberation, still exist solely as political and planning experiments” (p 320).

This echoes Mees (2007) earlier criticism of Australia’s professional planning culture in contrast to Vancouver’s that he contended is “characterised by participation and analytical rigour” (p 6).

**How to address the criticism - the central role of local government planners**

Whilst participatory planning research should focus on the development approval phase, resident third party appeal rights, and its impact on the implementation of planning policy (eg Cook, Taylor, Hurley, & Colic-Peisker, 2012), strategic planning is where engagement processes can most effectively influence broad policy outcomes and is the focus of this research. Although state driven metropolitan planning has increased in importance in recent decades (Goodman, Maginn, & Gurran, 2013) it is local governments that are generally at the forefront of implementing community engagement processes – they are the managers of planning schemes and are effectively in charge of both implementing and amending them. There are also many actors involved in property development, and land use policy implementation, however, planners occupy a central role managing the inherent conflict which occurs as part of the dynamic between the various actors in urban governance relationships (Minnery, 2007). Rydin (2007) argued that planners continue to wield influence in the planning process through their technical knowledge and control of the strategic planning process.
Planners, as practitioners “working in the face of public disputes” should critically reflect on planning processes as well as outcomes (Forester, 2013).

Despite a legislative framework which recognizes the inherent power base of governments, the messy reality of good governance through increased public participation and improved engagement processes is tangible. Furthermore, the need to support a professional planning culture which is equipped to deliver good governance is important. Local government planners are central actors to facilitate the process improvement needed – processes which allow open and honest dialogue about choices, trade-offs and consequences to facilitate informed decision-making. However, the assumption that people are rational agents which is central to deliberative and communicative literature, is not supported by research from the applied behavioural sciences.

What do the applied behavioural sciences say about how people make decisions?
An important influence on much deliberative, communicative, and collaborative discourse is Habermas (1984) and the idea of communicative action. Central to this is the assumption that individuals can reach an understanding of a situation and coordinate their actions through reasoned argument. It is reliant on language and reason to facilitate individuals to focus on collective or group outcomes rather than individual interests. Carpenter and Brownill (2008) note that the “concept of communicative rationality, deliberative democracy is built on the premise that agreement between different groups can be negotiated through rational communication” (p 229).

Hillier (2003) challenged the reality that planning disputes always end with consensus building because often “stakeholders’ commitments to values is “a matter of identity and historical contingency rather than rationality” (p 39). She saw a role for psychology where the political and personal intersect and pointed to the psychoanalytic tradition of the influential French psychiatrist Jacques Lacan to complement Habermas’s philosophy.

As part of this “critical reflection process”, it is useful to consider the body of evidence established within the applied behavioural sciences field in order to align engagement processes with known ways that people (including planners) behave, rather than being based on false assumptions of human behaviour, particularly in relation to how people process information and make decisions.

A number of government and institutional publications have been produced which have collated scientific evidence from the applied behavioural sciences. The purpose of these publications generally has been to use this collected body of research to show how a better understanding of human thought and decision making processes might be used to influence policy (eg Behavioural Insights Unit, 2014; Department for Transport, November 2011; Institute for Government, 2010). The publications generally explain how human decision making occurs. The most recent publication by the World Bank (2015), for example, explains that human decision making occurs “as an interaction between mind and context” (p 2). They note three principles of human decision making: automatic thinking; thinking socially; and thinking with mental models. By understanding these three principles and adjusting community engagement processes, it may be possible to work with known behavioural patterns to influence participation and potentially land use planning policy outcomes.

Automatic thinking
Automatic thinking recognizes alternative processes used by people when thinking and deciding: an automatic system; and a reflective one. These systems approximate intuition and reasoning (Evans, 2008; Kahneman, 2003). The automatic system is fast, uncontrolled, effortless, emotional, and unconscious. Behavioural examples of this system include daily commuting, brushing your teeth, and speaking in one’s mother tongue. The reflective system is controlled, effortful, deductive, slow, and self-aware, and is demonstrated through planning a new journey, counting kilojoules and learning a foreign language (Institute for Government, 2010). Within the psychological literature, the two systems are often referred to as System 1 and System 2 (Gilovich, Griffin, & Kahneman, 2002).

Whilst this might sound uncontroversial, much public policy (including planning theory) is directed at influencing behaviour with the presumption that people are rational-agents:

“Most traditional interventions in public policy take this route, and it is the standard model in economics. The presumption is that citizens and consumers will analyse the various pieces of information from politicians, governments and markets, the numerous incentives offered to us and act in ways that reflect their best interests (however they define their best interests, or -
Whilst this is true for some behaviour and decisions made, most judgments and decisions are the result of automatic thinking processes. John et al. (2011) emphasised that this does not imply that people are behaving irrationally. They noted that people tend to behave in ways that are goal oriented and influenced by reasons. However, people will also focus on certain information, ignoring other sources, and are driven by habits of thought, as well as emotions. Cialdini (2009) described these processes as “click, whirr” weapons of influence.

Dolan et al. (2012) presented a mnemonically titled framework MINDSPACE (Messenger, Incentives, Norms, Defaults, Salience, Priming, Affect, Commitment and Ego) which categorised the “nine most robust effects on behaviour” (p 266) known to influence the automatic system of thinking. The framework brings together a large body of literature from the applied behavioural sciences.

Whilst most people consider themselves as deliberative thinkers, most thinking processes and indeed behaviour is the result of automatic thinking. Thaler and Sunstein (2008) noted that lives are for the most part busy and complicated, and mental shortcuts are routinely used because it would be impossible to analyse and think deliberatively about everything that occurs. People employ rules of thumb because they are useful and quick. However, these short cuts can result in biases and errors that do not serve the individual well, particularly where strategic planning decisions are being made which influence land use directions into the long term in and around where one lives. For example, local governments routinely send out letters to notify people of strategic planning processes. The sight of a local government logo can trigger an automatic response – positive or negative. Similarly, people might read the word “development” and have automatic negative associations.

Within the strategic planning context, the assumption is generally more information is better and this will allow people to make informed decisions. This assumption does not hold true when we examine how people process information, as well as the context within which information is presented. The challenge therefore is to use an understanding of how people process information and present it in a way which works with known mental short cuts. Furthermore, it is important to switch people’s thinking across to the reflective system, and to use behavioural insights to help do this. One of the challenges is to get people to participate at all – for many local governments, participation numbers can be low as a percentage of a total population affected by any given proposed change. Using behavioural insights might therefore be effective to “get people to the table” to begin with. Adjusting the way information is presented in letters, during workshops, and on websites for example, could potentially be an effective way to facilitate participation as well as the framing of trade-offs and choices. Other considerations could involve designing plans or visuals cues that might reflect some of these biases.

**Thinking socially**

“Thinking socially” describes how people are influenced by how people around them behave and think (World Bank, 2015). People follow and take cues from what other people are doing. People learn from others, conform to fit in, and are concerned about what others think of them – in short people modify their behaviour as a consequence of social norms and expectations. These influences result, in the most part, highly desirable behaviours and reflect shared values and patterns of trust. But they can also be collectively destructive and individually unbeneﬁcial (Earls, 2007).

The “bystander effect” is a well-known example of how people can be inﬂuenced by what others are doing (or what they perceive or expect other’s to do). Latane and Darley (1968), for example, demonstrated how undergraduate students ignored a smoke ﬁlled room and decided that it was not dangerous when others in the room were behaving passively. Social norms have also been successfully used for more personally and socially advantageous outcomes to moderate individual electricity consumption. Allcott (2011) showed that energy consumption was reduced by informing residential utility customers how they compared with the electricity use of their neighbours.

Dolan et al. (2012) suggested that there are a number of lessons to draw from the literature about social norms. These include: if a social norm is desirable, let people know about what others are doing; relate the norm to the target audience so that the behaviour of people that the target person are familiar with or can relate to is highlighted; norms may need reinforcing by reminding people...
periodically about what others are doing because behaviours can drop off over time; and finally, descriptive norms have the potential to backfire if people are made aware that people are behaving worse than them, but can be managed through using social approval or disapproval indicators. Thus letting people know that others similar to them are participating in community engagement processes could involve using social norms to motivate more people to take part. Conversely, if people hear of vocal opponents, then this runs the risk of inaccurately conveying a social norm which is supported by many - loud voices are often equated with many voices.

**Thinking with mental models**

“Thinking with mental models” relates to how people within any given society make sense of the world and understand themselves within a common group or societal perspective (World Bank, 2015). Individuals identify with cultures they are a part of, and internalise the goals of the social groups they belong to (John et al., 2011). DiMaggio (1997) suggested that people experience culture as schemata structures which organise disparate bits of information, when schemata are understood as “representations of knowledge and information-processing mechanisms” (p 269). These result in “mental models” which help people to interpret what they perceive, and help people to create meaning which influences actions and choices.

Interestingly, DiMaggio (1997) described how psychological research has indicated three facilitating conditions which can shift people from automatic thought processes to more deliberative ones. These include: being attracted to a problem through attention; being motivated by dissatisfaction with the status quo of a particular issue; or when schemata fail to adequately account for a new stimulus.

Mental models can be useful, however some are not, and stereotyping is a well-known example of a mental model. People can stereotype high-rise or high density development which may or may not align with what the planning or development community intends. Thus mental models can be potentially influential on how people respond to proposals.

In combination, the research opportunity for planning engagement processes lies in the ability to draw on an understanding of the influences on people’s thought and decision processes, both the automated and reflective systems, to promote more effective engagement – greater participation from a broader demographic base, and facilitate people’s thinking to shift to a more reflective participation. Whilst planning practice and community engagement processes do not routinely draw on evidence from applied behavioural research, other areas of public policy are increasingly taking notice.

**Using the applied behavioural sciences in public policy**

Shafir (2013) noted that public policies are generally aimed to “shape society in desirable ways: to promote human welfare… (and) must therefore depend on a thorough understanding of human behavior” (p 1). Furthermore, he stated that it is “remarkable how small a role the attempt to understand human behaviour has played in policy circles”, particularly given that “we have now come to understand, much of our intuition about human behavior fails to predict what people will do” (p 1).

By utilising the applied behavioural sciences, “choice architects” as termed by Thaler and Sunstein (2008), “can make major improvements to the lives of others by designing user-friendly environments” (p 12). The World Bank (2015) similarly argued:

“...insights into how people make decisions can lead to new interventions that help households to save more, firms to increase productivity, communities to reduce the prevalence of diseases, parents to improve cognitive development in children, and consumers to save energy” (p xi).

Within this context, the use of applied behavioural science research has seen the flourishing of behavioural insights teams both in Australia (eg Behavioural Insights Unit in NSW and BehaviourWorks Australia at Monash University), and internationally (eg the “Nudge Unit” within the Obama administration and the UK’s Behavioural Insight Team). Various sections of government are developing evidence based public policy in areas such as waste management, energy and water consumption, traffic accident prevention, and health. This is underpinned by academic publications reporting on various experimental findings. For example, Wansink (2013) examined how an understanding of food consumption behaviour can improve consumer welfare. John et al. (2011) documented a number of experiments where they draw on “nudge” strategies to change civic behaviour. These include increasing voting participation, organ donation, and of particular relevance to the current research program, “linking”. They describe linking as the “the institutional links between
citizens and government” as a framework for civic participation” (p 133). In an experiment which was aimed at improving the responsiveness of councillors to concerns raised by community groups, they noted that by modifying the way information in letters was framed, they were able to nudge councillors to be more responsive.

**In what ways can the applied behavioural sciences be used to improve the effectiveness of community engagement processes in strategic land use practice?**

If governments are committed to improving the effectiveness of community engagement processes, then they need a program which in part begins to re-examine the “habits” within the planning profession (Binder & Boldero, 2012), and works with “the cognitive architecture of choice” (John et al., 2011). The authors do not suggest that such an approach is a panacea to fix the woes with community engagement processes in planning in Victoria. Indeed it should be part of broad range of sophisticated process improvements generally (Barker, 2013). However, we consider that it is worth drawing on the body of research which has emerged over recent decades which show that people process information and make decisions in consistent, predictable, and sometimes seemingly irrational ways. Community engagement processes should be modified to take account of this body of knowledge and then quantitatively tested to examine whether they result in improved community engagement outcomes. We are therefore proposing a research program to investigate whether integrating initiatives from the applied behavioural sciences into community engagement processes leads to improved outcomes within the Victorian planning system. Measures of efficacy could include improved participation rates in strategic planning processes which reflect a broad cross section of the community; and improved satisfaction by those who participate in processes, participants such as citizens, stakeholders and planners. Furthermore, it could be tested whether improved satisfaction was related to people’s ability to influence decisions or their understanding of how their input was used (or not used) in final plans.  This would potentially address some of the criticisms of existing engagement processes which can be perceived as tokenistic because participants are unaware how their efforts have been used to influence outcomes.

We are also mindful of the need for engagement processes which allow open and honest dialogue about often difficult choices, trade-offs and consequences to facilitate informed decision-making, and the need to support local government planners and an organizational culture to deliver this. Interventions should target both the intuitive and deliberative side of how people process information, and frame information to work with behavioural insights to assist with this.

From the literature, it is possible to propose some of the key issues which are contended to be of concern with current community engagement processes in land use planning practice. These issues include:

- Current community engagement practices used by local government planners in Victoria involve habitual processes which are seen to involve dismissive and defensive behaviours. We surmise that this is because local government planners (and their authorizing environment) see engagement activities as often time consuming, expensive and conflict-filled processes which frequently create opposition from vocal minorities;
- Opposition is created in part because information and choices are presented and framed in ways that are confusing, provocative, disempowering, and fail to take into account how people process and respond to information.

Whilst it is possible to look at other actors as described by Minnery (2007) such as the business sector, or developers for example, the authors have identified three key areas of behaviour which further research should initially explore to test the efficacy of behaviour change interventions on engagement processes. These include:

- the planner’s behaviour (and those who authorise it such as Councillors and executives) who have control over engagement processes;
- citizen’s behaviour to motivate them to participate; and
- citizen’s responses to strategic planning proposals when they participate in engagement processes.

Using Victorian strategic planning practice as an example, letters are routinely sent out to members of the public to inform them of projects currently being considered or to invite them to participate or attend information sessions or community engagement events. The language used can often be framed using broad concepts, and technical language. This in turn promotes the “click, whirr” mental
processes which can disengage people at critical points in processes where effective influence is still possible.

From the applied behavioural science research we know that more information is not necessarily better. It is the framing of the information, and whether it integrates key behavioral considerations, which will influence how people process it. The framing of information needs to be targeted to the audience, relevant, and attached to the community and culture within which people live. In short, messages need to be framed from a basis of understanding the community within which planners work.

Engagement activities also need to be aware of how people behave within group environments, and the power of social norms, and the attachments that people have to place. The potential for GIS and spatially interactive tools to frame information is an obvious potential for further investigation, as are design based tools which frame information so that it is relevant, focused, and in-line with known behavioural influences.

**Conclusion**

Community engagement remains an important process in contemporary planning, however it has a history of criticisms and challenges remain. Some of these can be attributed to a lack of understating of human behaviour and in particular, the way people process information and make decisions. In recent years, growing recognition of this shortfall in understanding human behaviour has seen a closer relationship between the applied behavioural sciences and public policy. While areas such as health, finance, and the environment have seen growing evidence of the benefits of such a relationship, the planning context remains a relatively new “frontier”. This lack of application might be attributed to more complex and contentious issues that are involved in land use planning. The authors acknowledge that the use of behavioural sciences is unlikely to be a panacea to fix systemic issues with engagement processes. Indeed, nudge approaches have been criticized for their inability to tackle more complex problems. This research therefore proposes to test a combination of simple and more sophisticated behavioural change approaches within the arena of complex problems associated with land use planning, whilst acknowledging the need for broader process reform. It is our fundamental contention that it is worthwhile to test the efficacy of using known behavioural influences, so that information is framed to work with, rather than against the known quirks of human behaviour.

**References**


