PROMOTING GOOD CHOICES:
Patterns of habit and the role of government

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Executive Summary

“Promoting good choices” first brings to mind government advertising: billboards telling us to be better people – to wear enough sunscreen, to avoid hard drugs. While many campaigns, particularly around public health, have been effective, such marketing has costs. More and more (and more provocative) advertisements now clutter up our airwaves and visual space. Often, the ambition to promote good choices has been compromised by the means chosen to do so, particularly the proliferation of signs, advertisements, and other forms of petty and disturbing interference. Yet “promoting good choices” also suggests a more serious aim: for a higher quality society, for social conditions supporting better choices, for markets in virtue not vice. These conditions can be established. And this can be done while restoring a quality public realm – a commons governed for the common good, protected against debasement.

Public space compromised by corporate and government advertising is an important symbol. It reminds us that valuable goods can be undermined in the name of choice. Many of our most complex policy problems today arise from free choice, around how people eat and exercise, the financial risks we take, or how sustainably we live, for example. Dealing with these problems will require moving beyond the popular binary debate between laissez-faire approaches and mandates. Regulation has its place, as does laissez-faire, but what our current approaches lack is an understanding of the full range of factors shaping choices, from brain to society. Our choices are made in contexts, which are often unavoidably shaped by policy. It is the conditions shaping patterns of choice on which this paper focuses.

Habits are a central concept linking brain and society. Many of our choices are not isolated, deliberative decisions, but should instead be analysed as semi-conscious patterns of habit, shaped over time by social and economic conditions. Habits are valuable in themselves, as they free up conscious mental resources for long-term thinking. They are an evolved mechanism which positively facilitates normal life and behaviour. Problems arise, however, when habits occasionally entrench patterns of bad choice that are difficult to change. Habits can only be redirected incrementally and imperfectly, but most areas of policy are already implicated in shaping habits, whether policymakers attend to this or not.

“Good” choices are partly based in biology: the picture of human nature emerging from neuroscience outlines the elements of human flourishing. In addition, we argue that in Australia, good choices are those which promote the individual and common good, based on the progressive values of prosperity, fairness and community. Promoting good choices requires two things: 1) policies tailored to specific choices and habits, and 2) policies to support “domain-general” habits, which underpin patterns of good choice. Domain-general habits such as empathy, self-control and long-term thinking might better be described as “virtues” – clusters of habit, motivation and belief which tend to be admired in a population. Their development is central to a good society; the role of government here is to establish and protect the economic and social conditions which tend to cultivate virtuous citizens.
Promoting Good Choices

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Many of our most intractable problems today arise from the aggregated choices of individuals. Diet and lifestyle choices lead to obesity; excessive debt leads to unsustainable growth; overconsumption damages the environment; binge drinking promotes violence and damages civic life. A related set of problems involve specific behaviours. Alcohol-related violence, environmental pollution and tax evasion each highlight the need for people to honour certain norms and standards, in addition to the need for legal sanctions. To some extent, solving these problems involves legislation. However, formal rules are often insufficient. Most good behaviour cannot be coerced, and prohibitions may unacceptably curtail freedom.

Rather, these issues are problems of individual choice and freedom. They raise the questions of what conditions promote good choices, and what is the proper role of government in establishing these conditions. These are not new questions. We have a history of programs which have influenced choices. Australia’s Quit campaign is known internationally for effectively reducing smoking; WorkSafe is a leader in changing attitudes in hard environments. More recently, the National Preventative Health Taskforce has drawn together a spectrum of policy tools to promote good choices around health. And, most obviously, businesses have been paying to shape patterns of consumption choices since advertising began.

Beyond advertising campaigns

For policymakers grappling with these problems, the advertising mindset is perhaps the simplest one to adopt. How do we get people to make better choices? Tell them to – on billboards! Fill the airwaves with good advice! Modern advertisers, of course, have extended their tools far beyond public signage and voiceovers. Marketers now have a better grasp of human habits and frailties than most policymakers and macroeconomists. Advertising, at best, is one (expensive) tool among many; at worst it is an excuse for governments to look proactive, neglecting the deeper determinants of choice while cluttering up our lives with nagging messages.\(^1\) While social marketing is one source of expertise for promoting good choices, this paper will describe a comprehensive policy approach, beyond government-as-advertiser.

Policymakers have largely ignored the pervasive, anchoring force of habit in shaping patterns of choice in society

A good place to start is our understanding of what shapes choices. Though many marketers and preventative health advocates intuitively grasp the interplay of individual and social factors, policymaking still often suffers from a narrow view of what motivates and shapes human choices. Recent work in neuroscience has begun to model “brain-to-society systems” to illuminate interactions between brain

\(^1\)Over the last five years advertising expenditure by Australian Federal Government Departments has doubled to $130 million per annum. See: http://www.finance.gov.au/advertising/docs/Full_year_report_2008-09.pdf
function and social influences on choice (Dubé et al., 2008). Though we are in early stages of modelling choice patterns, we have already confirmed the inadequacy of the neo-classical economic approach, based on the rational maximisation of individual utility. There are four related factors we tend to miss when we think about people as rational utility-maximisers, rather than as predictably irrational, sometimes rational, cultural and social animals:

1. We must examine the background factors which shape people’s opportunity to make good choices. This requires a focus on the distribution of opportunities and resources, and an awareness of the social conditions which produce differing capabilities. Some people may be comfortable making complex, rational choices, but others find it hard just to get through a day.

2. We need a fuller conception of what motivates human choices. We may choose to walk to the park because it is beautiful; we may pay tax because it is our civic duty (or dodge tax because our friends do); we may choose fast food because it is most available. Cost is important, of course, but good choices must be attractive and available, as well as affordable.

3. We need to recognise the influence of social norms. Social norms are the conventions, expectations and standards that form via communication and observed behaviour in a group. They define, informally, what is normal and “honourable” in a society, and they have a powerful effect on patterns of choice. Political leadership is central to shaping social norms. Norms also suggest new policy approaches which make use of influence in social networks.

4. We need to understand a crucial concept: habits. Perhaps because of the prevailing assumptions of perfect rationality and perfect self-control we have largely ignored the pervasive, anchoring force of unreflective habit in shaping patterns of behaviour and choice throughout society. This paper will examine the dynamics of habits as a new lens for public policy.

**Human behaviour beyond “preferences” and “incentives”**

“We often imagine the brain as a sort of high-powered, superbly engineered evolutionary computer. But it is actually a wonderfully baroque structure, made up of incompletely integrated units.”

- Henrietta Moore, Prospect Magazine, March 2010

The concepts of preference and incentive gloss over, rather than describe, what is important about our cognition. For example, many of our choices, particularly everyday choices around consumption, transport, work and recreation, are driven by semi-conscious habit rather than deliberation. Over time, patterns of choice become habits – part of behavioural repertoires, performed with ease as we reflect on other things. Some choices, of course, are highly deliberative; buying a house or adopting a child are not habitual choices. But habits shape much of our economic and social lives. Furthermore, human cognition involves wildly different motivations. We may choose to pick up litter out of pride, or drop it because we habitually
externalise our costs; we may stick with a job because of the intrinsic value of the work; avoid public transport because it is ugly²; buy green power because our social group sees it as socially normal; binge drink because our group sees it as honourable; or buy fast food because we’re mildly addicted.

It is a mistake to assume that all choices are more or less versions of a deliberative decision weighing up discrete costs and benefits – even given varying informational constraints. To collapse the heterogeneous, interrelated processes of the human brain which influence decision-making – from the appreciation of aesthetic quality, to the development of moral thought, the analysis of monetary gain and loss, conformity to social norms, conformity to habit, the need for creative expression and the instinct to reproduce – into the catchall notions of “preference” and “incentive” destroys informational content and produces crude, less useful analysis. Abstraction is important, to a degree. However, the way we currently model (and imagine) choices deceives us into abstracting too far. Policymakers should further investigate the contextual and psychological details of particular choices, for more tailored policies. As a starting point, we should recognise that choices vary from habitual to deliberative, and are motivated by disparate factors:

- **Buying a soft drink** (habitual, largely motivated by cost, social norms and thirst)
- **Walking to the park** (habitual, largely motivated by availability, aesthetic quality, and mental fatigue)
- **Using water sustainably** (mostly habitual, motivated by social norms and cost)
- **Eating at a restaurant** (habitual and deliberative, motivated by cost, social norms and availability)
- **Paying tax** (mostly deliberative, motivated by social norms, morality and fear of detection)
- **Buying a house** (deliberative, cost-driven with highly varying motivations)

This diversity matters for policy development. Everyday, habitual choices are better analysed as slowly growing patterns of habit rather than as a series of isolated, deliberative decisions. Furthermore, for deliberative choices, providing information is useful; whereas for habitual choices, more information can be distracting and cause mental fatigue (see Section II). The issue for policymakers is how to develop a working sense of the factors shaping different patterns of choice, based on this broader conception. Such an understanding will help us address the problems of individual choice noted at the beginning of this paper. The answer is not to unthinkingly prescribe choices, or to bombard people with more advertising and information, but to identify and establish conditions which promote patterns of good choices.

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What are good choices and who can legitimately promote them?

There is no mathematical or empirical definition of good choices, though human judgment must obviously draw on an evidence base. One relevant evidence base is the emerging empirical picture of human nature, which can be used as a reference point for judging good choices. The understanding of human nature emerging from neuroscience and its cognate disciplines is still rough and incomplete. However, it is clear that the elements of human nature extend beyond the common assumptions of self-interest and rationality. Based on aspects of brain function, human nature also includes a central role for:

- Empathy (see Decety & Jackson, 2006)
- Morality (Casebeer, 2003)
- Virtue (Takahashi et al, 2008)
- Predictable irrationality (Cacioppo & Nusbaum, 2003)
- Creativity (Dietrich, 2004)

Human nature is a reference point for judging what is healthy and good. Societies which ignore central elements of our nature are not conducive to human flourishing. Worse, societies which reject human nature or ignore its developmental limits, are inhumane. Roughly speaking, communist ideology ignores self-interest, and extreme market capitalism dismisses morality and empathy. (Postmodern relativists, luckily, have never gained power.) Instead, the emerging empirical picture of human nature tells us what to take seriously when judging social value. Empathy and morality are just as central as self-interest.

Judging good choices thus occurs at two levels. The first is biological: human nature gives us a broad understanding of the elements of human flourishing. The second is the politics of a population. Our system of government has already answered the question: Who decides what is good? It provides an ongoing means to relate the values and actions of the population and its policymakers. The discussion of what is good is political, in the broadest sense, involving different understandings of social value across a population and its institutions, and how these understandings are translated by leadership into policy.

The emerging empirical picture of human nature tells us what to take seriously when judging social value. Empathy and morality are just as central as self-interest.

Indeed, our whole society and politics have already developed around successive ideas of what is good. Our tacit or explicit beliefs of what is good shape every aspect of our country, from our laws, to the purposes of our businesses, to the way we design our suburbs. Today we say that choice is good, that freedom is good, that profit and efficiency are among the highest goods. Most people agree that these are worthwhile aims – the ingredients of liberty and prosperity. They are certainly valuable, but incomplete. For Australians, prosperity, fairness and community are three foundational values which shape our politics.
Promoting Good Choices

Good choices in Australia, then, are those which promote the individual and common good as understood in light of prosperity, fairness and community. Another way of putting this is that good choices tend to be win-win for both individual and society, based on these values. This paper will discuss specific good choices arising from this approach. We propose focusing on the conditions for more people to be healthy, to contribute to their local communities, to be fiscally responsible, and to use resources sustainably.

The central argument for the legitimacy of promoting good choices is that almost all policy areas already shape habits. Promoting good choices is not about developing further advertising campaigns around increasingly more choices, but understanding choices better, recognising the role that government already plays in shaping patterns of habit and deliberative decisions. Lacking this awareness, and assuming that all choices are deliberative, rational and satisfy people’s preferences, we ignore the barriers and enabling conditions for good choices and habits discussed in this paper.

Specific and general conditions for good choices

This paper identifies two sets of conditions which promote good choices. Firstly, those conditions specific to a particular choice, which involve making a choice “attractive, available, affordable and socially normal.” Secondly, general conditions which tend to promote good choices. These general conditions are the background distribution of opportunities and resources, and the conditions cultivating the “domain-general” habits, defined as habits which shape behaviour across multiple domains of activity. These include self-control, empathy and long-term thinking – general habits which might otherwise be known as “virtues”. Taken together, these underpin patterns of good choices.

This paper develops the approach to ‘choice architecture’ introduced in Per Capita’s report Heads, You Die: How to Mitigate Predictable Irrationality (Fuller, 2009). Choice architecture offers policy tools for designing the environments in which people make choices, to mitigate irrationality and promote good choices. The tools of choice architecture are:

1. Setting the default option in a set of choices
2. Offering "self-contracting" to support commitment
3. Presenting and organising information
4. Designing physical spaces to guide behaviour
5. Supporting the development of social norms

The paper will explore these tools, particularly the design of physical spaces and the development of social norms. It will also extend the concept of choice architecture by incorporating the broader conception of the factors shaping decision-making, outlined above. Section II discusses patterns of habits as a new lens for public policy, Section III describes the policy approach and principles for promoting good choices. Section IV details policy tools and case studies, and Section V concludes with a discussion of "virtues" as a new concept for social and economic policymaking.
Section II:
Patterns of habit as a new lens for public policy

“When we look at living creatures from an outward point of view, one of the first things that strike us is that they are bundles of habits.”

- William James, Principles of Psychology, 1890

“Habits are hard to break... the brain area largely responsible for willpower, the prefrontal cortex, is located just behind the forehead. While this bit of tissue has greatly expanded during human evolution, it probably hasn’t expanded enough.”


More choice is not necessarily better in every situation. The brain has evolved to ration its energy, not to expend it on navigating ever more choices. We put very little effort into most of our decisions, and tend to follow habits – habits of mind, patterns of behaviour and motivation. Habits are defined as learned behavioural and cognitive repertoires readily evoked by certain goals, or by certain social and physical environments (Aarts & Dijksterhuis, 2000). They involve a combination of conscious and unconscious processing in the brain. To approximate: as a habit is learned, it moves from relatively conscious processing in the cortex to less conscious, deeper structures. This process can take between 18 and 250 days to become largely automatic, depending on the type of habit (Lally et al, 2009). Habits depend on the brain’s “experience-dependent plasticity” but can become remarkably fixed in character (Graybiel, 2008).

Habits are generally a good thing, as habitual behaviour frees up conscious mental resources for long-term thinking

The great psychologist William James famously called habits “the flywheel of society”. Indeed, while bad habits tend to draw the most attention, habits, in fact, are generally a good thing. Habits are central to normal life, they are an evolved mechanism which guides us through almost all of our daily behaviours. Their key function is to reduce decision costs by reducing conscious information processing. Habits allow us to negotiate a supermarket without weighing up the mundane differences between hundreds of products. At work and at home they allow us to make the banalities of life as predictable as possible, to focus our always limited creativity and attention on the relationships and decisions that genuinely require them.

Habits have numerous positive externalities. They are associated with less stress, and habitual behaviour frees up conscious mental resources for long-term thinking (Wood et al, 2002). Habits also help self-control. Habits deplete self-regulatory resources less than information-rich decisions do, allowing people to conserve limited self-control for when it is needed. The ability to control our impulses, including aggression, requires that we are not continually distracted by new information and choices. Impulsive behaviour tends to arise in dynamic environments, when habits are disturbed (Wood et al, 2002).
The downsides of information and choice

This has a number of counterintuitive implications for public policy. Firstly, that information-rich environments can be damaging. The brain’s inhibitory attention system, which allows us to concentrate in the face of distractions, is easily depleted, resulting in symptoms of ‘directed attention fatigue’ (also known as mental fatigue) such as inattentiveness, aggression and impulsivity (Kaplan, 1995). In urban environments in particular, mental fatigue caused by advertising and noise predicts more aggression and less pro-social behaviour (Kuo & Sullivan, 2001). On the other hand, contact with natural environments, or other information-poor contexts, tends to reduce mental fatigue and aggression (Kuo & Sullivan, 2001). Distracting contexts disrupt habits, cue impulsivity, and undermine long-term thinking; there is thus a strong argument for curtailing advertising and noise in the public realm (for further discussion of this point see pages 19 – 21).

Secondly, habits highlight the value of settlement over flexibility and choice. Habits have value in themselves, lightening our cognitive load, but they take time to become established and resist revision (Graybiel, 2008). This fact may check our pursuit of the apparently unambiguous goods of population mobility and labour-market flexibility. Such disruptive conditions in fact uproot habits and so remove their value, as well as imposing the costs of reassessing choices and developing new habits. People of low socio-economic backgrounds, in particular, tend to be more reliant on habits, and have fewer resources to deal with change (Lindbladh & Lyttkens, 2002). They are thus most likely to benefit from valuing settlement over flexibility.

Indeed, choice itself has downsides. The more options that are available, the less satisfied we tend to be with the choice we make (Schwartz, 2004). Furthermore, more choices means we are more likely to experience regret. And high levels of choice also increase the sense of personal responsibility, or blame, for the outcome. These factors are all linked with negative mental health outcomes. Beyond a certain extent, usually minimal, increasing choice tends to make us anxious and even depressed (Schwartz, 2004). Settled ways, then, have value in themselves. Population mobility, labour market flexibility and consumer choice are at best ambiguous goods, as they undermine habit formation and its positive externalities.

Habitual choice versus “domain-general habits”

So far we have mostly considered patterns of specific choices as habits, noting that habitual behaviour tends to make long-term thinking and self-control easier by freeing up mental resources. However, long-term thinking and self-control are also habits themselves. Rather than habitual choices, these are “domain-general” habits, which shape behaviour and choices across multiple areas of activity. As well as the habits of long-term thinking and self-control, these include more complicated habits such as creativity and rational decision-making itself. Domain-general habits also depend on conditions which cultivate or undermine them in a population. The role of policy in supporting their development will be addressed in Section IV.
Cultivating bad habits: Obesity and junk food

A central problem involving free choice is obesity. Australia is one of the world’s most obese nations: over half of adults and a quarter of children and adolescents are overweight or obese (National Preventative Health Taskforce, 2009). The condition has now overtaken smoking as the leading cause of premature death and illness in Australia (The Age, 2010). Obesity is usually caused by a lack of activity and unhealthy eating, though genetics also plays a role (Wyatt et al, 2006). Only puritans would deny that junk food is cheap, accessible, and tastes really good. But its downsides, individual and social, suggest that consumption patterns are shaped by more than rational choice. To understand obesity, we need to examine a broader range of conditions shaping eating habits across the population.

For example, a recent study found a direct relationship between the proximity of fast food outlets to schools and the students’ likelihood of obesity at those schools (Davis & Carpenter, 2009). The locations of fast food outlets shape eating patterns – a nearby vendor makes bad habits easy. Accessibility alone can help cultivate demand. As fast food companies understand, they are in the business of cultivating habits (via advertising, the positioning of outlets) which underpin and expand markets for high fat, energy-dense foods. Davis and Carpenter (2009) suggest a possible policy response in this case: to require a minimum radius between schools and fast food outlets.

Most people have some choice between healthy food and junk food. But the increases in availability, affordability and promotion of junk food over the last three decades have driven massive increases in obesity (Anderson & Butcher, 2005; Cawley, 2006). The commercial successes of “obesogenic” products – energy-dense foods, cars, passive entertainment, and labour-saving devices – have had a massive social and economic cost, producing an obesogenic environment which promotes and entrenches overconsumption and underactivity (Moodie et al, 2006). Once these habits become established, supported by social norms, they create ongoing demand for obesogenic products, and the market locks in socially detrimental outcomes. There is a clear role for policymakers in designing markets which tend to cultivate habits in virtuous, rather than damaging directions.

The conditions supporting good habits

While all habits reduce our cognitive load, particular habits may entrench good or bad behaviour. Certain habits are particularly valuable, and should be considered personal and public assets. Healthy lifestyle habits, for example, are an asset requiring an initial conscious investment, but once established, reduce personal health risks over the long-term. Such private habits also have public value. The habit of bike-riding for local journeys, for example, contributes to individual health as well as social outcomes such as decreasing health expenditure. Similarly, the habit of volunteering has positive spillovers in communities, while also improving individual mental health outcomes, especially among older people (Lum & Lightfoot, 2005). Indeed, to maintain the mental and physical health of an ageing population we will have to focus more seriously on the means to support the formation of such habits.
Most areas of policy are already intertwined with habit formation, setting the conditions which shape the growth of habits. For example, our zoning and transport policies shape the travel and consumption habits of populations – habits which then develop a momentum of their own, driving future consumption decisions, and indirectly, future policy. Habits are always forming and consolidating in a population; the issue is whether policymakers recognise the effects of policies on this process. Not recognising these effects means we narrow our understanding of why people make the choices they do, and adopt a piecemeal and programmatic approach to promoting good choices, instead of a holistic one. Figure 1 illustrates the range of conditions shaping the development of habits, beyond only resource-based calculations.

**Bad habits: When a normally adaptive process is derailed**

As noted, habits are central to everyday functioning, reducing our cognitive load, allowing us to take banal choices for granted with mental resources free to focus on what is more important. Particular problems arise, though, when the development of habits is occasionally derailed, when the inputs are wrong and the habits become damaging – for example, problem gambling, binge drinking, inactive lifestyles, excessive indebtedness or anti-social behaviour. Such personal habits cannot be directly changed by policy, nor can they be changed quickly. However, policymakers can examine their formative inputs and the associated policy areas, and address the constraining and enabling conditions which shape habit development.

Habits are obviously only one *cause* of such complex policy issues, but the redirection of habits is often the primary *goal* of policy to promote good choices. For example, the habit of smoking has been reduced in Australia by a diverse range of policies: curtailing cigarette advertising, particularly in sport; increasing
taxes; introducing product warnings; restricting availability; running campaigns to change social norms; and instituting smoking restrictions. Over three decades, habits have been incrementally redirected and smoking has decreased among all age groups (National Preventative Health Taskforce, 2009).

Nevertheless, bad habits will always exist. Society is not perfectible and nor are people. Across all the domains of life – family, work, recreation, community, health, finance – we will always develop habits that work against our own interests. We will tend to lose track of our goals, buy impulsively, succumb to cognitive biases, become addicted against our will, lapse in keeping up our health or savings, grow weary of the complicated demands of sustainable living, and regularly forget empathy. As much as it is human to want personal and social improvement, it is human to be stuck with imperfection.

The policy approach to promoting good choices, therefore, must not be puritanical. It should accept imperfection and be modest in its goals for improvement, in both scale and pace. In contrast, the ideological mindset seeks absolute change according to its ideal. It believes, for example, that efficiency is the highest good and that the private sector is unfailingly more efficient, so unprivatised services are an imperfect blot on an otherwise perfect landscape. It is an impatient mindset, insensitive to local conditions and driven by a worldview that does not adjust itself to evidence. Promoting good choices, instead, must be guided by ideal values, but driven by a realistic incrementalism which understands patterns of habit as growing, biological phenomena – semi-rational and imperfect, but with possibilities for slow improvement.

Bad habits will always exist. We will always tend to buy impulsively, become addicted against our will, lapse in our savings, grow weary of the demands of sustainability, and regularly forget empathy

Section III:
‘Promoting good choices’ and its principles

Promoting good choices requires establishing the conditions which tend to lead to the development of better patterns of habit and choice. In discussing the general background conditions, this paper will not address the distribution of opportunities and resources; though it is a critical factor, it has been much discussed elsewhere. For the approach outlined here, two key questions for policymakers are:

1. How can policy measures increase the prevalence of specific good choices?
2. What conditions cultivate the domain-general habits underpinning patterns of good choice?

Making good choices and developing good domain-general habits are mutually reinforcing. This is because habits develop through practice, and as the practice of making certain choices becomes
widespread, the associated habits will become established in a population. Both types of habits develop simultaneously in making choices: habits specific to the choice, such as the habit of using less water, and domain-general habits, such as those of self-control. As habits form the choice becomes more automatic.

For example, experiments have shown the long-term capacity for self-control can be cultivated by choosing to resist temptations to consume, managing money, or adhering to an exercise program. Those who made such choices showed improved self-control. Overall, they became more successful at reducing smoking and moderating drinking, tended to eat less junk food and more healthy food, and reported better emotional control and less impulsive spending (see Baumeister et al, 2006 for a detailed review).

Policies which enable and support good choices thus form a virtuous circle with the policy goal of supporting good domain-general habits (Figure 2).

Figure 2: The self-reinforcing loop between making good choices and developing the domain-general habits which underpin patterns of good choice

Policy tools, from laws to social norms

Let us consider the spectrum of policies which influence choices. At one end is regulation directly banning choices or behaviours. Along the spectrum are a range of policy tools varying by the degree of freedom they allow, including traditional monetary incentives as well as the various tools of choice architecture. At the other end of the spectrum, there are bad habits and choices which policymakers must leave untouched, accepting that society is always imperfect (see Figure 3).
The policy tools which allow a high degree of freedom are not necessarily less effective. Social norms, for example, are often more effective than laws. They are more personal, persuasive, and spread naturally through a population. Equally, it is an illusion that strict mandates are always effective. Prohibition in the US was, in practice, ineffective and damaging. On the other hand, a high degree of freedom is not unambiguously good. Freedom is an important goal, but not the only consideration. For instance, maintaining the habits of civility and self-control in a population involves social norms, but in addition may require strict regulation of noise and advertising in the public realm, to decrease mental fatigue and enable reflective behaviour (Kuo & Sullivan, 2001). Each complex public policy issue will require a range of tools. Laws, other regulations and choice architecture must be matched to the tasks they are to perform.

The acceptance of bad habits has two elements. First, accepting that successful policy to promote good choices will only ever work imperfectly. From mandates to social norms, policies will at best statistically increase the prevalence of good choices. Second, accepting that many habits must be left alone by government. For example, there is a vast range of diets, relatively healthy or unhealthy, which do not lead to weight problems. These are not at issue. Furthermore, people should be allowed to risk their own bodies more than we currently allow, without lawyers and health and safety specialists enforcing unduly restrictive laws. Gambling, in moderation, is harmless entertainment. Religious habits are almost never the domain of government, nor are the habits which go on in families, except in the case of domestic violence. And though products are regulated, most consumption habits develop from free choices.
Principles for promoting good choices

The key tension throughout promoting good choices is the interplay of the individual and common good. The two are more closely connected than liberal philosophy supposes. It is not merely a matter of allowing people to do what they want as long as they don’t harm others. In fact, this approach generally fails us for the problems discussed in this paper. Rather, what is at issue is the quality of society. Our choices are shaped by the laws, public environments, flows of information and social norms that prevail in society. Personal independence and freedom are certainly important for making good choices, but they are not the only goals. It is very difficult to maintain habitual patterns of good choices when markets, public spaces and social norms distract from this. The quality of society shapes the quality of individual choices.

Given this approach, there are two sets of principles which should be adopted for promoting good choices, developed from those in Heads, You Die: How to Mitigate Predictable Irrationality (Fuller, 2009). First, the following principles should guide policymakers towards areas on which to focus:

• When consistent patterns of private choice or habits generate public problems
• When extremes of normal behaviour become damaging (i.e. binge drinking, addictive gambling, overeating)
• When a particular choice or behaviour, such as volunteering or moderate exercise, is win-win for both individual and society
• When distracting or intrusive environments disrupt normal habits or undermine rational deliberation
• When individuals lack the resources or capabilities (such as self-control) to achieve their goals or to stick to their decisions

Second, policymakers should be restrained in the following ways (including restraining current efforts at promoting good choices):

1. The approach should not be obstructive. Do not fill the world with more diverting information and advertising.
2. Policymakers should be reluctant to launch additional new schemes. Rather they should examine how existing, often disparate, areas of policy contribute to shaping patterns of choice and habit.
3. The approach should not be puritanical – it should not aim for perfection and it should allow bad habits. Society and its economy are not perfectible.
4. Hold freedom of choice as important, but do not sacrifice all good policy sense to maximise freedom, which is one good among many. The others concern the quality of society – the enabling conditions for good choices, particularly the quality of public spaces and norms.

Other areas which involve tradeoffs with individual freedom include: the benefits of settlement and community continuity; environmental protection and sustainability; the conditions required in education and workplaces to shape good domain-general habits; and the social need for individual fiscal responsibility.
Section IV: Policy tools and case studies

This section will draw on case studies to further describe the specific and general aspects to promoting good choices outlined above.

Making good choice attractive, available, affordable and socially normal

Three choices and the specific conditions supporting their uptake are addressed below. Particulars vary between choices, but in general, useful questions to ask of any choice are: is it attractive, is it available, is it affordable, and is it socially normal?

1. Building a culture of moderate exercise

There is increasing recognition that humans have evolved to be active; inactivity contributes to obesity, diabetes, depression and anxiety (Sparling et al, 2000). Modern environments have tended to lead to less exercise, due mostly to reduced occupational activity, more car use, less walking, and more passive entertainment (Moodie et al, 2006). The Australian healthcare system could save $1.5 billion annually if people were active for 30 minutes a day (Medibank Private, 2007).

Cost (in money or time) is not the only factor in designing environments to promote exercise. Attractiveness of the environments is also critical. Aesthetic judgement has a brain basis; though it varies culturally, it operates within parameters as revealed by experimental aesthetics (see Jacobsen, 2009 for a review). The human need for beauty should guide the design of all public environments.

These measures to promote exercise are complemented by the task of cultivating domain-general habits. For example, citizens with high self-control were 48% more likely to achieve healthy levels of walking than those with a low self-control (Giles-Corti & Donovan, 2003).

Case studies

- The most effective means of increasing stair use in a building (other than redesigning the building) is to make the stairs more attractive: installing artwork, repainting and carpeting. “Passive interventions can often be more successful in achieving population-wide changes than [signs and banners] that require the target audience to make active decisions.” (Kerr et al, 2004).

- Residents of Perth who had trees, or no major traffic, on their street were 50% more likely to achieve healthy levels of walking than those living on streets with major traffic, or no trees (Giles-Corti & Donovan, 2003). Similarly, those with access to ‘attractive’ parks (measured by tree shade, walking paths, water, and bird life) were 50% more likely to achieve high levels of walking than those with access to ‘unattractive’ parks (Giles-Corti et al, 2005).

- Residents of Alberta, Canada are now eligible for a $500 tax credit for exercising (joining sports requiring ‘sustained, prolonged activity’) and in Alabama, US, state employees pay $25 a month extra tax for Body Mass Indexes over 35.
2. Building a culture of taxpaying

The first step to understanding tax evasion and tax minimisation is recognising that most people evade tax thinking “it’s a pity we live in a kind of society in which you have to evade tax not to be left behind” (Braithwaite & Braithwaite, 2006). At the same time, though, in three surveys between 2000 and 2005, 90-95% of Australians consistently said they believed that taxpaying is a social responsibility to be shared by all (Braithwaite & Braithwaite, 2006).

This moral ambivalence is an important finding: an activity can spread even while its participants morally object to its existence. Ambivalence derives from having multiple sides to our ‘selves’. This complexity is vital to normal social functioning: our different selves dominate in different contexts. Of these, our ethical identity is that part of ourselves which “captures the capacities and character attributes of which we are proud” (Harris, 2007).

Building a culture of taxpaying requires establishing ethical norms, by supporting the ethical identity and behaviour. Measures, like those opposite, should be used to remind people of their best selves and normalise the related moral discussion (see Per Capita’s Philosophy of Tax program). Such measures will be complemented by cultivating the domain-general habit of long-term thinking.

Case studies

- A study of 5000 taxpayers found that long-term compliance is best ensured when conversations occurred between the tax regulator and the taxpayer about “what is right, what is fair, and what is reasonable behaviour for taxpayers to adopt” (Braithwaite et al, 2007). In conjunction with other “responsive regulation” measures, such interactions bring forward the moral sense and establish ethical norms.

- In an experiment, Australian taxpayers were informed that “normal social practice” was honesty in tax returns. Receiving this communication reduced the average deduction claim from $286 to $151 (Wenzel, 2004). Projected onto the Australian population, this could reduce claims by about $1.4 billion. Assuming an average tax rate of 30%, this would mean an $400 million gain in revenue.

- Two studies showed legal threats to be often ineffective in gaining compliance, whereas if regulators explain their actions and are seen to be acting fairly, most taxpayers defer to their decisions voluntarily. Letters which stated “we believe in your honesty” significantly increased rates of compliance (1.25 times) over the standard letter (Murphy, 2004; Wenzel, 2006).

3. Building a culture of healthy eating

In a recent investigation health expert David Kessler demonstrates that junk food stimulates addiction in the brain (Kessler, 2009). Kessler shows how food scientists design combinations of fat, sugar and salt to stimulate the brain to buy more, even when we aren’t hungry. This, of course, might otherwise be known as “enjoyment”! However, consumption of energy-dense foods can also slide into conditioned

Case studies

- Healthy food costs 24%–56% more in remote QLD and NT compared with the capitals (NPHT, 2009). In addition, low-income Australians report low consumption of fruit and vegetables due to difficulties in accessing, purchasing and storing these foods. Taxes and subsidies to support healthier food, including increasing
overeating, which people have difficulty stopping even if they want to.

Obesity appears to spread along social networks: your chance of becoming obese is about 50% more if a friend of yours is obese – dependent on social rather than geographic distance (Christakis & Fowler, 2007). Our eating habits are shaped by the people we know. Social norms around diet and weight can change dramatically given small changes by some in a group, and given this, role models and the social messages that reach a group are critical in shaping habits (Graham et al, 2007).

The ‘obesogenic’ environment promoting overconsumption has numerous complex causes (Moodie et al, 2006). In addition to the suggestions in the right-hand column, building a different culture will likely require regulating advertising (particularly to children), regulating the weight loss industry, supporting community healthcare workers, regulating some food contents, and attention to and investment in early childhood health.

the freight subsidy in remote areas, can reorient demand in food markets, reducing obesity (NPHT, 2009).

- Gamblers in Australia can sign themselves onto a ‘blacklist’ which bans them from entering casinos for a specified time. Such “voluntary self-exclusion” initiatives, combined with supporting programs, help people realise their choice to reduce gambling. Though monitoring is difficult, even minimal monitoring has an effect. Applied in fast-food outlets, such programs could support people who aim to change their eating habits.

- Between 2003-2005, of 123 bills enacted in American states to combat obesity, almost half concerned food quality and distribution (Boehmer et al, 2008). Strategies include farmers market grants (which also assist in spreading norms around healthy food), establishing local farm-to-community distribution systems, building community produce gardens, and building fully functional school kitchens.

Cultivating the domain-general habits underpinning patterns of good choices

Domain-general habits are cultivated across multiple areas of activity: in the education system, in workplaces, public environments, in family and community, in civic engagement, and via social norms. This section will focus on two policy tools: designing and regulating public space, and developing social norms.

Designing and regulating public space

Public spaces reflect and perpetuate cultures, and the activities and behaviours which a population holds in esteem. In understanding the civic role of public space, policymakers should look to ‘new urbanist’
objectives: to curtail excess selfishness and individualism, while leaving room for entrepreneurial drive, historical character, local innovation and ownership (see www.acnu.org). We define “public space” as suburban and city planning, parks, streets, waterfronts, malls and civic squares, the interiors of public transport, and public buildings – the design, regulation, and coherence of all these.

Two key aspects of civic design are central to cultivating the domain-general habits of self-control, empathy and long-term thinking: the control of noise and distraction, and the control of information and advertising.

Noise and distraction in public space plays damagingly on some of our innate brain mechanisms. In particular, one universal feature of brain function is an “involuntary orienting response” which causes us to involuntarily direct our attention towards distracting stimuli such as flashing lights or interruptive noises (Friedman et al, 2009). From experience, we know what it is like to be distracted by a screen during conversation, and that it is often difficult to think reflectively amid noise. Environments which tend to activate the involuntary orienting response in a population will alter where attention is directed and affect patterns of habit formation. Having our conscious attention distracted undermines the opportunities for reflective decision-making, and short-term goals come to dominate long-term thinking (Wood et al, 2002).

A critical policy measure is to restrict traffic. We recommend removing traffic completely from select urban spaces, and imposing a congestion charge throughout urban centres. The directed attention fatigue caused by constant background noise impairs our ability to think reflectively and strategically in social interactions, leading to an increase in aggression and a decline in pro-social (civic) behaviour (Kuo & Sullivan, 2001). Thus noisy environments undermine the formation of the habits of self-control. Moderate background noise also reduces people’s motivation and ability to make complex choices (Smith and Broadbent, 1992). Traffic has social costs in suburban areas, too. In one study, residents removed from traffic had three times as many friends, walked more, and tended to settle longer (CABE, 2004). The habits of empathy are cultivated in such settled environments with frequent social interaction (Trout, 2009).

A second key area of civic design is the control of advertising. Two neural systems underpin long-term and short-term thinking, the ‘executive’ and the ‘impulsive’ system (McClure et al, 2004). Most advertising aims to cue the ‘impulsive’ system, entrenching the habits of short-term thinking (Kacen & Lee, 2002). Advertising (increasingly employing neuroscientists) sets out explicitly to undermine self-control. For example, to quote some recent research findings:

- “Neuroscientific studies demonstrate that erotic stimuli activate the reward circuitry... We show that exposure to ‘sexy’ cues leads to more impatience in intertemporal choice.” *Bikinis Instigate Generalized Impatience in Intertemporal Choice* (Van den Bergh, B. et al, 2008, Journal of Consumer Research, Vol. 35)

- “Marketers and academics have long been interested in understanding what drives impulsive behaviour and have focused on what causes a person to indulge... The findings
suggest that contextual cues have powerful influences on impulsive behaviour over time when acting in conjunction with chronic hedonic goals.”


- “Earlier work in consumer research has documented the effect of appetitive stimuli (e.g., chocolate cookies) on a related consumption domain ... we find that consumers exposed to appetitive stimuli are more present oriented, more likely to choose smaller-sooner rewards or vice options, and more likely to make unplanned purchase decisions.”


The habits of impulsivity not only undermine long-term thinking and self-control, but are another contributor to antisocial behaviour and aggression (Luengo et al, 1994). To cultivate the habits of long-term thinking, environments which cultivate impulsivity should thus be curtailed. We recommend that advertising in urban centres be restricted to a minority of defined commercial areas, and banned in all public spaces elsewhere.

The balance of reflective versus high-stimulus public spaces should be reversed. Rather than reflective spaces being a rare exception to information-dense, high-stimulus, distracting environments, mainstream public spaces should be built around reflection. Policy should aim to minimise noise, distraction and the impulsive disruption of everyday habits, thus freeing up mental resources for reflective decision-making and long-term thinking. Contact with information-poor contexts of high aesthetic quality, both civic and natural, will also reduce mental fatigue and aggression (Kuo & Sullivan, 2001). Such environments are one critical basis for supporting civility in a population, underpinned by the domain-general habit of self-control.

**To build environments for reflective choices, which cultivate self-control, we recommend restricting urban traffic, and banning advertising in all public spaces, other than in a minority of defined commercial areas.**

**Supporting social norms around good domain-general habits**

Public space can cultivate such habits, but requires the relevant norms. Social norms are the conventions and expectations which informally regulate behaviour and interactions in a population. We have an innate tendency to follow norms and disapprove of those who don’t (De Quervain et al, 2004); people naturally like to conform to the norms of groups they consider as worth believing in. The development of shared norms depends particularly on “norm entrepreneurs” who adopt new language and persuasive arguments (Etzioni, 2000; Sunstein, 1996). Political leadership is therefore central to the process. Politicians and policymakers should promote the norms around cultivating the virtues of self-control, empathy, and long-term thinking.
Social norms can shift dramatically given even small changes by some members of a population, particularly when those people are highly connected across networks, such as politicians, opinion leaders and other policymakers. Models show that tipping points in norms occur via the accumulation of multiple small changes in behaviour, and resultant discussions (Young & Burke, in press). How policymakers – in government, business and the media – behave and communicate the norms around these habits of character is therefore critical in building a more empathetic and self-regulating, long-term thinking culture.

**Conclusion:**

**Virtue and public policy**

People are not fully independent, rational, highly deliberative calculators. We are social and cultural animals. It difficult for us to make good choices in contexts which push us in the opposite direction. Liberal philosophy, the basis of most modern politics, focuses on the individual and assumes she is independent; it tends to ignore quality-of-society issues such as the nature of social norms (or culture), the influence of public spaces and the conditions shaping domain-general habits. Our current politics also ignores a critical fact: that habits become fixed in character. In fact, “good domain-general habits” can be thought of as “virtues”. A technical definition of virtues is learnt clusters of domain-general habit, motivation and belief which tend to be admired across a population and which give rise to patterns of behaviour and choice.

Habits and virtues are crucial missing elements in our understanding of choices, and the social and brain-based dynamics which shape them. If our society cultivates impulsivity, for example, in the regulation of our public spaces, in our institutions and social norms, we will tend to produce patterns of choice motivated by impulsivity and short-term thinking. More importantly we will produce impulsive people. Habits matter, and character matters. They reveal connections between disparate areas of policy: that the quality of work can cultivate people’s self-control, and so affect outcomes in obesity; that advertising can cultivate the habits of impulsivity, and so exacerbate addictive gambling and domestic violence. The character of a nation is displayed in its activities and choices, and the characters, or established habits, of individual people are shaped by the quality of society.

This paper has begun to explore the policy implications of this brain-to-society thinking. There is more work to be done, particularly drawing on new research in the science of virtues. But neuroscience is already recasting many of our assumptions. In expanding our understanding of what shapes choices and habits, we move beyond the temptation to simply instruct, or urge, people what to do. Direct regulation of choices has its place, particularly in protecting a high quality public realm, but promoting good choices requires the tools of choice architecture, a long-term mindset, an acceptance of imperfection, and most importantly, an understanding that the habits cultivated in one domain of society shape choices in the others.
Bibliography


