From Changing Behaviours to Changing Practices: the role of urban planning

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Overview

1. Background and Context
2. Sustainable consumption and governance
3. The limits to behavioural change
4. From changing behaviour to changing practices
5. Planning and practices, Melbourne
6. The ‘practice’ of buying and selling houses on the fringe
7. Conclusions
1. Background and Context

Two areas of research

**Researching behaviour change**
- Carbon Neutral Communities – Making the Transition, 3yr Australian Research Council funded project (2007-2010)
- New research agenda – Beyond Behaviour Change, RMIT University, Melbourne.
- Continuing applied research - http://www.rmit.edu.au/cfd/beyondbehaviour

**Urban policy and planning research**
- Analysis of strategic planning policies in Melbourne and comparative
- Analysis of planning practice in Victoria
- Urban sustainability and integrated transport and land-use planning
1. Background and Context, Melbourne
Bigger city, bigger houses, more cars…. 

Energy Use: Trends

• Average annual electricity use growing by 7% since 2001 (1)
• Electricity use for heating increased from 28%–34%
• 4 + bedrooms, the new normal in outer growth areas
• Number of appliances increasing (eg. Increase in use of air-conditioners 40-57% 1996-2001)
• Australian trend (1911 to 2006)
  – house sizes are getting larger while household sizes are getting smaller (2)

Car use: Trends

• “Travel to Work: since 1970s, Melbourne worst performing capital city (3)
  – Biggest car increases, biggest declines in public transport, car pooling and walking
• New suburbs with little or no public transport (4)
• Combined rising auto fuel prices & home mortgages disproportionate in Australia’s urban fringe (5)

1. Victorian Utility Household Consumption Survey (2008), Department of Human Services
2. Goodman et al (2010) Planning and the Characteristics of housing supply in Melbourne, prepared for the Australian Housing and Urban Research Institute, RMIT Research Centre, Final Report No. 157
1. Background and Context, Melbourne

- **Asked people what they want given real-world constraints (700 residents, focus groups)**
  - Once trade-offs made, large housing shortages of semi-detached homes and apartments in middle and outer areas of Melbourne and Sydney

- **Even with large assumptions to housing price housing preferences remained very robust**
  - Given planning not working with clean urban fabric slate, identified housing shortages and preferences remained
  - Essentially: regardless age/socio-economic level, people are different, and housing preferences reflect this fact

<table>
<thead>
<tr>
<th></th>
<th>Detached</th>
<th>Semi-detached</th>
<th>Up to 3 Storeys</th>
<th>4 storeys &amp; above</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preferred Stock</strong></td>
<td>48%</td>
<td>26%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>(based on trade-off survey)</td>
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<tr>
<td><strong>Actual Stock</strong></td>
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<tr>
<td>(2006)</td>
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<tr>
<td><strong>New Supply</strong></td>
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<tr>
<td>(2001-2010 construction)</td>
<td></td>
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</tbody>
</table>

1. Background and Context, Melbourne

The absence of good planning in Melbourne

- Metropolitan strategies failing to implement urban containment and consolidation goals
- State government continues to expand the growth boundary
- Developer/builder led precinct design process
- Dominance of detached housing delivery model in outer suburbs
- Building regulations improving thermal performance of houses
- Planning regulations weak in governing house size and style
- Weak and discretionary local government controls
- Investment in road infrastructure outweighs that of public transport
- Outer areas of Melbourne no adequate PT

Map: Melbourne @ 5 Million, adopted from Goodman et al 2010
## 2. Sustainable Consumption & Governance

### Proactive & transformative governance
- Building capacity of cities & people to adapt & mitigate

### Social change
- Political
- Institutional
- Technical
- Infrastructural
- Norms

### Role of planning in shaping urban systems
- Infrastructure
- Transport
- Housing
- Land-use

Emerging discourse responding to “the unsustainability of existing patterns of consumption and production” and the idea that “this unsustainability had to be reversed” (Jackson, 2005, p.4).
2. Sustainable Consumption & Governance

**Behaviours**
- Household context – How energy, water, waste is used
- Travel choices

**Users & consumers**
- Education
- Persuasion
- Targeting consumer choices
- Travel demand management

**Systems**
- Infrastructure and urban form
- Technological innovation
- Regulations

**Infrastructure planning**
- Energy, water, transport etc
- Technological and efficiency improvements of buildings, appliances, etc
## 2. Sustainable Consumption & Governance

### Table 1: Two paradigms for the governance of environmental change

<table>
<thead>
<tr>
<th>Individualised Paradigm</th>
<th>Systemic Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>(social/psychology/economics)</td>
<td>(sociology/science studies)</td>
</tr>
<tr>
<td>Individuals and their attitudes are key units of analysis and policy</td>
<td>Producers/states and their strategies are key units of analysis and policy</td>
</tr>
<tr>
<td>Behavioural change of individuals is decisive for environmental change</td>
<td>Technical innovation within the production sphere is decisive for change</td>
</tr>
<tr>
<td>Individual choices are key intervention targets (micro level)</td>
<td>Socio-technical systems are key intervention targets (macro-level)</td>
</tr>
<tr>
<td>End-users/consumers determine fate of green products and ideas</td>
<td>Technologies and markets determine the fate of green products and ideas</td>
</tr>
<tr>
<td>Key policy instruments and approaches: social (soft) instruments (persuasive and information provision)</td>
<td>Key policy instruments and approaches: the use of direct regulation targeting providers (laws, market based instruments)</td>
</tr>
</tbody>
</table>

3. The Limits to Behaviour Change
Narrow psychological/economic framing

- Dominated by the ‘rational choice model’

- Common policy responses preoccupied with use of information and pricing signals

- Technological solutions are preferred and individuals are autonomous

- Often ignores multiple factors that are involved in shaping, sustaining how and why we live the way we do (includes emotional responses, role of habits, routines, norms and social embeddedness of decision making and infrastructure systems)
3. The Limits to Behaviour Change
Common assumptions in programs

**Assumption 1:** The right information will lead to appropriate behaviour
• Information is useful but not enough to motivate and sustain changes in social practices

**Assumption 2:** People respond rationally to the facts
• People do not respond rationally but often emotionally; habits and routine can be ‘locked in’ or constrained by social norms, infrastructures and regulations.

**Assumption 3:** Primacy of individual over collective social change
• Ignores social and structural context shaping and sustaining practices
3. The Limits to Behaviour Change

In targeting the low hanging fruit what are we missing and ignoring?

**Assumption:**
Energy and water will be saved

But what about the rebound effect; routines; habits; how systems of provision shape use; the role of social and cultural norms, standards, aspirations, expectations; issues around comfort, cleanliness and convenience etc etc…..

**Assumption:**
Individuals will change given the right information

Audit | Retrofit | Educate | Inform

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4. From changing behaviour to changing practices
Implications for research and governance

“First if the real goal is to reduce *consumption*, increasing *efficiency* may not be the best way forward. Second, if we agree that people consume goods, services and resources not for their own sake but as part of the routine reproduction of what they take to be normal ways of life, then it is these ways and practices on which we should focus” (Shove 2006)
4. From changing behaviour to changing practices
4. From changing behaviour to changing practices
Actor-structure relationships & environmental innovations

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Source: Shove 2006 adapted from Chappells et al 2000, p.23
4. From changing behaviour to changing practices*

Integrating the multiple factors that shape how we live

Rules and regulations

- Washing
- Laundering
- Cleaning
- Heating and Cooling
- Getting around

Common understandings/norms

- Food
- Shopping
- Cooking
- Gardening

Material infrastructure (urban, housing, technology)

Practical knowledge/know-how

5. Planning and practice change, Melbourne

Systemic
Urban planning
Transport planning
Housing/urban design
Techno-efficiency innovations
Financing mechanisms

The way we live, continuing trends……
Bigger cities

*Bigger houses (ie. Land use/energy use)*
More roads and cars
More appliances

Behavioural
• Increasing awareness
• Increasing concern
• Limited actions
• Increasing expectations
5. Planning and practice change, Melbourne
Selling houses, selling lifestyles……

The developers……

“We are simply providing what the market wants…..” (1)

“Today's consumers demanded standard features that their parents would have regarded as outrageous luxuries…..

"En suite bathrooms ... theatre rooms, big living areas integrated with the back yard, study, double garage, butler's pantry, the list goes on, “ (Metricon Homes spokesperson) (2)

The planners……

“Although developers might think they are delivering what markets want, consumers are not able to choose options they are not offered or don't know about”(1)

“I think its more driven by the marketing and the consumer preferences that come of that marketing or are driven by that marketing”(1)

We have little or no influence over the form and mix of housing in outer areas, as it is being determined by developers (1)

The commentators……

• “In terms of cost, smaller houses come off looking worse.”(3)

• “Buyers don't often factor in long term costs of maintaining larger houses or costs of heating and cooling “ (3)

• “People who want to build energy-guzzling McMansion-style homes should pay more taxes…...and taxes should also be used to make owning multiple plasma TVs prohibitive”

• “Rapidly increasing suburban house sizes, more reliance on cars and a rise in demand for consumer goods had wiped out many of the benefits of building energy-efficient homes” (2)


6. The *practice* of buying and selling houses on Melbourne’s fringe – Multiple interacting elements

**Material infrastructure**

- Bigger houses with more appliances (e.g. standard features - air-conditioners) outweighing 5 Star efficiency improvements *(building design and reg’s)*
- New suburbs with limited or no public transport *(planning and funding priorities)*
- Dominance of detached housing over other higher density options *(housing supply, planning reg’s, financing)*

**Practical Knowledge**

- Resale value of bigger house better *(financing mechanisms)*
- Bigger houses more cost effective than alternatives *(Housing supply system)*
- Detached houses dominant offering *(housing supply system, marketing)*

**Common Understandings**

- Home-ownership important - ‘marketing homes as lifestyle’ *(aspirations and expectations)*
- Trade offs for affordable house/land package *(aspirations and affordability)*

**Rules and regulations**

- Weak planning regulations and policies facilitates urban sprawl *(planning and reg’s)*
- Incentives for developers/builders and buyers driving detached bigger houses *(policy and regs)*
7. Conclusion: the role of planning
Market-led planning and market-led lives…..

• Neither current systemic or individualised approaches to governing are meeting current challenges
• State abdicating responsibility for governing for sustainability
• State planning is being led by the market not leading it
• Approaches to changing behaviour limited and inadequate
• Building unsustainable cities helps to create unsustainable ways of living
• Changing practices requires that the state and other actors take responsibility for shaping how and why we live the way we do
7. Conclusions: Governing Sustainable Practices
or Making it easier to live sustainably

State and other actors take responsibility for their role in shaping our daily lives.

Better understand how social and technical factors interact to create (un)sustainable practices.

Design integrated strategies to shift practices in more sustainable directions.

Develop and implement strong policies and regulatory frameworks to deliver more sustainable housing and urban form.

Prioritise investment in adequate public transport infrastructure.

Design cities to prioritise walking, cycling and public transport.

Recognise that good planning is part of the solution.
THANKYOU

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