

# Changing travel behaviour?

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## Overview

- ❖ Car dependency in Ireland
- ❖ Research question
- ❖ Outline of study
- ❖ Theoretical framework
- ❖ Application to case study

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## Car dependency in Ireland

- 21 % of GHG emission from transport (EPA 2008)  
- compared to industry/ commercial 17%
- Car travel to work 63% (Irish Census 2006)
- Since 1996 more than 10% increase, while decrease of bicycle and PT usage

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## Research question

How to change private car use to more sustainable travel behaviour in Ireland?

Sustainable travel behaviour (STB):



- walking
- cycling
- using PT
- ride-sharing

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## Outline of study

Focus:  
Effectiveness of interventions (Mobility Management Plans) for achieving behavioural change towards STB

Design and "test":

- Package of measures (MMP) for large employer
- Package of measures (MMP) for residential area

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## Conceptualising change

Central question:  
How can behavioural change be conceptualised?

Different disciplines:

- Psychology: Socio-psychological models
- Sociology: Practice theory

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## Socio-psychological models

- Theory of Planned Behaviour (Ajzen 1985)  
Based on rational choice theory
- Norm Activation Theory (Schwartz 1977)  
Personal norm determining behaviour
- Theory of Interpersonal Behaviour (Triandis 1977)  
Inclusion of habit, affect and contextual factors

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## Socio-psychological models

Strengths:

- Straightforward models
- Propose mechanism of behavioural change
- Fairly easily applicable to empirical cases – operationalisation (except Triandis' model)
- Ideal for quantitative methods

**Value-Action Gap:** models cannot predict/explain fully pro-environmental/travel behaviour

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## Socio-psychological models

Weaknesses:

- Overly simplistic models
- Linear relationship between attitude and behaviour
- Rational choice approach not suitable for describing complex human behaviour
- Assumption of conscious choice
- A-temporal models
- Omission of contextual factors influencing behaviour

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## Practice theory

- Many theories of practice – initially the stream we will be introducing was based on Giddens' structuration theory (Giddens 1984, Bourdieu 1977)
- Recent version was shaped by the philosopher Schatzki (1996, 2001) and Reckwitz (2002)
- Warde (2005) and Shove/Pantzar (2005) introduced it to consumption studies

## Practice theory

Unit of analysis: practices – instead of individuals.

Individuals are carriers of practices. By performing practices, they reproduce them.

Practices: Everyday activities and routinised behaviour that people perform.

Practices are embedded in environment.

## Practice theory

Drawing on Warde (2005) & Shove/Pantzar (2005)

3 components of practices:

- Know how:** knowledge and skills of how to carry out activities
- Meaning:** cognitive dimension (making sense of activities) and affective dimension (emotions and perceptions attached to practices)
- Material component** – objects (incl. technology) and persons involved in carrying out practices

## Practice theory

Narrative of reproduction & emergence of practices:  
(Pred 1981, Shove/Pantzar 2007, Ropke 2009)

- Practices recruit their practitioners and compete for practitioners' attention
- Individuals follow path in time and space
- Individuals and components of practices need to be brought together
- Uncoupling and coupling of paths which is organised by so called projects

## Practice theory

Strengths:

- Shifting focus from individual to practices means avoiding overly simplistic, yet widely used models of human behaviour
- Habit or conscious choice? – not a key issue
- Inclusion of material component
- Inclusion of contextual factors like cultural, infrastructural, institutional & technological factors

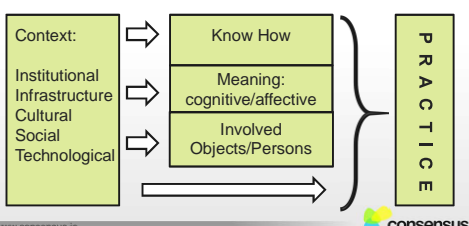
## Practice theory

Weaknesses:

- Primarily theoretical and rather abstract
- Application to empirical cases difficult
- Not systematically applied yet
- Conceptualisation of emergence of new practices and their reproduction still weak
- Conceptualisation of relationship between contextual environment and practice still weak

## Practice approach

Our practice approach:



## Practice approach – Case study

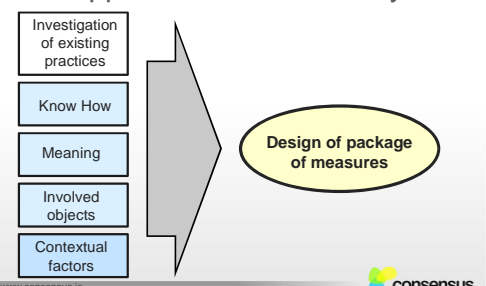
Research question:

- How to change private car use to more sustainable travel behaviour in Ireland?

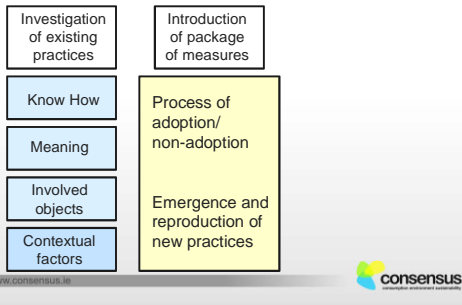
Key questions of case study:

- Can we observe a modal shift after introduction of MMPs?
- Are soft measures at household and employers' level suitable for initiating social change?

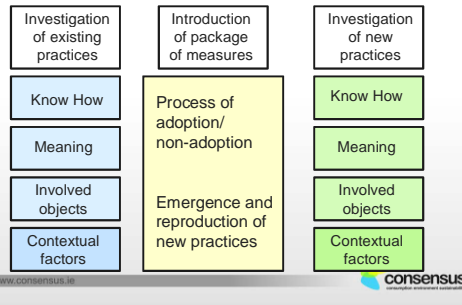
## Application to case study



## Application to case study



## Application to case study



## “Operationalisation”

Practices	Operationalisation
Know How	<ul style="list-style-type: none"> <li>• Technical know how : skills &amp; know how to do things (incl. knowledge of the area)</li> <li>• Social know how : knowledge of rules and conventions</li> </ul>
Meaning	<ul style="list-style-type: none"> <li>• Cognitive: e.g. What are purposes and particularities of specific practices?</li> <li>• Affective: e.g. What is car use associated with?</li> </ul>
Material component	<ul style="list-style-type: none"> <li>• General infrastructure: e.g. cycling lanes, foot paths</li> <li>• Availability of relevant objects: bicycles, ICT facilities etc.</li> <li>• Persons relevant to carrying out practice</li> </ul>
Context	<ul style="list-style-type: none"> <li>• National policy</li> <li>• Local policy</li> <li>• Organisational culture</li> </ul>

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## Data collection

- Policy Review (local and national policy, key players)
  - Comparative baseline data (behaviour, motives and barriers)
  - Site analysis (Infrastructure, organisational culture)
  - Travel surveys (pre and post on practices, know how & material)
  - Focus groups (motives & barriers, meaning)
  - In-depth Interviews (meaning, adoption/non-adoption, reasons)
  - Accompanying some participants throughout process
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## Case study – Answers

- ❖ Reasons, motives and barriers to STB in Irish context
  - ❖ Adoption/Non-adoption & acceptability of measures
  - ❖ Achieved (short-term) change
  - ❖ Relevance of intervention at household & employers' level for emergence of new practices – social change
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Thank you very much for your attention!

I am looking forward to hearing your questions and comments!

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