## **Tracing networks and practices:** electric vehicles in discourse and use



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for the humanities and social sciences

# Importance of electric vehicles (EVs)

Relationship between:

Discourses (Saying) + Practices (Doing)









### Ambiguous objects

Slater, D. (2014) in Journal of Consumer Behaviour, 13(2)



Objects become ambiguous when "there are two (or more) distinct, legitimate and practical answers to the question, 'what is this thing in front of me?'" (2014: 100).

Both a danger and resource in social life





### Ambiguous objects

Slater, D. (2014) in Journal of Consumer Behaviour, 13(2)



Uncertain meanings (discourses) Uncertain connections to other objects (networks) Uncertain actions (practices/uses)







### Electric vehicles in UK policy planning

#### Uncertain meanings, uncertain networks

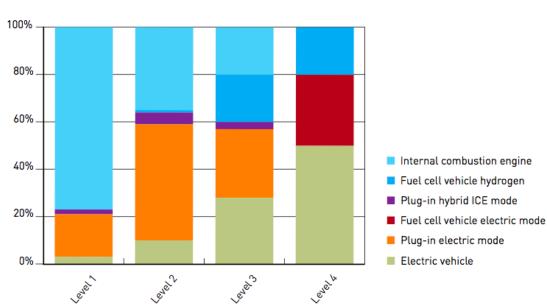


Figure B2: Proportion of car and van distance travelled by different power sources in 2050, under four levels of change<sup>68</sup> UK Government 'Pathways to 2050 Analysis' (2010)

Commitment to lower greenhouse gas emissions by at least 80% (in comparison to 1990 levels) by 2050













### Ambiguities or uncertainties about practice

Less commonly addressed

- Future transport scenarios (e.g. Timms et al. 2014 in Environment & Planning A)
- Limited nuance (e.g. equality but not dynamics)
- Energy Technologies Institute report on future transport – variability of vehicle use



A report by the Energy Technologies Institute

#### Transport

An affordable transition to sustainable and secure energy for light vehicles in the UK







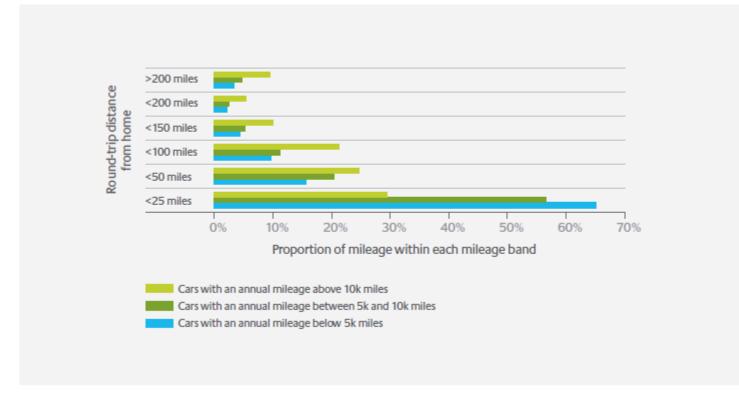


Figure 19: Round-trip Distances (Multi-leg) for Low, Medium and High Annual Mileage Cars<sup>[18]</sup>



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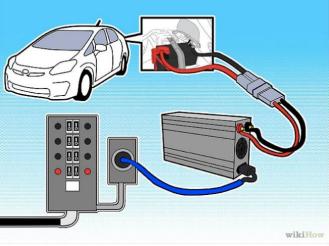




### Tracing other networks

#### What kind of technologies might EVs be connected to?





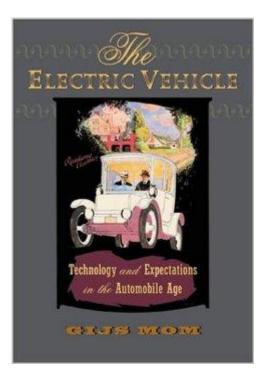




### Tracing other practices

Electric vehicles and Internal Combustion Engine vehicles

- Should EVs do the same things as ICEs?
- ETI: "at least two hours of high speed motorway driving (on a very cold and wet winter night" (p36)
- Mom (2004) The Electric Vehicle
  - multifunctional won
  - class and multiple vehicles







#### **Key Points**

- Concern for adoption of EVs in relation to sustainability targets
- Meanings shouldn't be addressed without attention to use
  Using ambiguities and uncertainties about networks and
  practices to inform better policies
- How EVs relate to other appliances and technologies
- In particular: would patterns of adoption and use be any different if EVs were less similar to ICEs?





## Thank you! Xiè xiè!

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