

Destabilisation and decline of existing regimes: the role of entrepreneurs in the NZ transport industry




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Current NZ transport system

- Old vehicle stock
- Inefficient ICE engines
- Lack of rail infrastructure
- Low petrol taxes relative to OECD countries
- Focus on road building

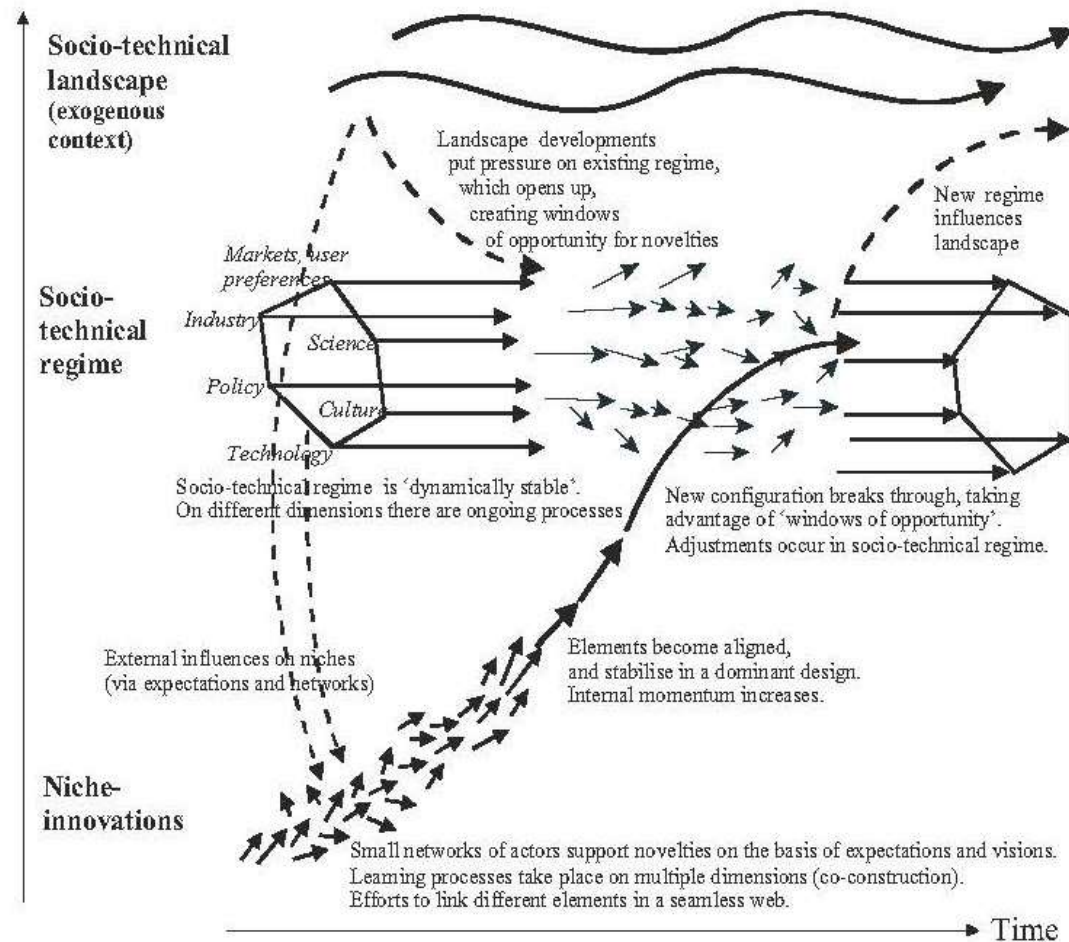
 Powerful institutional and infrastructural support in current transport regimes

System of 'automobility' (Urry, 2004)

- The manufactured object (the vehicle itself)
- Individual consumption (ownership)
- The complex (supply/value chain)
- The private mobility (making own decisions)
- The culture surrounding the car (symbols and meanings)
- The environmental resource use (roads)

Conceptualising regimes as part of socio-technical systems

Increasing structuration
of activities in local practices



Destabilisation by entrepreneurs?

- Environmental entrepreneurs
 - “generate new products, services, techniques and organisational modes that substantially reduce environmental impacts and increase the quality of life” (Schaltegger, 2002)
- Change agents in socio-technical systems
- Can they bring about the change needed in the regime to destabilise business-as-usual fossil-fuel regimes and move toward low-carbon mobility in Aotearoa/New Zealand?

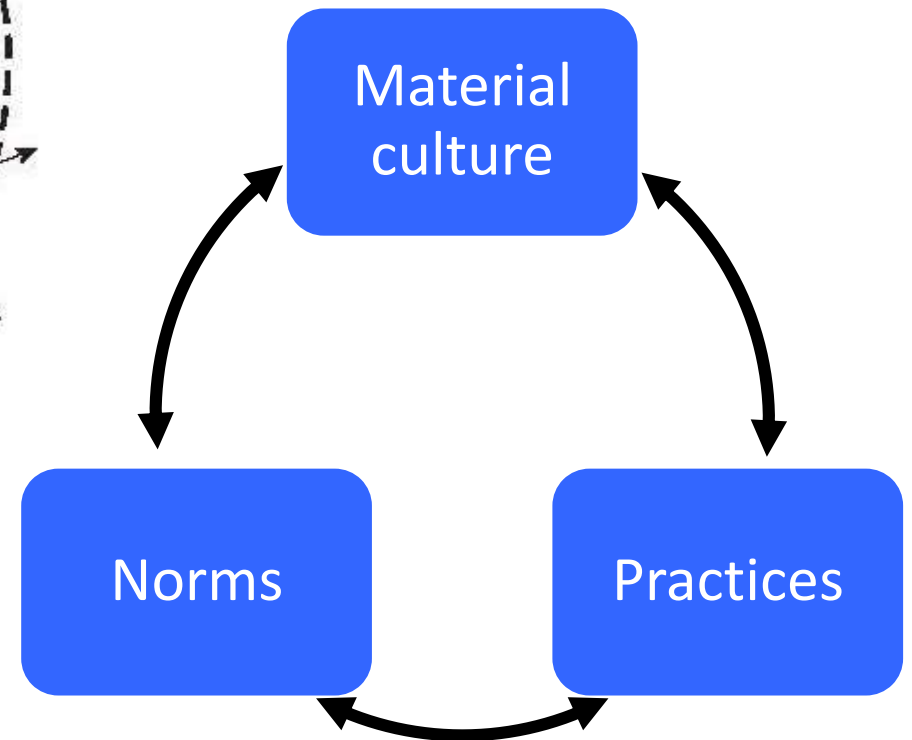
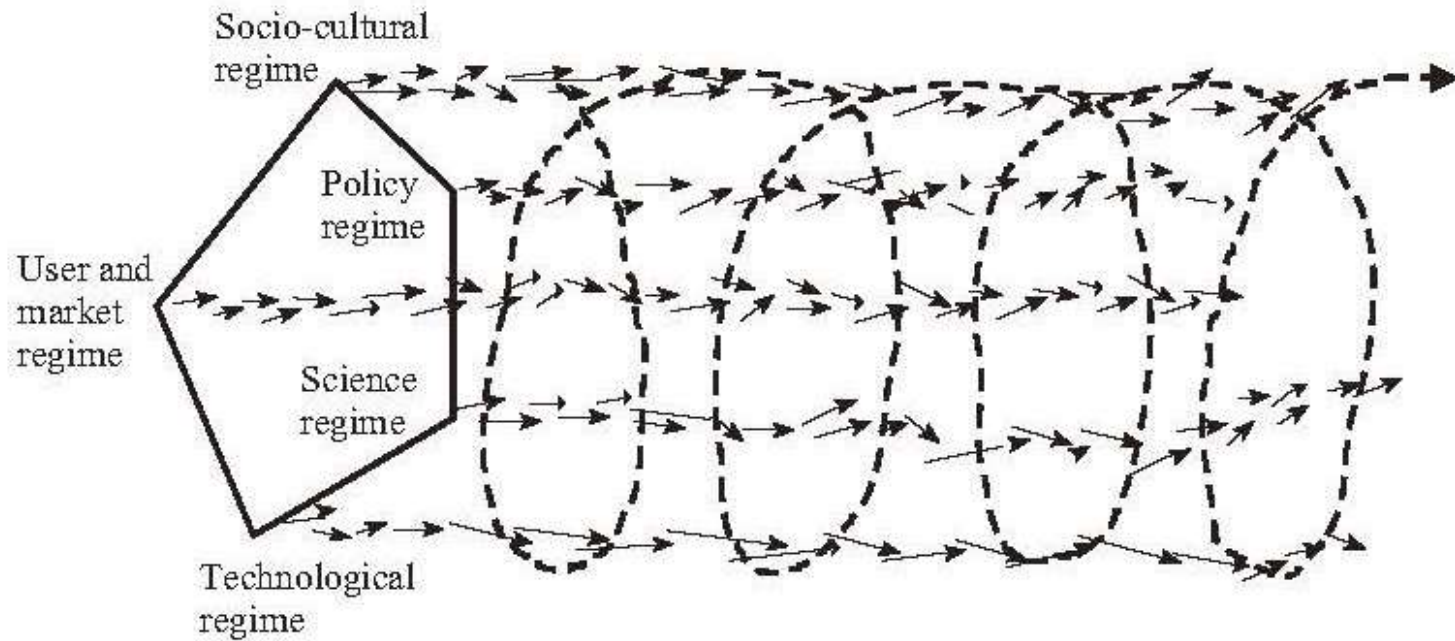
Method

- Interviews with 24 entrepreneurs involved in a business with some aspect of eco-innovation in the transport industry in NZ
- Key areas of innovation include: electric vehicles, hybrid vehicles, low emission vehicles, biofuel, car share, bike share, charging systems, battery management, alternative fuels, rail systems
- Had to be operating as a business, spoke with CEO/founder

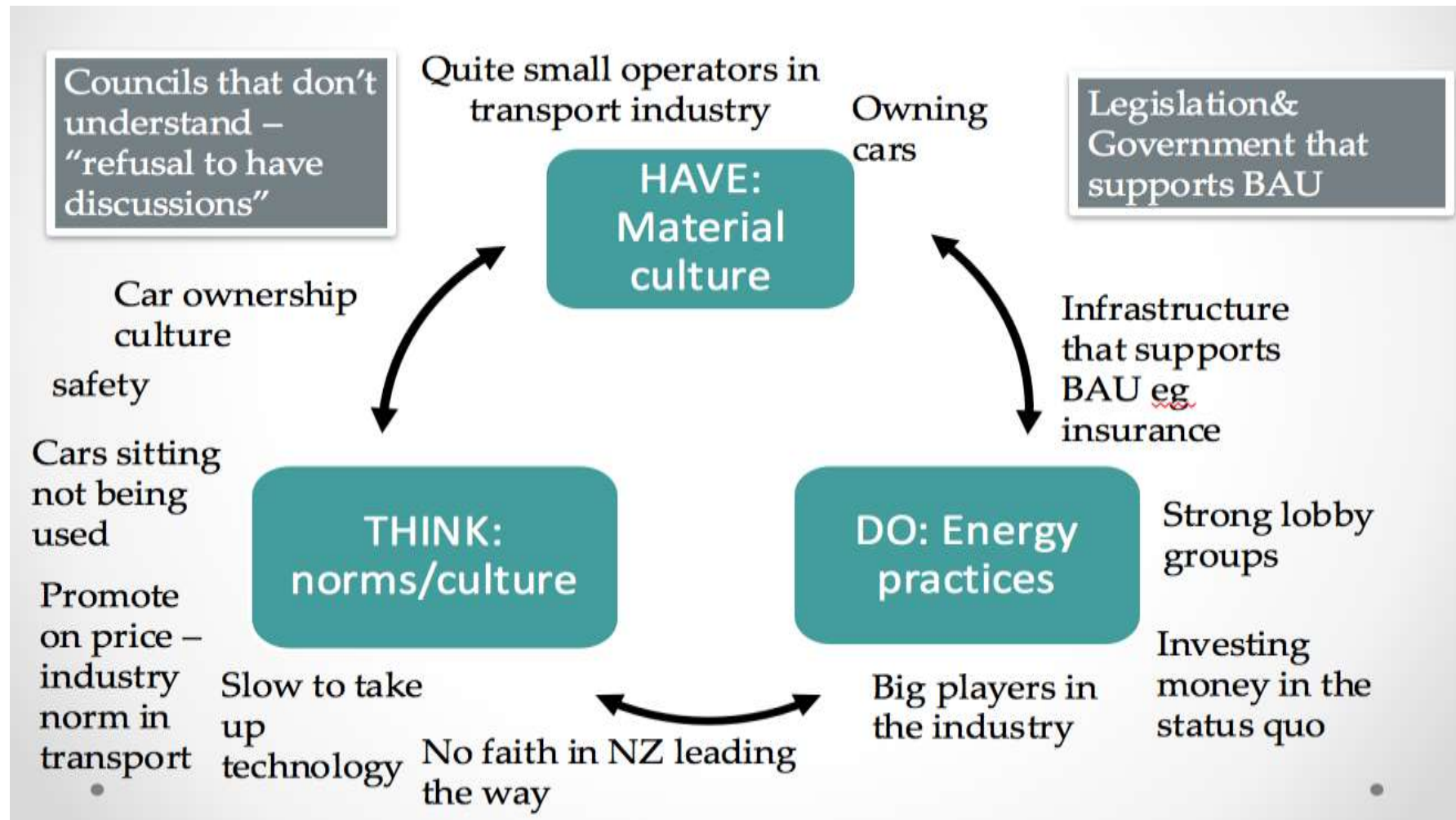
Case studies – eg Cityhop



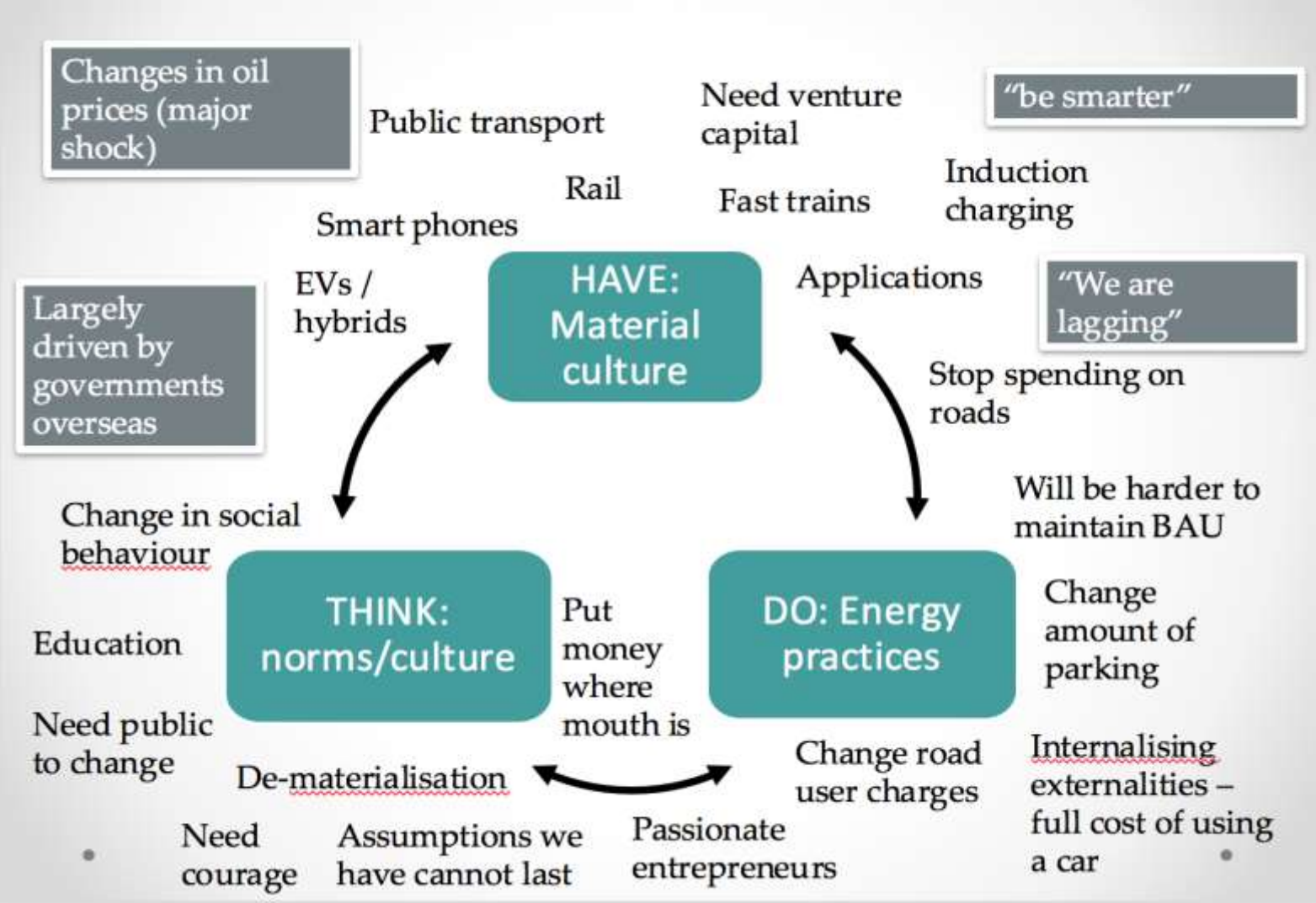
Analysis: using MLP and EC



Participants' thoughts on the key barriers



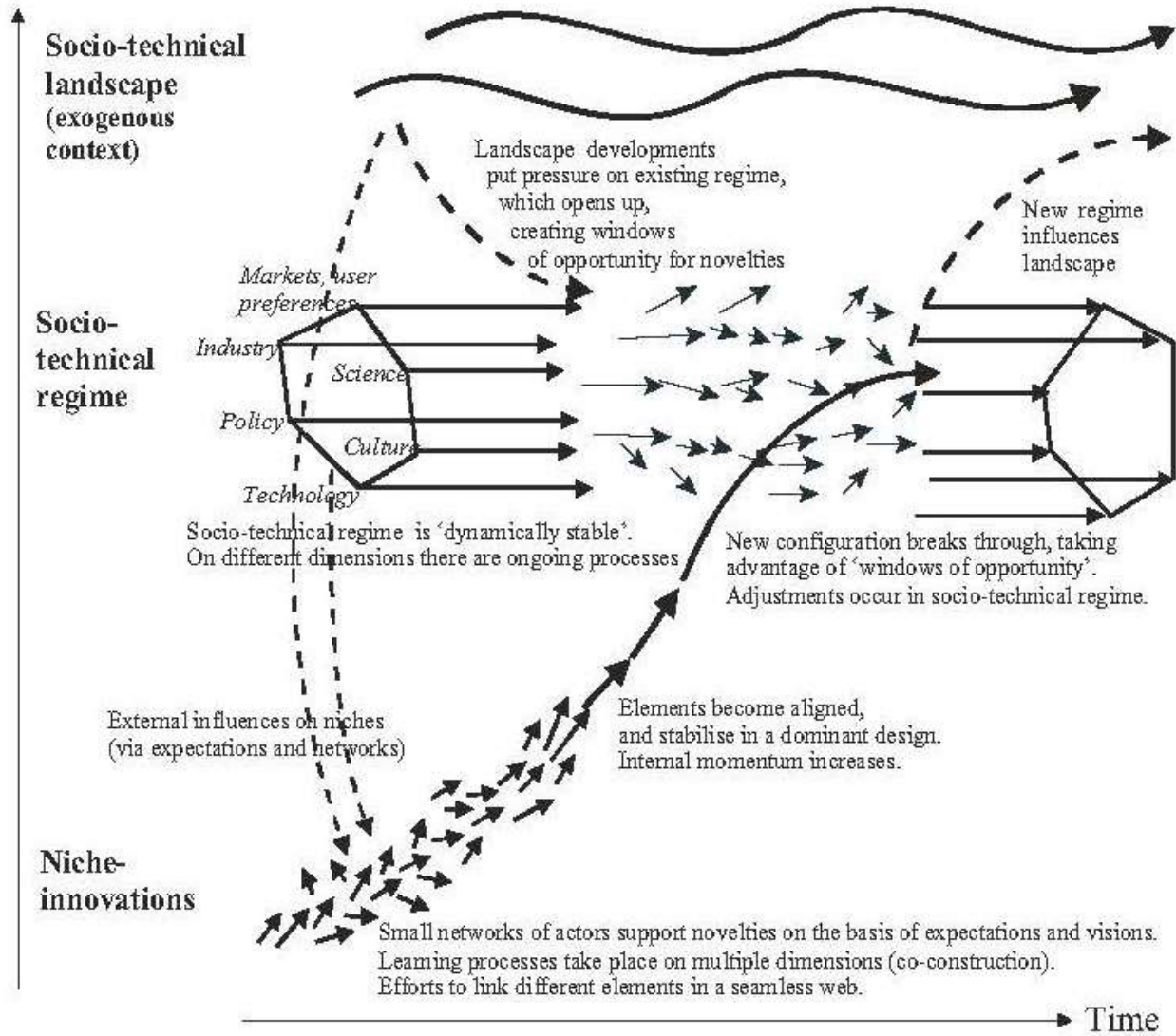
Participants' thoughts on the future



Entrepreneurial roles in the change (destabilisation)

- Mixture of transition pathways (Geels & Schot, 2007)
 - Technological substitution, De-alignment & Transformation
- Technological substitution may drive the key changes
 - Many would argue that substitution alone will not be enough for stability of a new regime (given low carbon commitments)
- Entrepreneurs have a role to play
 - De-alignment & Transformation
 - 3 key processes – Learning, articulation of expectations & building social networks (Kemp, Schot & Hoohma, 2007).

Increasing structuration
of activities in local practices



Entrepreneurs