

Networks of expectations

Using the multi-level perspective of transition theory to analyze expectations

Eu-SPRIng school, Anticipation in the Governance of Innovation

15.03-17.03.2012, Vienna

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Introduction

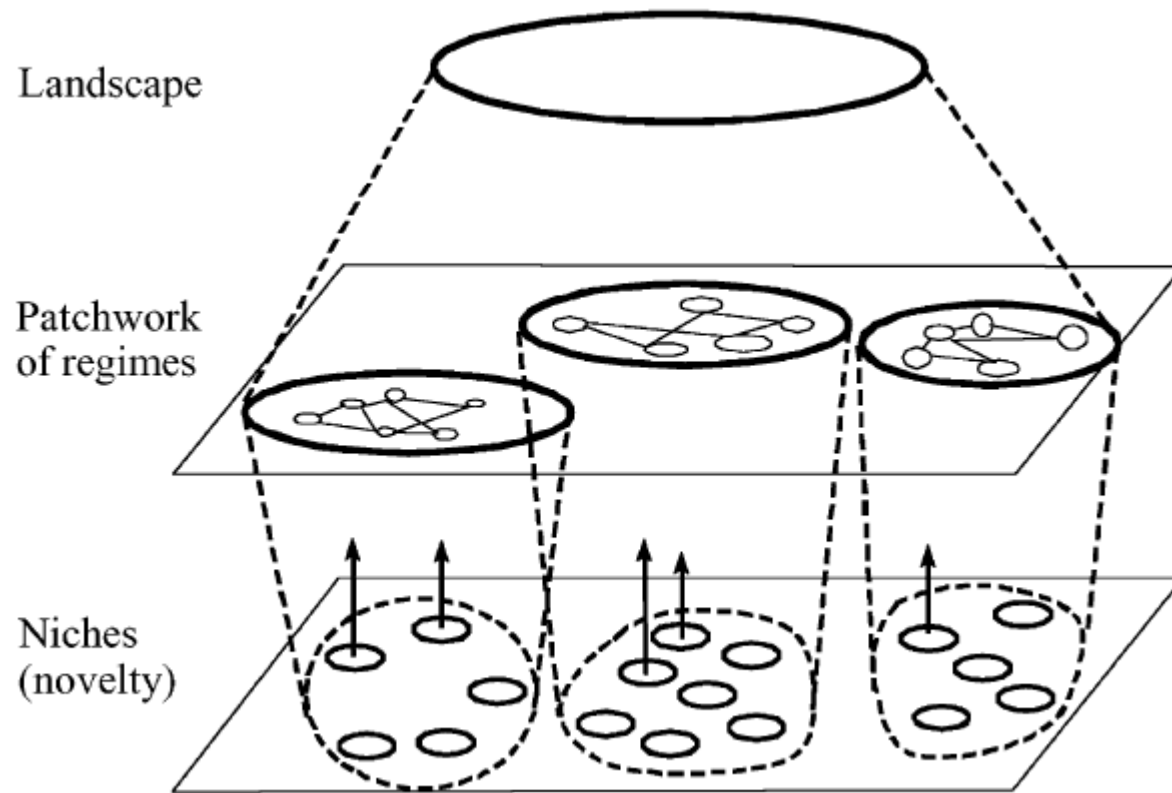
- ***„TODAY the race to develop the fuel cell car is over [...] Now we begin the race to lower the cost to the level of today's internal combustion engine. We'll do it by 2004.“
(Jürgen Schrempp, Chairman of the Board, Daimler Chrysler, The Economist 22.03.1999)***
- Future expectations are a powerful driver of innovation activities, and shared expectations and visions can contribute to the alignment of different actors
- Expectations as being crucial in research and policy approaches (e.g. transition management, strategic niche management).
- Expectations about technologies, in particular alternative powertrain technologies change rather suddenly (hype-disappointment cycles).

Networks of expectations

- In the case of fuel cells we see a complex network of expectations and visions
 - Fuel cells and “grand challenges”
 - Fuel cells and hydrogen economy
 - Fuel cells and a decentralization of the energy system
 - Fuel cells and climate change
 - etc.

- How to analyze these different expectations and their linkages?

The Multi level perspective



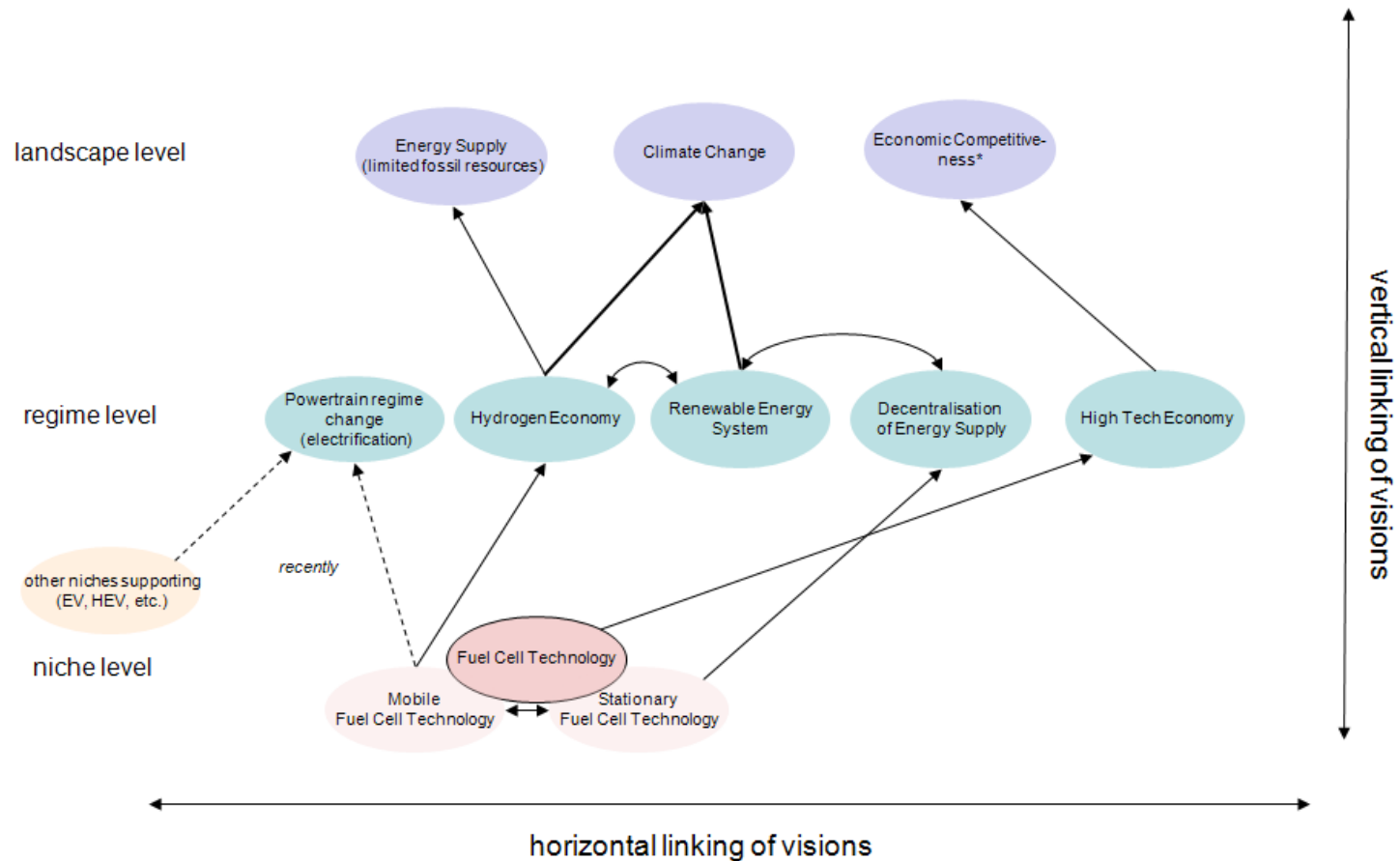
Geels (2002)

Using the MLP to analyze expectations

- Expectations can be conceptualized as „prospective structures“ (van Lente/Rip 1998)
- Not only activities at each of the levels of the multi-level perspective (niche, regime and landscape level) but also expectations and visions. (Geels 2002)
- As different levels support or contradict each other, so do expectations and visions at the different levels
 - e.g. expectations at the landscape level may support niche expectations and thus eventually activities

Methods: Discourse analysis of policy documents (plenary protocols and strategy documents, retrieved through several databases)

The German policy discourse on fuel cell technology



*related to landscape expectations about globalisation and its effects

Empirical findings

- The hype concerning fuel cell technology has to be seen in relation to expectations about the hydrogen vision and in particular climate change.
- Niche activities are linked to several visions of potential transitions, links are changing dynamically
- Those visions of transitions which are able to link (horizontally and vertically) are most stable, with regard to the dynamics of expectations, and thus most supportive for the transition in focus.
- From the perspective of niche activities it seems risky to link these activities to a single guiding vision, which may be subject to quite unpredictable expectation dynamics