

# Regions in Transition: New Path Development and Path Coupling as Policy Challenges

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### Introduction



Grand societal challenges provoke the need for regional economies to embark on new development paths

Evolutionary economic geography (EEG), innovation & transition studies

Focus often on one path / new path development (PD) activities in only one field (few exceptions: Martin & Sunley 2006)

"Single path view" prevailing in the literature appears to be a limitation

Research gap: How do various newly emerging paths influence each other?

### **Aims**



Meaning and nature of relationships between newly emerging paths in different fields?

- > competing relationship versus supportive relationship
- > effects on new PD and wider transformations

#### Policy implications and challenges?

- broader and more integrative innovation policy approach
- coupling potential and proactive linkage formation

### New path development



#### **Evolutionary Economic Geography**

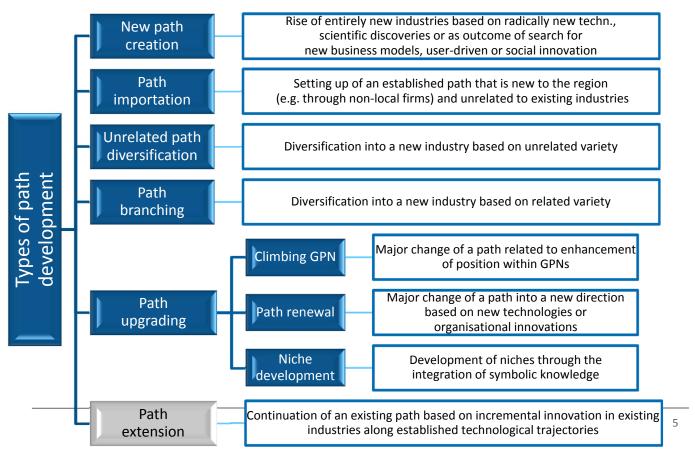
From the canonical model to the "path as a process" model (Martin 2010)

Related & unrelated diversification (Boschma 2017)

Path creation, path importation, path branching, path upgrading ... (Isaksen, Trippl & colleagues 2016, 2017)

### Types of (new) PD





### New path development



#### **Transition studies**

Transition pathways (Geels & Schot (2007), Geels et al. 2016)

Common themes with EEG: enabling and constraining conditions; relation of new paths to old ones

#### Relation between new PD in different fields?

- ➤ EEG: little is said about the relation between newly emerging paths in different fields
- Transition studies: several niche innovations (in one field) compete with each other – possible mutual support is ignored

## Nature of relation between new paths



#### **Broad conceptualization of new PD activities**

knowledge creation & diffusion, institutional change, market creation, visions, legitimacy, sourcing, mobilization & anchoring of resources (e.g. Bergek et al. 2008; Binz et al. 2016)

#### Relationships between new pathways

- Competitive relationship: over scarce resources, policy support, mobilization of stakeholders, public attention
- Supportive relationship: complement & reinforce each other, coupling potential for wider transformations but also barriers

## Geography of new path wien coupling and RIS capacities

## How do geographical context and scale matter in new path coupling?

RISs differ in their capacities to nurture new PD (e.g. Isaksen & Trippl 2016, Xiao, Boschma & Andersson 2016) and to promote new path coupling

#### Institutional capacities of RIS: explaining uneven distribution

- capacity to mobilize and orchestrate heterogeneous RIS actors: joint visions and experimentation, technological, social, institutional learning
- ➤ alignment with policy incentives and other influences at higher spatial scales (Dawley et al. 2015)

## Electric mobility and renewable energy



#### **Promotion of electric mobility in Austria**

- Purchase support schemes
- Tax benefits

## Coupling of new PD activities in electric mobility and renewable energy

- "Model regions of electric mobility"
- Core regions and rural areas





## Electric mobility and renewable energy



#### New path coupling by setting a requirement

➤ 100% of the electricity must be provided from renewable sources generated in newly installed plants

#### Searching, experimentation, demonstration

- Potentials for expanding renewable energy
- Effects of path coupling on the overall acceptance
- Involving green electricity customers as partners

## Conclusions for Innovation policies



New path development ranks high on policy agendas – selection of new paths is a key policy challenge

Prioritization and setting direction: identification and explicit selection of paths with coupling potential

Coordination of heterogeneous actors as task of the state

Removing barriers that prevent new paths to connect and proactive path coupling of them





Green industrial policies promote cross-technology cooperation and competitive potential of new technologies

➤ Balancing competition and cooperation as crucial prerequisite for wider transformation

Place-based policies matter

Proactively exploit place-specificity by creating model regions as laboratories for path coupling experiments



Many thanks for your attention!

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