Polycentricity at different scales
Definitions

“[S]tructure and development of a metropolitan territory are determined by multiple instead of a single node.”
Giffinger & Suitner 2014: 1173

“[A]chieve policy objectives such as economic competitiveness, social equity and sustainable development.”
ESPON et al. 2005: 7-8

- Morphological Polycentricity
- Relational Polycentricity
  - Institutions (cooperation)
  - Structures (flows)
Discourses

**ESDP**

“[...] ensure regionally balanced development and help avoiding economic and demographic concentration by utilizing the economic potential of all regions.”

Committee on Spatial Development 1999: 20

**ESPON 1.1.1**

“The role, specific situation and potentials of urban areas as nodes in a polycentric development”

ESPON et al. 2005: V

**ESPON 1.1.3**

“We examine the goal conflict in polycentric development between competitiveness, EU- and national cohesion, and sustainability.”

ESPON et al. 2006: VII
Debates

Polycentricity & Polycentrism

→ Polycentricity is both analytical tool and normative agenda

“Planners use it as a strategic spatial planning tool, geographers use it to explain the changing spatial structure of cities, EU Commissioners promote it as a socio-economic policy goal to achieve a balanced regional development”

Paraphrased from Davoudi 2003: 979

→ Polycentricity ⇔ Polycentrism

Vandermotten et al. (2010)

Structural Assessment & Process Dimension

→ Static analyses of polycentricity: morphological & functional condition

“[A]nalyze solely structural characteristics to depict the degree of polycentricity and define policy recommendations upon that.

[P]olitical processes inherent in strategy-building for metropolitan development are not taken into account with equal emphasis.“

Giffinger & Suitner 2014: 1170

→ Confronting evidence with governance process

ESPON & TU Wien 2012
Polycentricity in POLYCE

**Micro:** Metropolitan Regions = Core Cities + FMAs
→ Functionally integrated urban region

**Meso:** Polycentricity in Central Europe
→ Shared functional specialization

**Macro:** Danube Region
→ Cohesive territorial development

**Morphological polycentricity**
→ Hierarchies of nodes regarding size and significance within a territory

**Relational polycentricity**
→ Infrastructures, flows and interactions between nodes (intra- and inter-territorial)

**Strategic polycentricity**
→ Governance, actor networks

© ESPON & TU Wien 2011: 7
POLYCE Findings

“Strong (economic) ties can be recognized between Budapest, Praha and Wien.”
ESPON & TU Wien 2012: VII

“Differences in commuting between Vienna’s functional integration and former communist countries, which are dominated by capital cities and unidirectional flows to core cities.”
ESPON & TU Wien 2012: VI
POLYCE Findings

“All five metropolises try to position themselves as hubs in their own geographical context towards outside neighboring regions and countries.”

ESPON & TU Wien 2012: VI

“Inter-city relations are significantly influenced by travel times and cultural ties, pointing to the ongoing influence of transport accessibility and historical relations on economic activities.

ESPON & TU Wien 2012: VI
Need for further research

New evidence on relational polycentricity
- In-depth analyses of networks to better understand economic, social, cultural ties

Influence of multiple territorial dimensions
- Metropolitan regions with their inner and interrelations
- National level and its framings of future spatial development

Evidence on territorial development trajectories
- Context-sensitive analyses of different paces of polycentric development regarding actors & institutions, structures & networks, evidence & policy

© Scott Eshbaugh: „Visualizing City Planning“ (scotteshbaugh.com/visualizing-city-planning.html)
Need for further research

Linking web-graph and geo-information

- Analysis of relational polycentricity on meso & macro-level (e.g. European city networks)
→ Confrontation of "real" and virtual polycentricity
Polycentricity at different scales