

REGIONAL GRAVITY AXES AS VECTORS OF TERRITORIAL DEVELOPMENT

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Growth poles

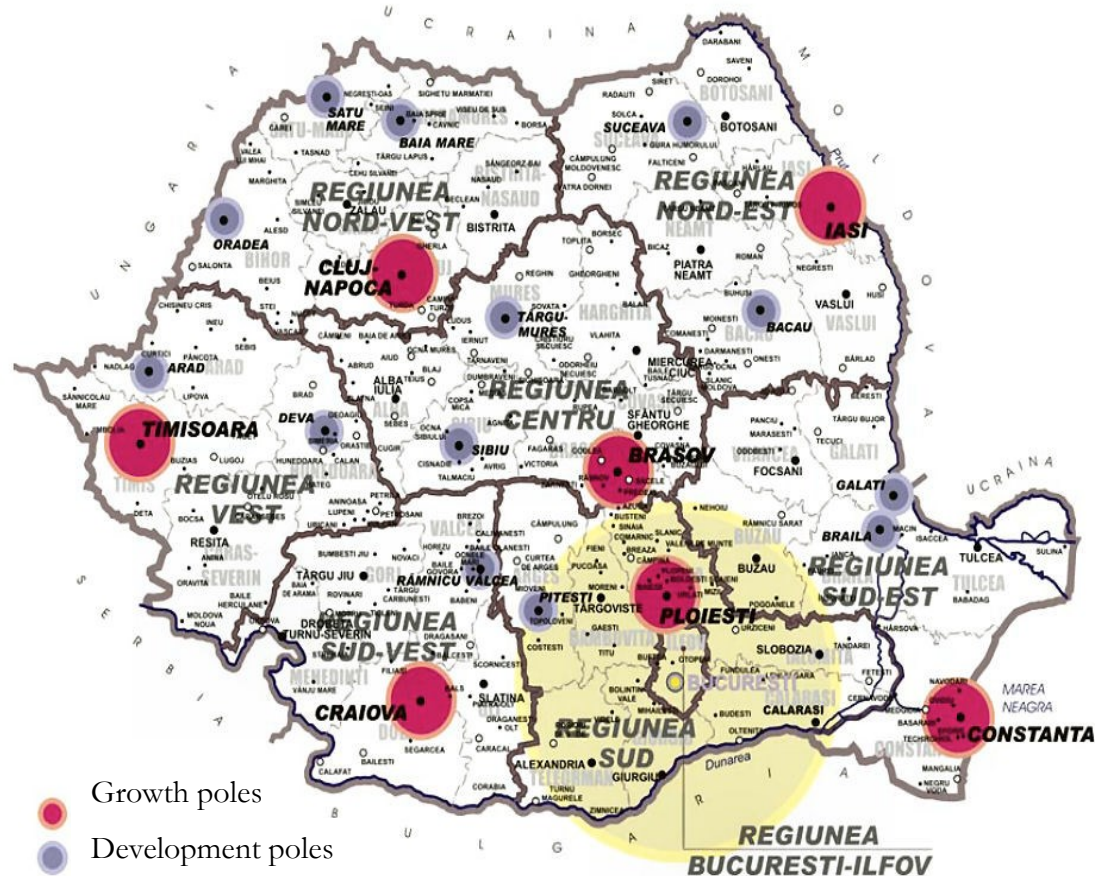
Polarizing regions

Regional gravity axes

Anisotropic regions



Approach elaborated according to the concepts specific to the *functional system regions* described by Dauphiné (1979), Nir (1990), Claval (1993), Vallega (1994), Wackermann (2002), Cocean (2002)



Peculiarities of the gravity axes through interspecific competition

- It requires a longer period for shaping the spatial system and a more convulsed evolution;
- Emerged in all the regions with heterogeneous relief, according to *the pre-existing morpho-hydrographical matrix* (the morphological corridors or river valleys with access and circulation facilities) or to the shortest distance between two or more polarizing habitats;
- The spatial selection that led to their individualization was performed according to the principle of *main drains* in the endokarst hydraulic systems
- *the main gravity axis* will overlap the most intensely circulated corridor, with various and efficient transport networks, or the territory of utmost affluence of resources and of economic and social effervescence

Case study: Transylvania

- three parallel gravity axes which polarizes the southern and central part of Transylvania
- these *simple gravity axes* branch out from a *complex joint axis* (D), developed on the morpho-hydrographical corridor of the Mureş River
- three neighbouring parallel gravity axes, of different order

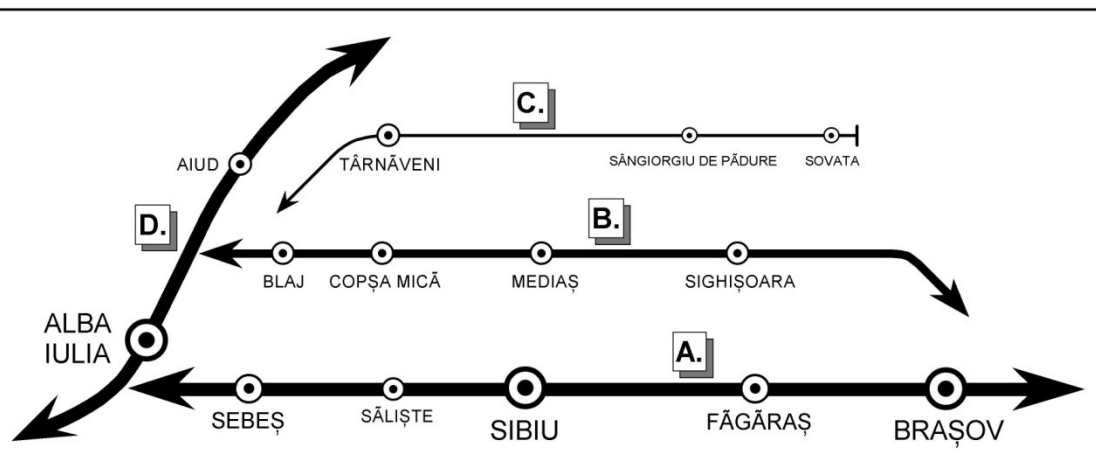


Fig. 1. Spatial selection of gravity axes in the central-southern part of Transylvania. A – main axis (first-order axis); B – second-order axis; C – third-order axis; D – joint axis

Gravity axes – sustainable spatial entities



Growth poles

Regional gravity axes

sustainability ensured **as long as their own spatial organism functions optimally** (when a crisis emerges in the process of its development and affirmation, it will resist through resilience or will decline on its own)

sustainability is **much more pronounced and long-lasting, being provided by complementarity** (geographical phenomena receive a much more pronounced dissipative development (Ianoş and Humeau, 2000), starting with the settlement system that establishes itself along them and continuing with the infrastructure network whose diversification, amplification and functioning are strictly dependent on the inputs and outputs within them)



Polarizing regions

Anisotropic regions

Spatial occultation phenomena generated by gravity axes

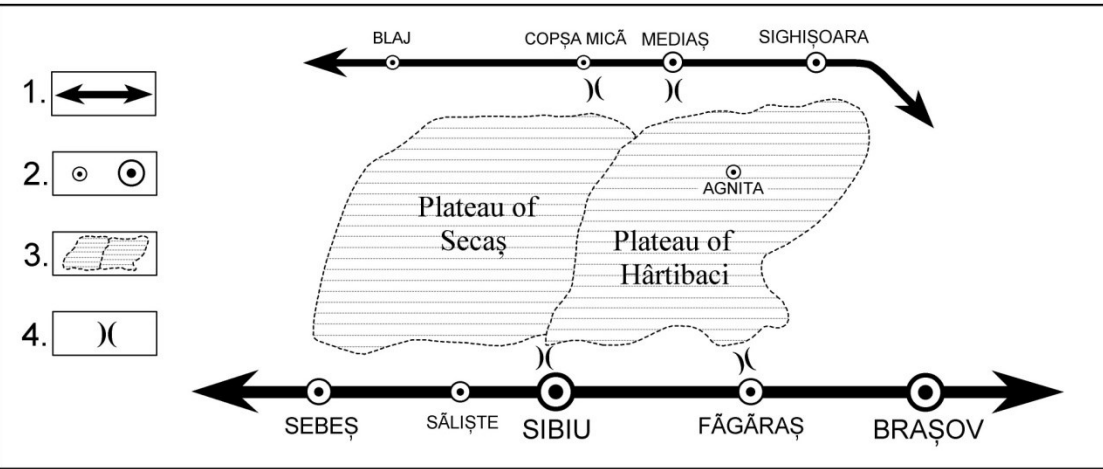


Fig. 2. Occultation phenomenon generated by the regional gravity axes. 1. gravity axes; 2. urban centres; 3. occulted territories; 4. synapses

Because of the major polarization effect caused by the two axes, which concentrate the absolute majority of activities and mass, energy and interest flows in the region, **a no man's land type of territory has emerged, overlaying the Hârtibaciu and the Secaș plateaus**

Regional gravity axes:

- by massively concentrating technical, administrative, economic and social infrastructures, habitats, goods and people in narrow spatial strips, but with notable lengths, **cause a rapid pace and a high level of territorial development.**
- they **induce**, at least in the early stages of development, **notable disparities in relation to the surrounding regions, which often become occulted territories and therefore repulsive.**

Thank you for your attention!