

Peripheral Cores or Central Peripheries?

Vasile SURD¹, Camelia-Maria KANTOR², Bogdan-Nicolae PĂCURAR¹

¹ Babeş-Bolyai University, Faculty of Geography, Centre on Research of Settlements and Urbanism, Cluj-Napoca, ROMANIA

² Claflin University, School of Humanities & Social Sciences, Department of History & Sociology, Claflin, UNITED STATES

E-mail: vsurd@geografie.ubbcluj.ro, ckantor@claflin.edu, pacurarbogdan@ymail.com

Keywords: core, periphery, segregation, Central-Eastern Europe, Romania

ABSTRACT

This present study provides a comparative overview of the core-periphery relationship of urban and rural areas in Romania based on one major parameter: *segregated spatial distribution*, driven and impacted by axiomatic factors such as time constraints and socio-economic disparities caused by political decisions, wealth, and available infrastructure. Overall, existent data suggest that: (1) both peripheries and cores are the result of political decisions resulting in wide wealth gaps; (2) evident segregation of the poor and rich peripheries is evidenced by spatial distribution of residential areas according to proximity, respectively distance to certain sites (waste disposal, contaminated areas, central urban location), and (3) poor and rich peripheries are both dominated by isomorphic social and infrastructure structures and functions.

1. INTRODUCTION

Through this study, we have the possibility to present how the core-periphery duality or, if we add the concept of semi-periphery, triad manifests itself in Romania, especially now, a quarter of a century after the fall of communism in this part of Central-Eastern Europe. We base our endeavor on segregation and focus on how different factors led to discrepancies in wealth distribution, infrastructure, political might and to the ever increasing rich-poor divide. We believe that the following paragraphs might prove or at least convince the reader that said discrepancies are products of the political framework recently created.

2. THEORY AND METHODOLOGY

The concepts of core and periphery stem from the “core” (play on words intended) of the World-System Theory, first proposed in 1974 and thoroughly and frequently discussed by I. Wallerstein, making it an inherent feature of the above mentioned model [1], [2],

[3], [4]. These two areas are fundamentally unequal: while the core has a high level of technological development and manufactures complex products, the role of the periphery is to supply raw materials, agricultural products, and nowadays especially cheap labor for the expanding agents of the core. Economic exchange between core and periphery also takes place on disproportionate terms: the periphery has to sell its products at low prices, but has to buy the core's products at high prices. Once established, this unequal state tends to stabilize itself and becomes status-quo. The statuses of core and periphery are not exclusive and fixed geographically, but are relative to each other. There is also a third zone, defined as “semi-periphery”, which acts as a periphery to the core and as a core to the periphery.

However, one must take into account that the core-periphery relationship or in fact contrast is not fundamental only in geographic studies. There are also applications in biology and psychology, like D.S. Bassett's et al. (2013) study of brain dynamics [5] or physics such as P. Holme's paper, which fuses

knowledge of networks from geography, physics and statistical modeling [6].

Despite the fact that the notions of “core” and “periphery” are sometimes and erroneously described as “simple” when considering economic factors such as human and physical advantages, the Core-Periphery (CP) Model being extensively used to explain urban, regional, and global development as P. Krugman did in 1991 [7], [8], or Z. Chen et al. in 2006 [9], or even M.J. Thompson [10], few studies investigate the relativeness of both the spatial-geographic and economic-political relationships within the CP structure. Likewise, few studies, like the ones of E. Molnar et al. in 1975 [11], or V. Surd in 1977, 2001, 2002 and 2009 [12], [13], [14], [15], discuss the development of these two urban components within the Eastern-European urban development context. This present study provides a comparative overview of the core-periphery relationship of urban and rural areas in Romania based on one major parameter: *segregated spatial distribution*, driven and impacted by axiomatic factors such as time constraints and socio-economic disparities caused by political decisions, wealth, and available infrastructure.

The two terms (core and periphery) are both associative and determinative, implying the existence of a priori, the presence of the one relying on the presence of the other. For the purpose of this study “cores” and “peripheries” imply two categories:

- *first*, with reference to the category of space-time (distance - time);
- *second*, with reference to power and income level.

3. DISCUSSIONS

3.1. Core versus periphery - a global perspective on time-space relationship

Reporting “core” and “periphery” through the class *time-space* (space-time) assumes a high degree of resilience, changes to these two structures occurring based on type of approach (global, continental, regional, or national) and transport infrastructure. For example, the town of Ushuaia in southern South America has a peripheral position, both globally and at the continental, regional and national levels. Interestingly, capitals such as Bucharest, London, Bratislava and Vienna are “peripheral” in opposition to Madrid, Ankara and Budapest which have “core” location. Cluj-Napoca (Romania) has a central position in the county of Cluj, whereas the county seat of Alba Iulia has a peripheral position in Alba County.

The variable *time* is constantly subjected to a process of “condensation” due to the upgrading and modernizing of transport infrastructure, thus justifying the relative nature of coexistence between “core” and

“periphery”. For example, in Britain, the distance between “large city” and “highly rural” is the average of 90 km, the equivalent in time of 70 minutes by car. In Romania, the same average distance is equivalent to 180 minutes and in Russia approximately 10 hours of riding the bus. However, one needs to keep in mind the relative nature of these parameters continually adjusted as a result of modernization of the transportation infrastructure and the development of specific habitat structures, some easily adaptable, able to diminish the distance between “core” and “periphery”.

3.2. Core versus periphery - a global perspective on spatial distribution generated by the power of wealth

“Cores” and “peripheries” generated and perceived in terms of wealth and power parameters meet outstanding “spatial segregation” regardless of position and the territorial distribution, starting from the regional and going down to the neighborhood level. One could thus mention the well-known examples (already clichés) of the “rich North” and “poor South” or “Western Europe” and its poor “Eastern” counterpart, of the Anglo-Saxon America (rich) and poor Latin America, or less known examples such as the Mezzogiorno and Lombardy, New York and Bamako, The Santa Ana’s favelas (poor) and the famous Copacabana (rich), the Făget district (Cluj-Napoca), dominated by newly built villas in the wooded area of the city and the Pata Rât, squalid neighborhood of the poor, located in close vicinity to the waste storage area.

Cores are seen everywhere as “central places”, generating information and power. Depending on the quality, diversity and type of information generated by these centers, they subordinate nearby territories of variable dimensions, both within states or even cross-border levels. While in some countries the dense urban core had a bad image and was seen as a poor residential area [16], in other countries they focused the wealth and power of their respective nations where the social dynamics parameters reach the highest and the most important decisions are being made. Lately, the Urban Renaissance movement in North America and some western European countries showed growing interest in inner-city districts leading to efforts toward restoring their appeal, hence another example of core-periphery temporal dynamics. In contrast, “peripheral” areas have gained a mixed (but clearly segregated) character, associated with miserable life and poverty in some areas located in close proximity to opulence, and with luxurious living of the rich and powerful. One can thus distinguish poor vs. rich peripheries as a result of the process of segregation of the population on the basis of wealth (a few even carrying specific names: favelas in Brasil, ghettos in North America, bidonvilles in French-speaking Africa, shanty-towns in Southeast Asia etc.). It is important to mention though that, in most cases, the better the

economy, the smaller the differences between core and periphery. Both rich and poor peripherals grow on the principle of "exclusivity", often functioning based on own regulations and loosening or losing some level of control from the local authorities (the "gated societies" of Los Angeles, Rio de Janeiro's favelas, etc.).

3.3. Reality and core - periphery relations in Romania

One first aspect of the core-periphery relationship in Romania lies in the remoteness of the capital. Distances from the extreme points of the country to the capital city are, on average, 700 km from Sighetu-Marmatiei, located in the north-west of the country along the border with the Ukraine, down to Bucharest. This distance can be traveled today by train in 14 hours, according to the Train Schedule of 2014 [17], a tiring and usually badly perceived experience by the people of Maramureş County when forced to travel for capital related business (especially visa issuance) or for leisure purposes (Black Sea vacation), as well as a major deterrent to visiting the highly tourist side of the country by Romanians living in the south of the country. In addition, besides its "eccentricity", the Romanian capital adds four additional major negative aspects, namely:

a). *The acute lack of water in adjacent areas*, technically solved by the adduction of the Vidraru lake on Arges river (the preparation of the canal Danube - Bucharest started during the communist period, then halted to later have the entire irrigation system of the Romanian Plain Irrigation destroyed after 1989).

b). *Cold winters with frequent blizzards* that cause paralysis of the entire system of land access to the capital as well as issues with the gas and electricity supply.

c). *Hot summers with temperatures around + 38° C + 40° C* during the day, accompanied by long periods of drought over the summer, leading to frequent water shortages; additionally, drastic

reduction of green spaces in the urban area replaced by new construction partially paralyzes urban life during the day.

d). *The capital city is located in an active seismic zone*, highly vulnerable to earthquakes above 7 degrees on the Richter scale (the March 1977 earthquake caused 1,000 deaths and has deeply affected the entire housing stock of the city, especially in the core area, where there are buildings of significant architectural value). Furthermore, in economic terms the capital city is too expensive and it requires great financial efforts for its maintenance. In the same manner, the region of development Bucharest - Ilfov "absorb" most of the national income, the urban hypertrophy process reaching alarming levels, extremely difficult to control with the current legislative system.

3.4. Polarizing centers

At the national level the systemic subordination relationships within the network of settlements can be highlighted more easily through the categories of polarizing centers.

Romania has nine categories polarizing centers (figures 1 and 2), six with urban character and three rural. The six categories of polarizing urban centers (in order of importance), are: national (N) – 0, provincial (P) – I, regional (R) – II, county (J) – III, area (Z) – IV, local (L) – V.

The rural categories are: supra - (Sc) – VI, communal (C) – VII, sub-communal (Sb) – VIII.

The Capital (N) 0, polarizes the entire national space as anywhere in the world and generates the most expansive peripheries, both rich and poor.

There are seven Provincial Polarization Centers (P) I, namely Iaşi, Galaţi, Constanţa, Craiova, Timişoara, Braşov and Cluj-Napoca that usually have a demographic potential of 300,000 residents, and incorporate territories with an average area 35,000 km².

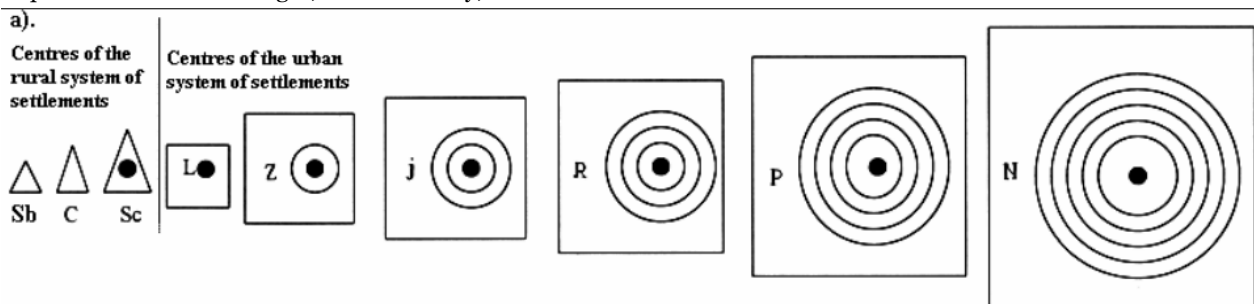


Fig. 1. Categories of suburbs and peripheral cores [15].

These have generated three types of peripheries by 1989, namely:

- poor peripheries, usually located in close vicinity to the major urban waste disposal sites;

- rich periphery, usually developed by "attacking" and clearing of forested areas adjacent to cities;

- middle income periphery with new neighborhoods being built in adjacent rural towns,

where land is cheaper (mostly with multilevel buildings or townhouses).

Regional polarization centers (R) II extend their influence over two to three nearby counties. They have a demographic potential of between 200,000 and 300,000 inhabitants. Many have found an adjustment response to the drastic reduction of industrial activity via the "exploded" university function. Advertised as local substitutes to the national traditional universities, they become the largest providers of university degrees after 1989. In addition, the emergence and expansion of supermarkets awarded these centers a proliferated strong commercial position. In this regard it is worth mentioning cities such as Arad, Oradea and Baia Mare in the west, Târgu-Mureș and Sibiu in the center, Ploiești, Pitești, Bacău and Suceava in the south and east. Similarly, poor peripheries have proliferated in relation to household waste that the city produces. Poor and middle suburbs are not expressive. The county level centers of influence (J) III were established in 1968, having developed strong "industrial peripheries"

(industrial areas). These areas went through the deindustrialization and decommission process after 1989, making place for a newly established social class, the *cardboard bourgeoisie* which broke away from the central core of the city, adjudicating horticultural (fruit trees, vines) adjacent areas that used to operate until 1989 as modern intensive agricultural models (examples: Bistrița and Zalău in Transylvania, Vaslui and Botoșani in Moldova, Slobozia and Alexandria in the south). Since, in general, this category incorporates a population under 75,000 inhabitants, it does not generate compact urban peripheries.

Urban centers of influence zones (Z) IV and (L) V have inherited peripheries, usually consisting of impoverished Gypsy population. Hence, the poor peripheral areas inhabited by Roma has witnessed megalomaniac constructions specific to this ethnic group, erected as a result of begging, deception and exploitation of "scrap metal" resulting from the decommissioning of former state owned economic units.

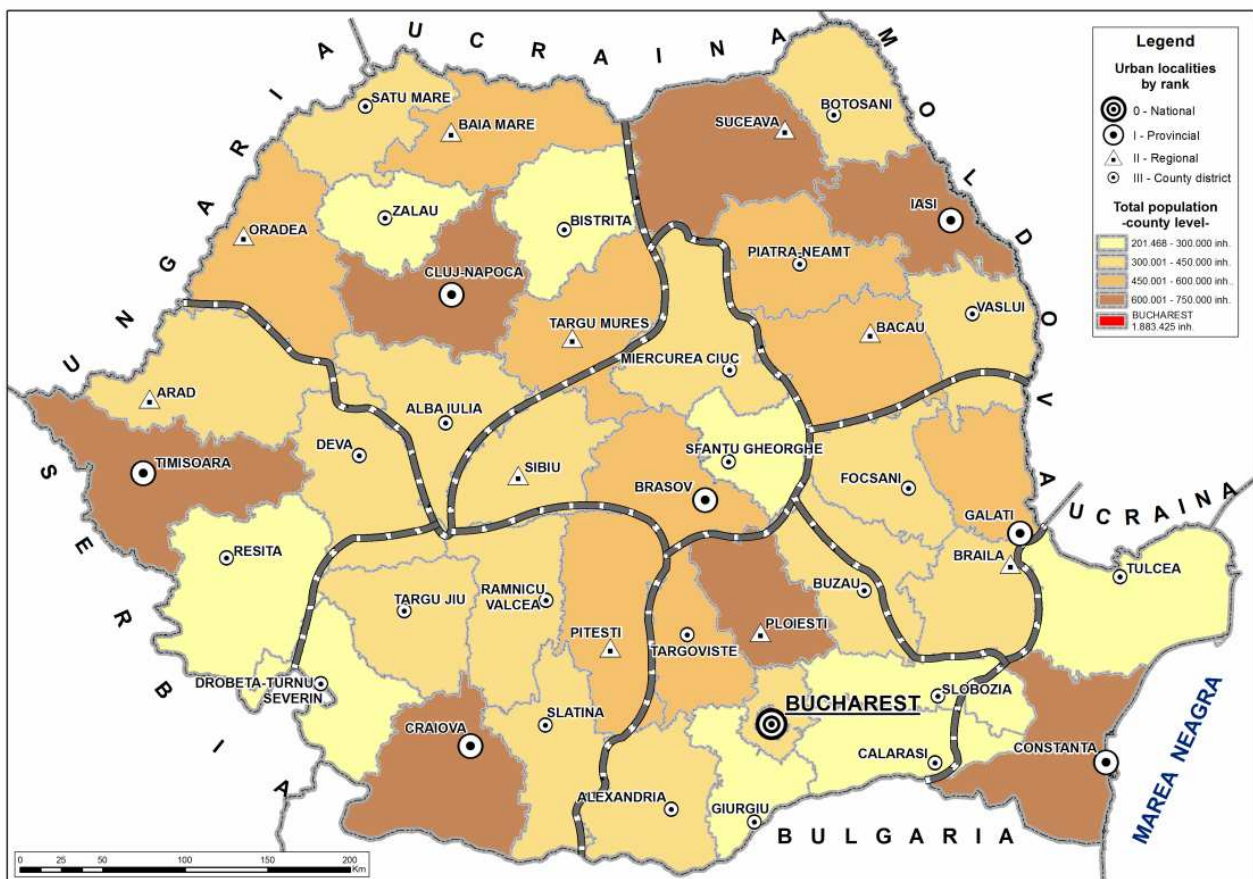


Fig. 2. Polarization centers rank 0, I, II and III. [15].

The wealthiest population of the urban category usually occupies the central core in these cities, private homes coexisting with multilevel buildings erected during the communist period. In the peripheries the private homes are usually accompanied by vegetable gardens and small subsistence animal farming that rather characterize rural settings. Rural centers with

supra-communal polarization (Sc) VI are characterized by more advanced utilities and public services as compare to other rural settlements. Lately, in addition to the health and commercial functions, some were also awarded legal functions by establishing rural courts, which led to polarization of villages from the neighboring (adjacent) areas.

Rural centers with communal polarization (C) VII are villages that provide the rural environment with administrative functions (town hall, post office, police), educational facilities (schools, grades I - VIII), and health facilities (rural doctor's office-usually general medicine and sometimes dental services). They polarize in average four villages located in close proximity and territorial contiguity, together with an average population of approximately 3,500 inhabitants.

Sub-communal polarizing rural centers (Sb) VIII used to include villages with communal residence status until Law nr. 2 of 1968 when they lost this function through merging [18]. They also have schools with a small number of students (10-20), one or two mini family owned stores (called ABC stores), and one local milk collection center. The remaining villages are characterized by accelerated depopulation and low number of inhabitants. Some of them carry a name, but in reality there are only 2-3 people left in the village.

Over half of Romanian villages have a demographic potential of less than 500 people, where people older than 60 years usually have a share of over 60%, demonstrating a real and acute current demographic crisis in Romania. Overall, in the rural Romanian landscape poorer and richer households live in a cohabiting space. The rule is sometimes "disturbed" by the presence in several peripheral places of Gypsy households, with shabby houses found in territorial contiguity. In addition, in many villages of Transylvania and Banat, due to mass emigration of the German population, their centers were populated from political considerations by the Roma population.

Through specific behavior and customs of this ethnic group, rural centers formerly thriving and dominated by elevated household practices were transformed after 1989 into ... "central peripheries".

4. CONCLUSIONS

In conclusion, the following aspects can be observed in relation to the core-periphery Romanian development model, namely:

- peripheries are the product of the cores (not not other way around);
- peripheries are waste products ("excess") centers, hosting both the poorest segments of the population and the richest;
- spatial segregation of both the rich and the poor periphery is absolute and irreconcilable;
- both rich and poor peripheries are dominated by isomorphic social and infrastructure structures and functions (the same type of habitat, the same social category, same lifestyle, the same level of utilities etc.);
- rich suburbs are the largest consumers of green spaces;
- poor peripheries represent the final filter of urban waste, the last step of the selection and ranking of recyclable waste;

- rich and poor peripheries record the largest difference of income levels, which are both standards-sample of wealth and social misery;

- perpetuating for a long time the two peripheral categories generates a chronic and atomic status, gradually coming out of the control of state authorities;

- both peripheries and cores are the result of political decisions taken over time and resulting in widening development gaps between groups of countries, states and citizens;

- persistence and proliferation of both types of peripheries, paralleling the uncontrolled and rapid process of concentration of wealth generates perpetual political instability and social convulsions until climax stage is reached.

Reaching this critical phase of human relationships logically, inevitably and irreversibly generates a process of "social reset" by violent means, having as the ultimate form the absolute and ultimate establishment of a new "social harmony".

REFERENCES

- [1] **Wallerstein, I.** (1974), *The Modern World System. Volume I: Capitalist Agriculture and the Origins of the European World Economy in the 16th Century*, Academic Press, New York, United States.
- [2] **Wallerstein, I.** (1980), *The Modern World System. Volume II: Mercantilism and the Consolidation of the European World-Economy*, Academic Press, New York, United States.
- [3] **Wallerstein, I.** (1989), *The Modern World System. Volume III: The Second Great Expansion of the Capitalist World Economy*, Academic Press, San Diego, United States.
- [4] **Wallerstein, I.** (2011), *The Modern World System. Volume IV: Centrist Liberalism Triumphant*, University of California Press, Oakland CA, United States.
- [5] **Bassett, D. S. et al.** (2013), *Task-based Core-Periphery Organization of Human Brain Dynamics*, PLOS Computational Biology, Volume 9, issue 9, 2013.
- [6] **Holme, P.** (2005), *Core-periphery organization of complex networks*, Physical Review E, Volume 72, issue 4, 2005.
- [7] **Krugman P.** (1991a), *Increasing Returns and Economic Geography*, Journal of Political Economy, 99, pages 483-99.
- [8] **Krugman P.** (1991b), *Geography and Trade*, MIT Press, Cambridge, United States.
- [9] **Chen, Z., Lu, M., Xu, Zheng** (2008), *Core-Periphery Model of Urban Economic Growth*, Available at: http://www.sef.hku.hk/events/conference/jes2010/paper/3_Lu_Ming_CorePeriphery_Model_of_Urban_Economic_Growth-final.pdf, Last accessed July 12, 2014
- [10] **Thompson, M. J.** (n.d.), *A Decayed Core and Its Periphery. A Marxian Contribution to Urban Economics*, New York City Housing Authority, NY 10007, Available at

https://www.academia.edu/1510455/The_DecayedCore_Periphery_Model_A_Marxian_Contribution_to_Urban_Economics, Last accessed: July 12, 2015.

- [11] **Molnar, E., Maier, A., Ciangă, N.** (1975), *Centre și arii de convergență din România* [Convergence centers and areas in Romania], Studia Universitatis Babeș-Bolyai, Geographia, Cluj-Napoca.
- [12] **Surd, V.** (1977), *Geografia dezvoltării și a decalajelor economice contemporane* [Geography of development and contemporary economic discrepancies], Editura Presa Universitară Clujeană, Cluj-Napoca.
- [13] **Surd, V.** (2001), *Geodemografie* [Geodemography], Editura Presa Universitară Clujeană, Cluj-Napoca.
- [14] **Surd, V.** (2002), *Introducere în geografia spațiului rural* [Introduction to rural space geography], Editura Presa Universitară Clujeană, Cluj-Napoca.

[15] **Surd, V.** (2009), *Geography of Settlements*, Editura Presa Universitară Clujeană, Cluj-Napoca.

[16] *** *Centre and Periphery, Urban Renaissance-The Restored Appeal of Inner Cities*, Goethe Institute, Available at: <http://www.goethe.de/kue/arc/dos/dos/sls/zup/en9009642.htm>, Last accessed July 7, 2015.

[17] *** *Mersul trenurilor* [The Train Schedule of 2014], Available at www.sighet-online.ro, Last accessed: July 7, 2015.

[18] *** (1968), *Legea nr. 2/16 februarie 1968 privind organizarea administrativ-teritorială a României* [Law nr. 2/16th February 1968 regarding the administrative-territorial organization of Romania], Marea Adunare Națională, România.