

**Universitatea din București**  
**Facultatea de Sociologie și Asistență Socială**  
**Departamentul de Sociologie**

**REZUMATUL TEZEI DE ABILITARE**

**ABSTRACT**

**Social networks and organizations**  
**(Rețele sociale și organizații)**

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## Abstract

This Thesis of Habilitation introduces the most important original scientific achievements and merits, the major directions in the development of the academic career as well as the arguments which show the capacity of coordinating research groups and implementing research projects.

My main research streams, illustrated by this thesis, contribute to the understanding of *how* and *to what degree* social networks affect the accumulation of academic prestige inequalities and the transnational circulation of remittances. Specifically, the thesis presents the main research results and activities in relationship with: a) the impact of coauthorship networks on academic scientific productivity and performance, under the context delineated by the research-teaching oriented organizations (*i.e.* universities); b) the impact of social transnational networks on the circulation of ideas, social values and material resources, controlling for the organizational and institutional arrangements which facilitate the emergence and the development of transnational social ties.

So far, I have employed a social research methodology preponderantly of a quantitative substance, even if the qualitative methods have not been disregarded. Social network analysis, secondary data analysis, semi-structured interviews and institutional analysis are but a few of the research methods employed by my ongoing or completed research projects. Moreover, in the empirical data analysis process, I have made use of a wide palette of software packages, such as: SPSS, Mplus, Mlwin (for the analysis of the attribute social data sets), UCINET, visone, Pajek (for the quantitative analysis of network data sets), EgoNet, VennMaker, Gephi (for the qualitative analysis of networks), RSiena, Igraph, statnet and other R code packages (for the visualization and analysis of dynamic networks).

Social data sets have been statistically modeled using: *structural equation modeling for causal inferential testing* (*e.g.* regression model family, econometric modeling, factor analysis modeling) with one or more dependents, either observable or latent variables. Where applicable (*e.g.* social data with multilevel structure), *multilevel regression models* have been tested. Additionally, by the use of *statistical models having social networks as dependent variable*, I have explored network dependencies between tie variables (*e.g.* *homophily, reciprocity, transitivity* etc.) as well as endogenous variables (tie

configurations) and exogenous variables (attributes of actors embedded in the networks).

*Statistical models with matrices as predictors* have been tested using algorithms based on permutations (e.g. multiple regression quadratic assignment procedure). I have also used *exponential random graph modeling* with non-Markov assumptions (for modeling single network observations) and *stochastic actor-oriented modeling* (SAOM models) with Markov and continuous-time assumptions for modeling network dynamics.

My research interests as well as the courses conducted at the Sociology Department (University of Bucharest) merge at least three subject areas: *sociology of organizations*, *sociology of science* and *mathematical sociology*. At the same time, my major research methodology generally employed in my research activity is *social network analysis* (Wasserman and Faust 1999). In terms of approaches or research strategies, I have applied both the *methodological nationalism* (i.e. it assumes national states are the social context within a social phenomenon or process occurs) and *transnational methodology* (i.e. it redefines the national state as a unit of analysis)<sup>1</sup>. Specifically, methodological nationalism is employed in the analysis of the factors associated to academic prestige, while transnational methodology is applied to the analysis of the structural factors affecting the resource and idea circulation supported by transnational social networks.

Until now, my the scientific outputs and results have been reported in journals and books with high international visibility, produced by prestigious publishing groups such as *Nature*, *PLOS One*, *Springer*, *DeGruyter* etc. Additionally, my professional achievements have been validated by several awards, such as: the University of Bucharest award for *the most prestigious research paper in social sciences* (2017); the Romanian Executive Agency for Higher Education, Research, Development and Innovation (UEFISCDI) awards, i.e. two prizes for publishing papers in ISI index journals, red area (2015, 2016); the A.D. Xenopol award from the Romanian Society for Historical Sciences (2015).

My research work meets scientific and social, economic and cultural criteria of relevance. Precisely, the work I bring forth on *the factors which impact on the academic prestige inequalities* contributes to and empirically informs national and European policies in the area of education and scientific research. At the same time, my studies on

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<sup>1</sup> For a detailed discussion on *methodological nationalism* and *transnationalism studies*, see Faist (2012).

*the structure and effects of demographic enclaves and social transnational fields* produce relevant scientific knowledge for European migration and integration policies.

The memberships in internationally complex multi-sited and multi-cultural research projects as well as the constant enrolment to international professional courses, workshops and seminars (given by top 500 Shanghai ranked universities) have provided me with an updated *state of the art* knowledge on the subject areas I work within. Moreover, the continuous development of my sociological expertise is also enhanced by the research collaborations I have with researchers and academics embedded in highly prestigious universities, such as: ETH Zurich (Swiss Federal Institute of Technology in Zurich), University of Groeningen, Autonomous University of Barcelona, University of Konstanz, Sciences Po Paris. These international collaborations are clearly indicated, for instance, by the research proposals I have submitted to different project calls available with the 2020 Horizon Program, or by the ongoing research projects I am involved in.

The above presented landscape has effects and consequences on my teaching / knowledge transfer activities. The information I circulate and disseminate during the academic courses I conduct is always updated and allows for a nexus between my students and the novel theories and methodological approaches in the field - the academic courses I conduct within the Sociology Department of University of Bucharest: *social network analysis, sociology of organizations* and *organizational behavior*. The quality of my teaching activity was validated, in 2017, by the Bologna Professor award from the Romanian National Alliance of the Student Organizations (ANOSR).

My research interests and directions will be further developed in the future with the support of the research groups I currently coordinate: GraphNets (*the research group on graphs and social networks*), Rorbits (*the research group on transnational social networks*) and *r-ADAR* (the former SoNAR group for the analysis of relational data sets). These research groups are institutionally embedded in the Research Institute of the University of Bucharest (ICUB) or in the Faculty of Sociology and Social Work (University of Bucharest). In parallel, the nexus with the international research agenda will be supported by the ongoing scientific collaboration with internationally competitive research groups such as *egolab-GRAFO* (Autonomous University of Barcelona), *the Max Planck Institute for the History of Science (MPIWG)* or the network research group of the Autonomous University of Aguascalientes in Mexico.