

ALEXANDRU BĂNICĂ AND IONEL MUNTELE – RESILIENCE AND TERRITORY, 248 PP., TERRA NOSTRA, IAȘI, 2015, ISBN 978-606-623-056-8

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Abstract. The article is a review of the book “*Resilience and territory. Conceptual operating and methodological perspectives*”, by Alexandru Bănică and Ionel Muntele, placed within the framework of placing resilience at the core of research.

Key words: resilience, territory, sustainability, book, Alexandru Bănică, Ionel Muntele

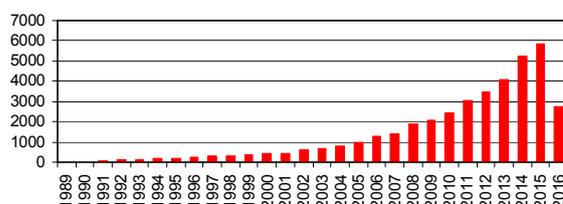
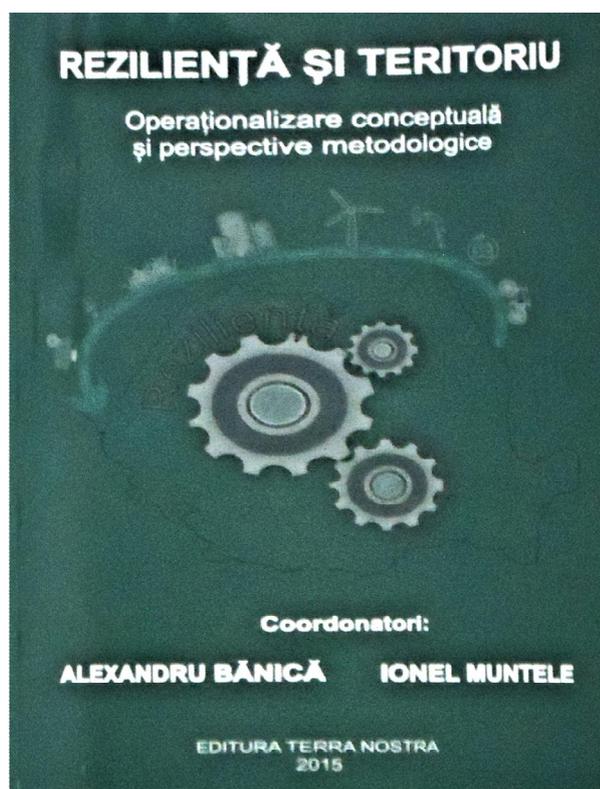


Fig. 1. The increasing number of publications indexed with Thomson-Reuters dealing with resilience (Web of Science data).

Although the modern interpretation emerged in the 70's (Bănică and Muntele, 2015; Petrișor *et al.*, 2016), the concept of resilience seems to attract more and more the attention of specialists from different fields. A simple analysis of data from the Web of Science (Lipitakis and Rivalle, 2016) reveals the constantly increasing total number of publications (Fig. 1), but also the diversity of fields that are using the concept (Fig. 2).

“Resilience and territory. Conceptual operating and methodological perspectives”, coordinated by Alexandru Bănică and Ionel Muntele, published by Terra Nostra in 2015.

The book consists of ten chapters; the first one is a theoretical one, aimed at producing a conceptual refinement of resilience; the next eight are case studies, aimed at measuring resilience at different spatial scales (national to local) from particular perspectives (demography, energy, transportation, sewerage, metropolitan areas, urban, infrastructure, and green corridors), and the last one concludes over the territorial analyses carried out within the previous eight case studies.

Although all the chapters are very interesting case studies, the analysis will focus on the first chapter and treat all the others, dealing with the operational side of resilience, as a unit.

The first chapter, making about one third of the book, explores the origin of the concept, showing its origin in the 1800's in material sciences, but concludes that the modern understanding originates in the works of ecologists (Holling, 1973). Starting from this modern understanding, the authors analyze the particular interpretations in technical sciences, psychology, ecology, social and economic sciences, and geosciences. The concept is explained from a systemic perspective, and in relationship to the thermodynamic understanding of equilibrium, especially through the lens of adaptive cycles and panarchy (Gunderson and Holling, 2001).

A particular attention is devoted to similar and related concepts, including robustness, absorption capacity, adaptability, and transformability, but

also to its relationship with vulnerability. Several principles of resilience are also derived. The presentation of resilience ends with analyzing its relationship with sustainability; the authors start by presenting the two concepts as complimentary, but make very interesting points referring to the differences, according to which *“the approach of resilience is more sustainable than the one of sustainability, opposing long-term benefits to short-term efficiency when the probability of confronting hazards increases”*, and, therefore, resilience is the key to managing an imbalanced world instead of balancing it through sustainability.

A special attention is devoted to the territorial resilience, considered the spatial component of resilience, distinguishing several territorial levels: community and/or region, and urban. At the end of the chapter, the authors ensure the transition to the next chapter by presenting the premises for turning resilience into an operational concept. Finally, the authors review the approaches to resilience in the Romanian literature.

The next chapters represent territorial analyses “glued” together by the fact that resilience becomes an operational concept and is measured. Some of the analyses (demography, energy, transport, vacuum sewerage, metropolitan areas, or urban infrastructure) cover the entire national territory, while others (urban resilience, green corridors) use Iași as a case study. All of them are structured as self-standing articles.

As the authors notice in the concluding chapter, some of the approaches overlap, some do not, showing the fact that resilience is, among others, a multifarious

concept, and some differ, emphasizing the need for a conceptual refinement. In the end part of this chapter the authors show, among others, the value of resilience in analyzing territorial networks, connecting territories, fluxes, and networks, risk assessment, analysis of geographic landscapes. Further research can include multi-scale approaches, and space-time analyses where only one dimension is kept constant.

The volume also includes a preface by Professor Irina Ungureanu, and excerpts from the reviews of Professors Ioan Ianoș, Sorina Voiculescu, and Adrian Grozavu, all emphasizing the theoretical and methodological value.

In summary, the book is a valuable contribution to the field; some of its key features leading to this conclusion include, without limiting to: (1) from a theoretical perspective, a complex, trans-disciplinary and systemic analysis of the concept, including its timeline and relationship with other important concepts, including sustainability, and (2) from a practical perspective, resilience becomes an operational concept used in multi-scale analyses carried out from different perspectives; most of them are the first attempts of mapping the resilience of the Romanian territory. Furthermore, the analyses presented in the book are a starter for future research, and also an example. Last at not least, the results of these analyses can substantiate

future urban and territorial policies, especially in the framework presented in the beginning: research aimed at meeting the societal need for more resilient territories, particularly in the context of the effects of global changes.

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