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ONLINE DOCUMENTATION FOR EMERGING SUBJECTS IN GEOGRAPHICAL RESEARCH: THE URBAN BIOREGIONS

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Abstract

The aim of this paper was to present the challenges and suggest solutions in online documentation on emerging topics in fields concerned with the territory. To reach this aim, we chose the topic of urban bioregions in Romania. Lack of scientific literature produced in Romania about urban bioregions proved that the topic was suitable to explore as to describe the research process. This research was conducted at the Faculty of Geography, Babeș-Bolyai University, in Cluj-Napoca. We established the following steps: to identify papers on the topic from the international literature; to make a selection of the most relevant ones according to the definition of the urban bioregion; to identify case studies in Romania, considering the case studies described in the international literature; to describe the challenges and solutions in the documentation process. The research material consisted of a detailed description of the documentation process realised on the topic of urban bioregions. Results showed that conducting research on an emerging topic required a flexible, innovative attitude in data gathering and assessment process, as well as knowledge from related research fields. Moreover, in this case, of researching urban bioregions in Romania, it was not recommended to limit the survey to academic research papers, but to consider further online sources.

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1. Introduction

In the study of Regional Geography, various types of regions are approached with students, both through theory and practice (i.e., case studies). Students' competence level to identify specificity features of places and regions is crucial, especially when using online information for research on a certain topic (Magdaş et al., 2018). In this process, of identifying territorial specificity features and geographical processes, the professor's supervision and feedforward is a key issue for increasing learning efficiency (Dulamă & Ilovan, 2016).

Similarly, to previous research, we started from the premise that the student's level of competence in Geography was a key variable in the correct assessment of information quality and in information use (Ilovan et al., 2018; Ilovan, 2019), besides access to valuable web sources on a certain topic. Student's level of competence in the field is even more important if the approached topic is an emergent one. Therefore, for this research, we selected a student (the third author of this paper) based on his high competence level in Geography, demonstrated in previous face to face activities.

His strengths were the transversal skills (oral communication, critical thinking, good identification and processing of information, good use of bibliographic references) and the competences specific to geography: data interpretation (planning and landscaping for development); space / field orientation; a good understanding of geographical processes; analysis / description of a geographical system; field mapping; territorial planning and development; elaboration of geographical studies.

Another variable, besides the student's competence level, was the topic. In comparison to prevalent topics in Regional Geography, we chose an emergent one in research and practice, at the international level and more so for Romania. The topic is the *urban bioregion*. Addressing global and local problems as well, such as "climate change, resource depletion and environmental degradation, food system vulnerability, and food insecurity" (Harris et al., 2016, p. 71), *bioregionalism* is a cultural and social movement where the urban bioregion concept developed from environmental roots (Fanfani & Duži, 2019).

Focusing on creating more resilient and attractive settlements, bioregionalism was defined by various traits, as it "represents a diverse flow of concepts and ideas" (Fanfani & Duži, 2019, p. 2). These concepts and ideas include that of urban bioregion, sustainability, participative processes, fair resource management, urban-rural reciprocity, governance, community, etc. Bioregions are generally defined as "areas that share similar topography, plant and animal life, and human culture" (Harris et al., 2016, p. 71). However, the definition of the urban bioregion is complex and not so easy to grasp in a quantitative framework, as it is "a community centred regionally polycentric - civic organization and willingness" (Fanfani & Duži, 2019, p. 2). The concept of urban bioregion was assessed primarily as a model to aspire to and work for than as an already achieved aim:

"a model of re-framing the local development according to a self-relied approach. Here, the urban bioregion is mainly featured as a 'choral' economic system (Becattini, 2015), based on the territorial heritage, the latter being conceived either as environmental endowments and social contextual skills and knowledge. In this way the urban bioregion is also aimed to set conditions for the unfolding of processes of endogenous and placed-based development, a multi-purpose model underpinned by

circular (Fanfani, 2018) and import replacing economies (Jacobs, 1984)” (as cited in Fanfani & Duži, 2019, p. 6).

Or

“[...] a bioregional shaped economic scheme, especially rooted on the creation of reciprocity relationships between the citizens, protection and valorization of the local resources and heritage, in the framework of urban-rural mutuality” (Fanfani, 2018, p. 66).

Local, regional and global scales intersect in an urban bioregion, as in any type of region. However, because the creation of an urban bioregion is considered a participatory, bottom-up process and due to the peculiar attention given to fair networking at the local level and justness in all societal dimensions (i.e. social, economic and environmental), the balance proposed and created within urban bioregions is therefore challenging in both practice and theory for all interested stakeholders and researchers as well:

“A balance based on fairness, local participative and deliberative democracy, communitarian resources management and relying on a local market that connects in a selective and active way to the global markets inputs” (Fanfani, 2018, p. 63).

To sum up, bioregions have been conceptualized as integrated socio-territorial systems that include several components (economic, political, agro-environmental and related to the living) (Poli, 2017) and may be the ideal scale at which sustainability can be established in urban planning (Harrill, 1999).

Concerning teaching practices, the concept of bioregions has been introduced in the curriculum in many universities and community colleges in the United States to improve the quality of undergraduate education (MacGregor, 2013) and is regarded as the best way to conceive a community in teaching the theory and practice of communitarianism either in class (Ingalsbee, 1992) or in field courses (Fawcett, 2005).

Starting from this emerging research topic – the urban bioregion – a concept which is not elaborated enough upon in Romania, we conducted research on the working procedure – online research only – of a master student at the Faculty of Geography of Babeş-Bolyai University, in Cluj-Napoca, Romania. Also, the subject underlines the need for people’s continuous education for democratic societal practices and development, at various spatial levels, and for a contribution of universities to inclusive solutions (Albulescu & Albulescu, 2014, 2015).

2. Problem Statement

Starting from the premises that this subject is emerging in Romania and that there are no studies conducted by Romanian researchers, we asked ourselves if in Romania there are areas that have the characteristics of a bioregion, which correspond to the descriptions in the specialized literature abroad. We also found that students, even at the master’s level, have difficulty documenting a given topic. For students to develop the competence of documentation and information processing, we proposed to a master student to look for information on this subject. The purpose of his documentation was to create a solid information base and, starting from this, to evaluate whether in Romania there is openness and tendency to outlining the concept of urban bioregionalism. The data acquisition was made under certain constraints: the more recent the chosen subject is, the more increases the level of difficulty, challenge amplified by the restrictive conditions faced due to the health and societal crisis caused by COVID-19.

3. Research Questions

The research questions of this study are the following: How can university students conduct research on emerging topics in science and practice related to the territory using only online resources? What are the steps they go through while searching for sources? How do they select the most relevant sources for defining and describing the urban bioregion? How do they identify case studies in Romania that fit into the concept of urban bioregions? How do they primarily process the results? How does the professor guide the student?

4. Purpose of the Study

The aim of this paper is to analyse the research strategies and the applied data processing methods, to present the identified challenges and solutions in online documentation on new or emerging topics in fields concerned with the territory. We discovered the lack of scientific literature produced in Romania about urban bioregions and this proved to be an adequate topic to explore in order to describe the process of researching it under what we considered restrictive circumstances: an emerging topic and only online documentation.

5. Research Methods

Research stages. In the first stage, which unfolded from March to the end of May 2020, one M.Sc. student (third author) was asked to carry out online research on the topic of urban bioregions under continuous supervision and feedback from his professor (first author). We chose the online environment for research due to two reasons. First, the topic of urban bioregions is an emerging one, both in theory and practice. Thus, it was most probable that any approaches to the theme were registered in the online environment. Secondly, the online research was carried out during severe lockdown conditions, when face to face interaction in Romanian universities and libraries was forbidden, to prevent the spreading of the COVID-19. In a second stage we analysed the products of his research: a research diary and texts regarding case studies in Romania.

The Procedure. The collection of data about the strategies used in online documentation and their processing was done by the student in a solicited diary. This diary came in the form of a file and an archive with all documents used in the process. The content of the student documentation process described in the diary was analysed by the method of discourse analysis. We collected data through interviews as well, questions addressed to the student, online. We also considered the stages of a traditional research process, drawing on the research experience of authors in the field of urban, rural, and regional studies.

The research material consists of the student's diary text, the archive of documents collected by the student, the tables of synthesized data, as well as of the argumentation of choosing sources, and of the student's answers to the interviews. Specific tools of Educational Sciences were used to process research data (Magdaş, 2018).

6. Findings

6.1. Presentation of the documentation strategy created by the student and of the results obtained by applying it

Our research showed that the student created a strategy for researching the topic only online. He created a data research structure, for synthesis and conclusions which entailed three stages:

(i) *Familiarization with the notion of bioregionalism, then moving on to urban bioregionalism.*

This first step was the most important because the notions which defined this concept led to the realization of the search strategy for information and synthesizing it. The research base helped to understand the concept and then to establish keywords or topics on which the student performed the searches. This information base was created through works from the Italian academic environment, which is among the pioneers of research in bioregionalism, respectively urban bioregionalism (Fanfani, 2018; Fanfani & Duží, 2019; Poli, 2015). The guidance made by the teacher consisted in recommending bibliographic sources, discussing the terms by phone and online to verify their correct understanding by the student.

(ii) *The actual research included the following steps:*

a. searching by keywords in Romanian was done with the Google search engine to identify various sources in Romanian media. This search was carried out in hope of finding a number of researchers at national level who would be interested in this concept, but the student did not expect an expert scientific community in this field given that this concept was relatively new and little spread worldwide, according to the initial information provided by the tutor. The used key words / phrases were: “urban bioregion”, “metropolitan area”, “regional development”, “bioregionalism”, “rural-urban development”, “rural-urban connection”, “rural-urban development strategies”, “rural-urban environmental evolution”, “territorial dynamics” and “rural-urban dynamics” (in Romanian: bioregiune urbană, zonă metropolitană, dezvoltare regională, bioregionalism, dezvoltare rural-urban, conexiune rural-urban, strategii de dezvoltare urban-rural, evoluția mediului rural-urban, dinamica teritorială și dinamica dintre rural-urban). The results were web pages that contained information about the following: urban area, urban planning, urban strategies, urban development, etc. All this indicates that the phrase “urban bioregion” (in Romanian: bioregiune urbană) is not used in the Romanian online environment.

b. searching for academic sources by using keywords in Romanian. Using the phrase “urban bioregion”, a search was performed with the Google Academic engine. The search returned no work containing this phrasing in its title. Only sources about bioregions were found. This subject is extremely scarcely mentioned in Romanian scientific papers and they have a relatively different object of study (cf. Delcea, 2014, which also mentions the critical spirit of the Italian academic environment on contemporary development strategies and a theoretical bioregional concept in the purpose of seaside towns and regions development).

c. searching by English keywords in international scientific databases and mass media. Scientific articles or media were searched using the keywords “bioregionalism”, “bioregion”, “urban bioregionalism”, and “urban bioregions”. The Web of Science (WoS) database was interrogated using two keywords: “bioregion” and “urban bioregion”. These searches have yielded results for the international scientific

community. According to WoS records, the search for papers on the topic of bioregion generated 891 results. The used keyword was “bioregion”. Considering Web of Science categories, ecology was the category with the highest number of scientific papers (32% of the results). Between 10 and 15% were the following: environmental sciences (14%), marine freshwater biology (13%), and biodiversity conservation and zoology (almost 12% each). The category of physical geography includes about 6% of the total number of such articles, while fewer than 5% were based on the following: environmental studies (4%), water resources (2%), geography (1.6%) and regional urban planning (1.4%). From the mentioned categories, the most represented ones or those connected with the field of geography were listed. One can notice the small percentage of geography and urban planning related research on the topic of bioregions.

A second search, this time using the keyword “urban bioregion”, generated 40 answers, which, according to WoS categories, fall in the following: ecology (27.5%), environmental sciences (20%), and with 12.5% each agriculture multidisciplinary, environmental studies and evolutionary biology. Out of the remaining categories, the ones related either with the field of geography or with studies on the urban area included 5% (meaning 2 papers) of the generated results on the topic: biodiversity conservation, geography, regional urban planning and water resources. Other categories, selected according to the above, included only one such paper. It was the case of: construction building technology, demography, environmental engineering, and physical geography.

Here, the student identified one highly cited paper (121 citations), from the field of ecology and physical geography, published in 2016, in *Global Ecology and Biogeography*, on cities as hotspots for threatened species, presenting the impact of urbanization on animal and plant species, and on biodiversity conservation in the urban areas of Australia (Ives et al., 2016). Out of the 40 titles, 23 were selected for in-depth analysis of their concepts and case studies.

The student concluded that, according to the WoS results, the topic of urban bioregion was present in the scientific literature of Australia, the U.S.A., Canada, the U.K., Germany and Italy and learned about the main subtopics approached: a change in attitudes and lifestyles that would solve the environmental crisis, environmental stewardship, environmental health issues, the sustainability of the built environment, partnerships for sustainability between the city and the hinterland, protection of farmland against urbanization, restoration of ecological services, conservation of natural heritage, healthy and fair urban bioregions supported by place-based social approaches, sustainable food systems, urban community gardens, eco-architecture, etc.

d. in-depth search in Romanian using the above-mentioned keywords. The first searches, based on student’s understanding of this concept and on his personal perspective about regional development in Romania, generated a network of concepts associated with this subject. The student conducted a search on specific topics (i.e., reconnection of urban and rural environment, urban-rural cohesion, rural and urban environment in the context of regional development, urban-rural development strategies), and extracted relevant information, which touched on the subject of urban bioregionalism, even if it was not the authors’ focus or intention in those materials. The keywords used in Romanian corresponded to those used in English. The student divided the searches into two important categories, namely searches for academic sources and searches in online media. In the next part of this paper, only the searches for academic sources are detailed.

e. searching for academic sources in the Romanian scientific literature, by related keywords.

From the perspective of academic sources, information based on related keywords was found relatively easily, with 15 sources being identified. The searches were based on keywords such as “rural-urban connection”, “rural-urban development strategies”, “rural / urban issues”, “rural / urban evolution”, and “metropolitan areas”. These articles came from various fields of study: from the study of territorial dynamics (Pintilii et al., 2012), to economic fields (Furdui et al., 2011; Antonescu & Popa, 2014), architecture (Delcea, 2014), agriculture (Ungureanu et al., 2013), tourism (Răcășan, 2015; Răcășan et al., 2016; Răcășan, 2018), but especially from the field of geography (Nemeș & Serac, 2012; Săgeată, 2008; Stoica et al., 2010). In these works, however, the concept of urban bioregion was not found, through definitions or examples, only tangential treatments of the subject were attempted.

(iii) Analysis and selection of academic sources and texts from the Romanian scientific literature

a. selection of scientific articles based on reading the title, abstract and introduction or certain subchapters which were related to information already known. What prevailed in this part of the search was the relatively short time in which articles were found that could be related to urban bioregionalism. The knowledge acquired by the student, concepts and keywords (territorial reconnection, functionality and sustainable development at regional level, interdependence and complementarity between urban and rural environment, the need for a social identity with common objectives), which defined the concept of bioregionalism, were used to identify useful articles only by title, abstract and introduction.

b. detailed analysis of the accumulated information was the most difficult part of all the documentation. It was applied only to selected articles based on title, abstract and introduction. As most of the information did not refer directly to bioregionalism, slow text processing was needed to identify information that indirectly led to useful data.

c. formulating conclusions / decisions. The student considered that he understood quite well the concept of “urban bioregions” so that, through analyses of the information, making connections with the informational base related to bioregionalism, his own conclusions appeared as personal perspectives on the works. The information was selected, synthesized, processed, and restructured to reach his own conclusions.

6.2. Analysis of the strategy used by the student

One can see a staged learning process, using only information accessible online. This process was the most time consuming, as short but relevant information was extracted from each article. The student found that in some papers, the first pages were lacking useful information, whereas in some chapters there was a different approach to the topic that was relevant. As an example, the work of Hartel et al. (2014) was quoted, a study based on the perception of the importance of the natural environment for rural development. Although at first there was no specific link with bioregions, the analysis and conclusions of this article provided information on important aspects of the rural environment, in terms of both natural resources and socially, all in the context of rural development. This paper highlighted the importance of the natural environment as a resource, along with the social relations among citizens and their perception of the future. These aspects bring together the communities under a shared rural identity, which facilitates the drawing of common development objectives in connection with other communities.

From an overall perspective, the student categorized his documentation process as a real challenge in many ways. There were many aspects that imposed difficulties in collecting information, in synthesizing them and achieving an overall picture related to the concept of “urban bioregionalism” at national level. A difficulty arose from the fact that this subject was not sufficiently treated in the Romanian literature. The difficulty of the searches was accentuated by the complexity of the subject, through its connections with other concepts tackled by the scientific community, such as: population dynamics in relation to urban-rural environments, the issue of functional structure between urban and rural areas, urbanization in rural development, regional development strategies, the concept of metropolitan area, etc.

6.3. Student’s processing of the results identified in the Romanian mass media (online mass media and web pages of some initiatives and projects)

Using keywords such as the notion of urban bioregion and the economic and social relations of society, a series of subtopics were established (Table 1), based on which the student identified good practices that reconnected rural and urban milieus throughout Romania. The structure of the search topics was a complex one, the student having in mind a series of factors that would provide him with as much valid information as possible. Initially, the search was carried out only for the region of Transylvania, but it soon became necessary to expand it to national level, in order to find enough information on the given topic. The subtopics were synthesized separately. For each subject, at the professor’s request, the student wrote the motivation for his choice (Table 1) and exemplified (Table 2).

The first topic had a general character (Table 1) and was as close as possible to the basic notion in order to observe how familiar the Romanian society was with this concept. It started from a paradigm frequently used in international literature. This concept was the connection of the rural and urban environments, the dependence of the first on the latter and the interconnections between the two: “Cities and towns require resources from beyond their geographical boundaries, but rural communities also take advantage of modern infrastructure and services provided in an urban setting” (Hammond et al., 2017, p. 481). These three notions were initially the search engine for good practices at national level and provided the results that were closest to the basic notion (bioregionalism), but their number was relatively small. In the case of this search process based on general characters, information was found in various fields, from agriculture, tourism, transport, but the more the subject was niched on keywords, the more information was obtained. The student found that instead of looking for a general topic such as “reconnecting the rural with the urban from an economic point of view”, a specific search such as “example of a program to support local producers in rural areas” or “farmers can sell their products to the city” gave a precise result, with detailed information. He noticed that the volume of information increased as he narrowed the search spectrum; this made it difficult to synthesize information data, a large part of the topics not being relevant, although they were suggested by the search engine.

The following topics were specific (sub-topics defined by the student), being based on the main components of the society and the economic and social relations between them: crafts, transport infrastructure, metropolitan areas, peri-urban agriculture, agricultural and agro-industrial parks, urban agriculture and reducing pressure on the rural environment (Table 1). The student documented on the topic of urban bioregions and was able to categorize the related subtopics. These were motivated and the

argument was based on concrete examples in Romania. In addition, the student distinguished between information obtained from academic sources and online media. Thus, he found that:

“Contrasting specialized literature that touched on the subject and provided more information directed to general studies, which offered solutions or theoretical concepts, in terms of information found in the online environment, the situation was completely different. In the case of media articles, we can no longer talk about theoretical concepts or solutions, but of examples of good practice among citizens or local governments, all in order to encourage such initiatives. At the same time, we find a lot of information that keeps the society up to date with the big projects launched by the administrations to put pressure and enable their realization” (M. Marin).

Due to the fact that in the media the character of the information is completely different regarding the scientific topics touched (the media articles being more focused on mentioning concrete examples of good practice), and diversified, the searches were much more detailed, with many more topics and good results, both quantitatively and qualitatively.

Table 1. Relevant subtopics for Romanian urban bioregions

Category	Subtopics	Motivation in choosing the subtopic
General	relations between rural and urban environments	Key concepts: connection, relation, dependency - general character; - (the) initiating search for information in Romania; - identifying the degree of familiarity in Romanian society with these urban-rural relations; - offering the identification of good practice examples in Romania.
Specific	crafts	Present interest for resuming traditional crafts in the urban area. The movement of crafts from rural to urban environments, first through products, then through practices.
	transport infrastructure	Present interest for developing efficient transport as well as environmental-friendly transport means and routes.
	metropolitan areas	Romanian metropolitan areas are still being built at present and environmental issues, despite important, are problematic when implementation is realized.
	periurban agriculture	Landscape changes due to the urban sprawl. Emerging initiatives and raising interest for alternative short food supply chains which connect the urban with the rural. It is in trend with urban citizens' raising interest for gardening and subsistence agriculture.
	agricultural / agro industrial parks	This endeavour tackles the situation of small-scale farmers in the proximity of urban settlements and their limited access to the market, offering solutions.
	urban agriculture and reducing pressure on the rural environment	Reducing urban pressure on the rural environment and supporting the practices and products of rural areas, by capitalizing on the disused spaces through urban agriculture, through marketing the products from the rural to the urban.

Table 2. Good practice examples regarding Romanian urban bioregions

Subtopics	Case studies/examples
Crafts	<ol style="list-style-type: none">1. “Increasing the visibility of authentic folk crafts by creating authentic cultural promotion products, representative for Romanian cultural creation” (part of Braşov Metropolitan Area Project, in collaboration with Asociația Creatorilor de Artă tradițională și Contemporană Braşov [Braşov Association of Traditional and Contemporary Art Creators], Inspectoratul Şcolar Judeţean Braşov [Braşov County School Inspectorate], and Muzeul Judeţean Braşov [Braşov County Museum]) (Braşov Metropolitan Agency, 2017).2. A project to promote producers in Bistriţa-Năsăud County with various areas of activity, ranging from food products to crafts. The products are promoted online and sold in the centre of Bistriţa, encouraging small rural producers to sell their products “in town”. The project was carried out by Asociația „Produs în Bistriţa-Năsăud” [“Produced in Bistriţa-Năsăud” Association], and the fair takes place every Saturday (after harsh restrictions caused by the COVID-19 human health crisis) (Farcaşiu, 2020).
transport infrastructure	<ol style="list-style-type: none">1. Biking trails that connect surrounding Transylvanian Saxon villages with the city of Sighişoara. This project is intended for tourism and strives to facilitate the flow of financial resources from Sighişoara to neighbouring Saxon villages (Zaharia, 2015).2. Facilitating the connection between localities by Asociația Metropolitană Sibiu [Sibiu Metropolitan Association]. The main objective of this association is to “solve the problem of public transport between localities, [this] being an obstacle in the flow of materials and products” (Şelimbăr Town Hall, 2019).
metropolitan areas	<ol style="list-style-type: none">1. Oradea Metropolitan Area, with a series of ongoing projects, which specify in detail the objectives, budget, and stakeholders. A good example is “CityRegion.Net The role of cities in integrated urban development”, aiming to develop work plans and public policy recommendations to improve cooperation between cities and other local communities / peripheral communes (Zona Metropolitană Oradea, n.d.).2. Development Strategy of Constanța Metropolitan Area: “The development direction envisages the development of Constanța Metropolitan Area as a competitive multifunctional centre of Romania and the main economic polarizer in the Black Sea region, taking into account the sustainable development of the entire area and reducing current development disparities among the 14 localities that make up the growth pole” (Zona Metropolitană Constanța, 2010).
periurban agriculture	<ol style="list-style-type: none">1. Asociația pentru Susținerea Agriculturii Țărănești [The Association for Supporting Peasant Agriculture] promotes a project through which, in exchange for an annual or monthly amount (based on subscription), the proximity producer delivers weekly baskets of vegetables, fruit or other food products to consumers in Timișoara, Cluj, Arad, Oradea and Odorheiu Secuiesc (Business Ideas, 2014).2. Strategy for distributing products from rural communities to urban areas. This project was carried out by two young people from Cluj-Napoca who took products from neighbouring rural areas and sold them in urban areas through a mobile store (Dascălu, 2020).
agricultural / agro- industrial parks	<ol style="list-style-type: none">1. The agro-industrial park of Leţcani, which aims to develop an outlet market for local and regional agricultural producers. The park offers selling points for over 300 agricultural producers in Iași and for dozens of companies and agricultural companies in the Republic of Moldova and Ukraine (Adevărul, 2012; Iași County Council, 2014, 2016).2. Creation of an agricultural park by taking over a disused farm near the city of Suceava, owned by the Academy of Agricultural Sciences and the County Council. The arrangement of this park shall be conducted with the contribution

reduction of the pressure on the rural environment (capitalization of the disused spaces through urban agriculture, capitalization of the rural products)	of private financiers who are interested in such projects. This initiative proposes that the products should no longer be sold as raw material, but as processed products to produce added value. The goods are intended not only for local consumption, but also for other areas (Agricultura Românească, 2011; NewsBucovina, 2013).
	1. Asociația Efectul Fluture [The Butterfly Effect Association] proposes the redevelopment of disused industrial parks into urban gardens with multiple functionalities (Țugui & Diaconu, 2015). This idea was inspired by the project “Grădinărescu”, developed by Kaufland in cooperation with the Asociația și Institutul de Cercetare în Permacultură din România [Association and Research Institute in Permaculture of Romania] for community urban gardens, transforming the roofs, outdoor parking lots and warehouses of the supermarket chain into cultivated green spaces with vegetables, thus reducing the pressure on rural areas (WallStreet, 2017).
	2. Creation of marketplaces and covered market halls in the outskirts of Timișoara, designated for local farmers and producers (Dichiș, 2016).

7. Conclusion

Starting from an emerging research topic that is not documented enough in Romania, we conducted a research on the way of working – documentation only online – of a M.Sc. student, at the Faculty of Geography, Babeș-Bolyai University, under the guidance of a supervisor. This survey showed that in case of emerging topics of interest, with scarce scientific research to the topic, the process of data gathering with abstract terms leads to little success. The survey of mass media and further online platforms showcased the existence of practical approaches on the topic of urban bioregions in the everyday reality, the presence of the phenomenon in the preoccupation of citizens, civil society and local administrations, but yet lacking the theoretical background and study of the subject by the academia in Romania.

The delay in researching this topic by Romanian academia needs and can be partly compensated by the international publications. For that, students need adequate language skills. In addition, students' counselling by professors is a key issue for successful research due to students' need for initial feedforward on the topic and permanent counselling during the research process. Moreover, in doing research about emerging subjects, one should take in account other scientific fields, which might approach and reflect the topic of interest.

The research process of emerging topics is time consuming. The students should develop competences of speed-reading. Further on, basics for online research, the access to required technology, working internet connections, and relevant scientific data bases, should be provided.

One limit of the study is that this research was conducted using only two languages: English and Romanian. It may be that more relevant results for the international perspective would have been obtained if more languages would have been used (French, German, Spanish, Italian, etc.).

Even though conducting research on an emerging topic shows similarities with the conventional research process (using key words, extending or narrowing down search concepts, addressing connected topics, etc.), it requires a flexible, innovative attitude in the data gathering and assessment process. Further on, it became clear that, in this case, of researching urban bioregions in Romania, it is not recommended to limit the survey to academic research papers, but to consider further online sources, while keeping in mind a critical analysis of the identified and gathered data.

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