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> Lucrările Seminarului Geografic Internațional International Geographical Conference Le Colloque Géographique International

"Dimitrie Cantemir"

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24 octombrie 2020

Universitatea "Alexandru Ioan Cuza" din Iași Facultatea de Geografie și Geologie Departamentul de Geografie

Iași, 2020

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#### Programul manifestărilor/ Conference schedule /Programme de la conférence

#### Lucrărilor Seminarului Geografic Internațional

"Dimitrie Cantemir"

#### Ediția a XL<sup>-a</sup>

#### Web-Conference

#### 24 octombrie 2020

#### Universitatea "Alexandru Ioan Cuza" din Iaşi

#### Facultatea de Geografie și Geologie

#### Departamentul de Geografie și Fundația Alumni

Conferința va fi susținută on-line pe platformele CISCO WEBEX și ZOOM Fiecare moderator va genera o invitație on-line pentru participanți.

The conference will be held online on the CISCO WEBEX and ZOOM platforms Each moderator will generate an online invitation for participants.

La conférence se tiendra on-line sur la plateforme CISCO WEBEX et ZOOM Chaque modérateur générera une invitation en ligne pour les participants.

### 09<sup>30</sup> – 9<sup>45</sup>: Deschiderea conferinței/ Opening of the conference/Allocutions d'ouverture : Corneliu Iațu - prorector al "Universității Alexandru Ioan Cuza din Iași, Președinte al comitetului de organizare a Seminarului Geografic Internațional "Dimitrie Cantemir" Adrian Grozavu – Decanul Facultății de Geografie și Geologie Lilian Niacșu – Directorul Departamentului de Geografie

#### 945 – 1150 : Comunicări în plen/Communication in plenary/Communications en plénière

11<sup>50</sup> - 12<sup>00</sup> : Pauză/Pause/Pause

#### 12<sup>00</sup> – 13<sup>50</sup>: Comunicări pe secțiuni/Communications by sections/ Communications à sections

13<sup>50</sup> – 14<sup>00</sup>: Pauză/Pause/Pause

#### 14<sup>00</sup> – 15<sup>50</sup>: Comunicări pe secțiuni/Communications by sections/ Communications à sections

15<sup>50</sup> – 16<sup>00</sup>: Pauză/Pause/Pause

#### 16<sup>00</sup> – 17<sup>50</sup>: Comunicări pe secțiuni/Communications by sections/ Communications à sections

#### 16<sup>00</sup> - 17<sup>50</sup>: Workshop/Atelier

### Comunicări în plen/Communication in plenary/Communications en plénière Orele/Hours/Heures 9<sup>45</sup> -11<sup>50</sup>

Corneliu Iațu ("Alexandru Ioan Cuza" University of Iași, Romania): Les 40 ans du Colloque géographique international «Dimitrie Cantemir»: entre le passé et le futur, quel présent ?

Andrés Rodríguez-Pose (London School of economics, Great Britain): Jouer au golf avec Trump: capital social, déclin, inégalités et croissance du populisme aux États-Unis

> Sebastian Bourdin (Normandie Bussiness School, France): *Covid-19 : regard de géographe en dix questions*

## Secțiunea/Section/Session Geomorfologie și Pedologie/Géomorphologie et pédologie/ Geomorphology and Pedology

#### Moderators/Modérateurs: Prof. univ.dr. Adrian Grozavu, Conf.univ.dr. Lilian Niacşu Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Angela Canțir, Alexandru Gherasi, Ion Taran (Institutul de Ecologie și Geografie, Republica Moldova): Assessment of the morphometric characteristics of the Cubolta-Republic of Moldova;

2. Cristian-Dan Lesenciuc, Cristian Secu ("Alexandru Ioan Cuza" University of Iași, Romania): Importanța altitudinii pentru evoluția ciclurilor de îngheț - dezgheț din Masivul Rarău;

3. Dorina Micu (West University of Timisoara, Romania): Identifying vulnerability to erosion of the area located at the contact between Lipovei Hills and Timis - Bega Plain;

4. Valeriu Stoilov-Linu, Mihai Niculiță, Dan Dumitriu ("Alexandru Ioan Cuza" University of Iași, Romania): Geomorphological planform typology of the Bistricioara River channel (Eastern Carpathians, Romania);

5. Tatiana Bunduc, Iurie Bejan, Petru Bunduc (Institute of Ecology and Geography, Republic of Moldova): *A case study on land use change analysis using GIS in the Tigheci Hills, Republic of Moldova;* 

6. Bogdan Alexandru Burican (Colegiul Național "Ștefan cel Mare" Hârlău, Iași, Romania): Landslides in the upper basin of the river Bahlui -Pârcovaci area;

7. Mențiu Gabriela (Liceul Teoretic Carei, Romania): Changements de certains éléments environnementaux de la Plaine de Carei, induits par les travaux d'hydro-amélioration de 1871 à nos jours;

8. Alexandra Petronela Stoleriu, Iuliana Gabriela Breabăn ("Alexandru Ioan Cuza" University of Iași, Romania): *Monitoring crop phenology using spectral indices in NE part of Romania;* 

9. Elena Diana Bobric (Institute of Interdisciplinary Research - ICI-UAIC, CERNESIM, Romania), Eugen Rusu ("Alexandru Ioan Cuza" University of Iași, Romania), Nicoleta Melniciuc-Puica, Iuliana Gabriela Breabăn ("Alexandru Ioan Cuza" University of Iași, Romania, Institute of Interdisciplinary Research - ICI-UAIC, CERNESIM, Romania): *The assessment of soil organic matter quality in NE Romania based on FTIR spectroscopy;* 

10. Ionuț-Costel Codru, Lilian Niacșu ("Alexandru Ioan Cuza" University of Iași, Romania): Analysis of gully headcut distribution within the Moldavian Plateau (the sector between Siret and Prut rivers);

11. Doru-Toader Juravle ("Alexandru Ioan Cuza" University of Iași, Romania): *Considerații paleogeografice privind evoluția zonei de WEDGETOP est-carpatic la nord de Valea Moldovei (Podișul Moldovei)* 

## Secțiunea/Section/Session Riscuri climatice și gestiunea resurselor de apă/ Climatic Hasards and Management of Hydrological Resources/ Hasards climatiques et Gestion des ressources hydrologiques

#### Moderators/Modérateurs: Conf.univ.dr. Lucian Sfîcă, Conf.univ.dr. Ionuț Minea Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Lucian Sfîcă, Mihai Bulai ("Alexandru Ioan Cuza" University of Iași), Vlad-Alexandru Amihăesei, Constantin Ion ("Alexandru Ioan Cuza" University of Iași), Marius Ștefan ("Dunărea de Jos" University of Galați): *Weather conditions (with focus on UV radiation) associated with COVID-19 outbreak;* 

2. Alexandru Antal (University of Craiova, Romania): *Mapping annual precipitation and temperature in Romania using Ordinary and Simple kriging;* 

3. Petru Bacal, Iurie Bejan, Viorica Angheluță, Pavel Țîtu (Institute of Ecology and Geography, Republic of Moldova): *The actual pecularities and problems of water use in the Botna river basin* 

4. Andra-Cosmina Albulescu, Ionuț Minea, Daniel Boicu, Daniela Larion ("Alexandru Ioan Cuza" University of Iași): Comparative multi-criteria assessment of hydrological vulnerability. Case study: drainage basins in north eastern part of Romania;

5. Ana Jeleapov (Institute of Ecology and Geography, Republic of Moldova): *Flood runoff and land cover changes in the Cubolta river basin;* 

6. Gabriela Moroșanu, Liliana Zaharia, Gabriela Ioana–Toroimac (University of Bucharest): Multivariate analyses of the morphometry – lithology – suspended sediment load relationships in Jiu river basin (Romania);

### Secțiunea/Section/Session Geografie regională și a mediului/Regional and environmental geography/ Géographie régionale et environnementale

#### Moderators/Modérateurs: Prof.univ.dr Ioan Cristian Iojă, Lect. univ. dr. Adrian Ursu Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Ana-Maria Opria, Lucian Roșu, Corneliu Iațu ("Alexandru Ioan Cuza" University of Iași ): *LEADER axis - an inclusive or selective instrument for the development of rural space in Romania?;* 

2. Mihai Răzvan Niță, Ana Maria Popa, Simona Grădinaru (Centre for Environmental Research and Impact Studies, University of Bucharest): *Evaluating the quality of local strategies for sustainability and resilience in Romanian cities;* 

3. Cristina-Gabriela Mitincu, Ioan-Cristian Iojă, Constantina-Alina Hossu (University of Bucharest): *The use of interview method: environmental planning and regulation processes for growing greener cities* 

4. Ioan Eustatiu Marinescu, Gheorghe Curcan (University of Craiova, Romania): *Recreational quality of urban green spaces. Case study – Craiova;* 

5. Constantina-Alina Hossu, Ioan-Cristian Iojă, Cristina-Gabriela Mitincu, Andreea Niță, Simona-Raluca Grădinaru (University of Bucharest, Centre for Environmental Research and Impact Studies, Romania): *Collaborative planning in environmental plans: practitioners' perspectives;* 

6. Ana-Maria Popa, Diana Onose, Athanasios Gavrilidis, Simona Gavrilidis, Raluca Slave (University of Bucharest, Centre for Environmental Research and Impact Studies, Romania): *Potential contribution of small green infrastructure in improving quality of life at urban level;* 

7. Ruxandra Ionce ("Alexandru Ioan Cuza" University of Iași, Romania): Aspects concerning the ecological coherence in the mountain area of the Bistrița River catchment in the Suceava County;

8. Silvia Kostovska, Andrey Herzen (Institute of Geography, Russian Academy of Sciences. Russia): Complex poly-scale studies of the evolution of the historic-geographical landscapes of the nothern and north-western Black Sea regions;

9. Gabriela Adina Moroșanu, Marta Cristina Jurchescu, Mihaela Sima, Cătălin Ciubuc (Institute of Geography of the Romanian Academy, Romania): Vers une base de données des zones minières de la région Sud-Ouest Olténie pour améliorer la résilience aux risques hydromorphologiques induits;

10. Remus Prăvălie (University of Bucharest, Romania): Forest perturbations across the planet. A major pathway of global land degradation;

## Secțiunea/Section/Session Turism, patrimoniu si biodiversitate/ Tourism, Heritage and Biodiversity/ Tourisme, patrimoine et biodiversité

#### Moderators/Modérateurs: Lect. univ. dr. Mihai Bulai, Lect. univ. dr. Oana-Mihaela Stoleriu Orele/Hours/Heures 12<sup>00</sup>- 16<sup>00</sup>

1. Florentina-Cristina Merciu, George Merciu, Loreta Cercleux, George Secăreanu (University of Bucharest, Faculty of Geography, Interdisciplinary Center of Advanced Research on Territorial Dynamics): *European Capital of Culture Program: challenging cultural identity and the socio-economic impact on Sibiu city;* 

2. Pal Tapas (Raiganj University, India): Sustainable Thinking: The root of Sustainable Development;

3. Antonio-Valentin Tache, Oana-Cătălina Popescu, Alexandru-Ionuț Petrișor (National Institute for Research and Development in Constructions, Urbanism and Sustainable Spatial Development URBAN-INCERC, Bucharest, Romania): *Ecological networks: a spatial planning concern in Romania;* 

4. Bogdan-Constantin Ibănescu, Mihail Eva, Alexandra Gheorghiu ("Alexandru Ioan Cuza" University of Iași, Romania): *The Impact of Accessibility and Economic Performance on Tourism-induced Resilience ;* 

5. Alexandra Cehan, Ema Corodescu-Roșca, Mihai Bulai, Lucian Roșu ("Alexandru Ioan Cuza" University of Iasi, Romania): *Collaboration particularities in the tourism area of Neamt County, Romania;* 

6. Cezara Dulce, Ionel Muntele ("Alexandru Ioan Cuza" University of Iași, Romania): *Tourism of higher* education: component of the educational tourism in the city of Iasi. Study case: Erasmus International mobilities of Ion Ionescu de la Brad University of Agricultural Sciences and Veterinary Medicine and Grigore T. Popa University of Medicine and Pharmacy;

7. Iuliana Gabriela Breabăn, Nicoleta-Nona Ardeleanu ("Alexandru Ioan Cuza" University of Iași, Romania): *Comparative analysis on climate change adaptation of two Natura 2000 sites in the Middle Siret sector;* 

8. Marius-Eduard Filip, Gabriel Camară ("Alexandru Ioan Cuza" University of Iași, Romania): L'impact du tourisme sur le paysage urbain et sur les habitants de Paris;

9. Raluca-Iulia Ursulin, Gabriel Camară ("Alexandru Ioan Cuza" University of Iași, Romania): Le tourisme culturel-religieux dans le comté de Suceava;

10. Ana-Maria Istrati ("Alexandru Ioan Cuza" University of Iași, Romania): The evolutionary profile of tourist arrivals in hotel accommodation structures: from lockdown to a new chance!;

11. Petronela Natalia Perțea (Liceul Teoretic Nicolae Iorga, Nehoiu, Romania): *Bazinul superior al râului Slănic* - *Potențial turistic;* 

12. Rodica Lupu (Secondary School No. 19, Braşov, Romania), Liliana Zaharia (University of Bucharest, Romania): *Possible Types of Tourism in Localities with Mineral Waters in Brasov County;* 

13. Daniela-Andreia Damian, Andrei Săndulache, Lucian Roșu, Mihai Bulai, Ema Corodescu-Roșca, Alexandra Cehan ("Alexandru Ioan Cuza" University of Iași, Romania): *Dezvoltarea comunitară a destinației Neamţ. De la percepții la realități geografice;* 

### Secțiunea/Section/Session Geografia Populației/ Geography of Population/ Géographie de la population

#### Moderators/Modérateurs: Prof.univ.dr. Ionel Muntele, Lect.dr. Radu Dimitriu Orele/Hours/Heures Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Radu Dimitriu ("Alexandru Ioan Cuza" University of Iasi, Romania), Petre Bunduc (Institul de Ecologie si Geografie Academia de Științe din Moldova, Republica Moldova): *Aspecte structurale privind emigrația populației din Moldova de la vest de Prut;* 

2. Vicențiu Gabor, Octavian Groza, Alexandru Rusu ("Alexandru Ioan Cuza" University of Iasi, Romania): Spatio-temporal coordinates of road accidents in Romania – exploratory analysis;

3. Octavian Groza, Andreea Rodica Birta ("Alexandru Ioan Cuza" University of Iasi, Romania): Divorce, a regional business. A comparative study between Moldova and Transylvania regions;

4. Andreea-Mădălina Cozma (căs. Gania), Octavian Groza ("Alexandru Ioan Cuza" University of Iasi, Romania): *Demographic vulnerability – between geography, demography and sociology;* 

5. Victoria Buza, Octavian Groza ("Alexandru Ioan Cuza" University of Iași, Romania): Spatial dimensions of illiteracy in Romania, 1992-2011;

6. Firțală Gabriel, Toma Adrian ("Alexandru Ioan Cuza" University of Iași, Romania): Territorial differences in the relationship between the demand and supply of medical services in Vrancea county;

7. Ana-Maria Agape ("Alexandru Ioan Cuza" University of Iași, Romania): Dynamique du réseau scolaire du département de Neamţ dans 1990 et 2020;

## Secțiunea/Section/Session Geografia Așezărilor Umane/ Géographie de l'habitat humain/Geography of Human Settlements

### Moderators/Modérateurs: Prof.univ.dr. Martin Simard, Prof.univ.dr. Violeta Puşcaşu Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Martin Simard (Université du Québec à Chicoutimi et CRDT, Canada): Urbanité et centralité: le paradoxe des villes moyennes périphériques;

2. Mihai Răzvan Niță, Diana Andreea Onose, Cristian Ioan Ioja, Athanasios Alexandru Gavrilidis, Ana Maria Popa (University of Bucharest, Romania): *Playing with sustainable planning - analyzing the integration of playgrounds in the urban green infrastructure of Bucharest;* 

3. Violeta Pușcașu ("Dunărea de Jos" University of Galați, Romania): Habitat inclusif et résidences intergénérationnelles - une nouvelle réalité dans la géographie des établissements;

4. Adrian Covăsnianu, Liliana-Elena Covăsneanu (Moldova Vrea Autostradă, Iași, Romania): Mobilité et transport urbain au sud de la municipalité de Iași. De l'indifférence administrative aux solutions civiques;

5. Gheorghe-Gavrilă Hognogi, Ana-Maria Pop, (Universite "Babeș-Bolyai" of Cluj-Napoca, Romania), Alexandra-Camelia Potra-Marian (West University of Timisoara, Romania): *L'utilisation des bases des données géographiques dans la digitalisation de l'administration publique;* 

6. George Țurcănașu ("Alexandru Ioan Cuza" University of Iași, Romania): A test of territorial resilience: the urban hierarchy and the dynamics of creative industries in Romania

7. Bianca Elena Solomon, Mihai Bulai, Zahra Alabrash ("Alexandru Ioan Cuza" University of Iași, Romania): Urban renewal of the historical city center of Iași. Gentrification from a post-socialist perspective;

8. Manuel Foșalău, Oliver-Valentin Dinter, Adrian-Mihai Cimpu, Lucian Roșu: ("Alexandru Ioan Cuza" University of Iași, Romania): *The role of public transport in the modelling of urban and periurban structures. Challenges of the post-socialist transition in the Metropolitan Area of Iași;* 

9. Oliver-Valentin Dinter, Adrian-Mihai Cimpu, Cristian-Manuel Foșalău, Lucian Roșu ("Alexandru Ioan Cuza" University of Iași, Romania): New Residential Complexes and Conflicts in the Urban Landscape of Iasi Municipality;

10. Adrian Mihai Cimpu, Lucian Roșu, Oliver Dinter, Manuel Foșalău ("Alexandru Ioan Cuza" University of Iasi, Romania): Using deep learning to determine land use dynamic in post-socialist city of Iași;

11. Anca – Teodora Bulai Phd Candidate, Octavian Groza ("Alexandru Ioan Cuza" University of Iasi, Romania): *Roads quality as a key factor in reducing time-response of first responders (firefighters)*;

## Secțiunea/Section/Session Geografie Economică/ Economic Geography/ Géographie économique

#### Moderators/Modérateurs: Prof.univ.dr. Jozsef Benedek, Lect.univ.dr. Alexandru Rusu Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Jozsef Benedek, Kinga Temerdek-Ivan, Iulian Holobâcă, Ibolya Török, Iulia Hărănguş ("Babeş-Bolyai" University, Cluj-Napoca): *The state of the sustainable development in Romanian regions;* 

2. Alexandru Rusu ("Alexandru Ioan Cuza" University of Iasi, Romania): The Iraq War Logs. Too soon for history, too late for geography?;

3. Veronica Railean, Petru Bacal (Institute of Ecology and Geography, Republic of Moldova): *Structure and dynamics of economic activities in the Northern Development Region of the Republic of Moldova;* 

4. Silviu Marius Suditu (Școala Gimnazială Vadu Pașii, Buzău, Romania): *Turkey's New Geopolitics in the Middle East, between imperialism and democracy;* 

5. Elena Aurica Mihai (Liceul Tehnologic "P.S.Aurelian" Slatina, Romania): Importanța industriei în Slatina pentru dezvoltarea localității;

### Secțiunea/Section/Session

## Dezvoltare locală durabilă, inovare socială și reziliență teritorială/ Sustainable local development, social innovation and territorial resilience/Développement local durable, innovation sociale et resilience territoriale

#### Moderators/Modérateurs: Prof.univ.dr. Jean-Paul Carrière, Prof.univ.dr. Abdelillah Hamdouch, Prof.univ.dr. Corneliu Iaţu Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Jean-Paul Carrière (Université de Tours, France): *De l'utilité de la prospective stratégique pour construire le développement local durable. Leçons d'une expérience régionale en Centre-Val de Loire (France);* 

2. Simona Grădinaru, Cristian Iojă, Gabriel Ovidiu Vânău, Mihai Răzvan Niță (University of Bucharest, Romania): Integration of food security issues into county planning agendas;

3. Andreea-Loreta Cercleux, Florentina-Cristina Merciu, Elena Bogan (University of Bucharest, Romania, Interdisciplinary Center of Advanced Research on Territorial Dynamics): *Understanding the social innovation process in a small post-socialist industrial town: Fieni, Romania;* 

4. Marinela Rusu, Călin-Cornel Pop (Babeș-Bolyai University of Cluj-Napoca, Romania): Axes geographiques dans la logique du developpement regional soutenable;

## Secțiunea/Section/Session Identitate Teritorială și Dezvoltare/Territorial Identity and Development/ Identité territoriale et développement

#### Session Convenors: Associate Professor Ph.D. Oana Ramona Ilovan, Lecturer Ph.D. Marinela Istrate

### 1. A. Theory and Methodology for Researching Territorial Identities Moderators: Associate Professor Ph.D.Oana-Ramona Ilovan and Assistant Professor Ph.D. Luigi Mundula Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. Tiziana Banini (Sapienza University of Rome, Italy): Is It Possible to Develop a Methodology to Detect Territorial Identity? Some Preliminary Reflections;

2. Sander van Lanen (University of Groningen, The Netherlands): Territorial Identities and the Geography of Well-being;

3. Amalia Niță (University of Craiova, Romania): Urban Image Assessment as a Tool in Sustainable City Development;

4. Zoltan Maroşi ("Babeş-Bolyai" University, Cluj-Napoca, Romania): Recreating the Digital Image of the Derelict Parquet Factory of Rupea - Homorod, Romania;

# 1. B. Politics & Territorial IdentitiesModerators: Professor Ph.D. Octavian Groza and Lecturer Ph.D. Marinela Istrate<br/>Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

5. Octavian Groza ("Alexandru Ioan Cuza" University of Iași, Romania): Territory, Identity and Territorial Development – An Overall Approach

6. Ionel Boamfă ("Alexandru Ioan Cuza" University of Iași, Romania): 150 Years of Senatorial Elections in Romania (1866-2016)

7.Lisa Gohlke (University of Eastern Finland, Joensuu, Finland): *Political Mobilization through Populist Actors' Appeal to Territorial Identities in the Republic of Moldova* 

8. Marinela Istrate, Andreea Fedor, Corneliu Iațu ("Alexandru Ioan Cuza" University of Iași, Romania): European Citizens' Perception of Women's Involvement in Political Life. Evidence for Romania and Other Central and Eastern European Countries

### 2. A. Approaches to Crisis & Territorial Identities Moderators: Lecturer, Scientific researcher II, Ph.D. Florentina-Cristina Merciu and Ph.D. Student Andreea Fedor Orele/Hours/Heures 14<sup>00</sup>- 15<sup>50</sup>

9. Iwona Markuszewska ("Adam Mickiewicz" University of Poznan, Poland): Old Trees Cannot Be Re-Planted: When Energy Investment Meets with Farmers' Resistance;

10. Alexandru Banică ("Alexandru Ioan Cuza" University of Iași, Romania): A Territorial Approach to Disaster Management Capabilities;

11. Meike Fienitz (Leibniz Centre for Agricultural Landscape Research, Germany): Territorial Identity and Land Use Conflicts in the Urban-Rural Fringe: The Perspective of Stakeholders in Northern Germany;

12. Liliana Popescu, Cristiana Vîlcea, Cristina Șoșea (University of Craiova, Romania): Patterns of Depopulation and Urban Shrinkage for Small Towns. Oltenia (Romania) as Case Study;

### 2. B. Local and Regional Identities Moderators: Associate Professor Ph.D. Andreea-Loreta Cercleux and Associate Professor Ph.D. Marco Picone Orele/Hours/Heures 14<sup>00</sup>- 15<sup>50</sup>

13. Bogdan Păcurar (Cluj County Council, Cluj-Napoca, Romania): Postdecembrism. A Still Ongoing Urbanism Reality. Case study: Cluj-Napoca, Romania;

14. Luigi Mundula (University of Cagliari, Italy): Territorial Identity in the Digital Era. The Role of the Smart Communities;

15. Constantin-Alexandru Stoian, Alexandra Sandu ("Alexandru Ioan Cuza" University of Iași, Romania): *Local Identity and Suburban Development in Iași's Metropolitan Area;* 

16. Alexandra Apopei (Lazăr), Corneliu Iațu, Mihail Eva ("Alexandru Ioan Cuza" University of Iași, Romania): Analyse multicritere des disparites regionales en Roumanie pendant la periode 2000-2016;

#### 3. A. Development & Territorial Identities

### Moderators: Lecturer Ph.D. Alexandru Banică and Ph.D. Student Constantin Alexandru Stoian Orele/Hours/Heures 16<sup>00</sup>- 17<sup>50</sup>

17. Marco Picone (University of Palermo, Italy): *Touristification and Territorial Identity in the Inner City of Palermo;* 

18. Andreea-Loreta Cercleux (University of Bucharest, Romania): Graffiti & Street Art's Impact on the Local Identity. Case Study: Bucharest, Romania;

19. Ioana Alexandra Ciupe ("Babeş-Bolyai" University, Cluj-Napoca, Romania): Spatial Analysis of the Possible Economic Effects of Second Home Tourism. A Case Study: Apuseni Nature Park;

20. Paulina Tobiasz-Lis, Marcin Wójcik (University of Lodz, Poland): "The Village as a Place of..." Anchoring Territorial Identity of the Countryside. Examples from Poland;

### 3. B. Heritage and Territorial Identities Moderators: Assistant Professor Ph.D. Anca Tudoricu and Assistant Professor Ph.D. Sander van Lanen Orele/Hours/Heures 16<sup>00</sup>- 17<sup>50</sup>

21. Anca Tudoricu, Daniela Dumbrăveanu (University of Bucharest, Romania): Heritage Management and Territorial Identity Dissemination through Non-Formal Education Methods: Living Library and Cantastorie. Babel Project – A Case Study;

22. Florentina-Cristina Merciu (University of Bucharest, Romania): The Role of Visual Imagery in Interpreting and Documenting the Elements of Cultural Identity. Case Study: The Romanian Atheneum, Bucharest;

23. Harieta Sabol, Ștefan Purici ("Ștefan cel Mare" University of Suceava, Romania): "Built to Last". Defining Identity by the Statues of Czernowitz/Cernăuți/Chernivtsi;

24. Oana-Ramona Ilovan ("Babeş-Bolyai" University, Cluj-Napoca, Romania): Comics for Pioneers. Representations of Modernisation and Class Identities in Socialist Romania;

#### Sectiunea/Section/Session

## Les territoires de la vigne et du vin dans la mondialisation : approches spatiales, paysagères et par les acteurs

#### Moderators/Modérateurs: Professeur François Legouy, Professeur Stéphane Angles Orele/Hours/Heures 12<sup>00</sup>- 13<sup>50</sup>

1. François Legouy (Université de Paris 8, France): «L'internationalisation » de la viticulture française à l'aune de l'évolution de l'encépagement (1958-2017) ;

2. Alfredo Manuel Coelho (Bordeaux Sciences Agro, France): Les exportations européennes de vins vers les Etats-Unis : Quels impacts des taxes Trump et de la pandémie du Covid-19?;

3. Michel Réjalot (Université Bordeaux Montaigne, France): Le vignoble de Bordeaux : un vignoble en crise profonde;

4. Stéphane Angles (Université de Lorraine, France): *Le renouveau du monde viticole en Lorraine : des actions originales pour relancer un vignoble déclinant;* 

### Secțiunea/Section/Session Didactica Geografiei/ Didactics of Geography/ Didactique de la géographie Moderatori: Prof. dr. Mihaela Lesenciuc, Prof. Dr. Daniel Răduianu Orele : 12<sup>00</sup>-16<sup>00</sup>

1. Daniela Larion, Andra Cosmina Albulescu (Universitatea "Alexandru Ioan Cuza" din Iași): Aspecte metodologice ale activităților de predare și evaluare online pentru disciplinele geografice;

2. Ionel Boamfă (Universitatea "Alexandru Ioan Cuza" din Iași): Activitatea geografică ieșeană a lui Simion Mehedinți;

3. Mona Chiriac (Universitatea "Alexandru Ioan Cuza" din Iași): A relevant Geography. A case for teaching Geography throught the theme of Covid-19

4. Ion Stoica (Moreni, Romania): Lecție practică: Plan de desfășurare a excursiei școlare pentru o zi;

5. Viorel-Alin Marin (Colegiul Național "Nicolae Iorga", Vălenii de Munte, Romania): Valorificarea metodei proiectului în studierea mediului la liceu;

6. Mihaela Lesenciuc (ISJ Iași, Romania): Opționalul - partea flexibilă a Curriculum-ului Național;

7. Dorin Fiscutean, Mihaela Fiscutean (Colegiul Național Iași), Cătălin Baziluc, Ciprian Mihai (Liceul Tehnologic "Victor Mihăilescu Craiu", Belcești): *Proiectul ca metoda de evaluare si de formare a competentelor";* 

8. Crina Elefteriu (Colegiul Tehnic de C.F. "Unirea" Pașcani): *Feed-back-ul eficient în evaluarea competențelor și deprinderilor geografice;* 

9. Vasile Papaghiuc (Școala Gimnazială "Ion Ghica"), Lidia Papaghiuc (Liceul Teoretic "Al. I. Cuza" Iași): *Resurse on-line utile în pregătirea examenului de Bacalaureat;* 

10. Cecilia Chifu, Gabriela Boronia (Școala Gimnazială "Ștefan Bârsănescu" Iași): Utilizarea platformelor educaționale la disciplina geografie. Dezvoltarea învățării interactive și a învățării autonome;

11. Valentina Catalina Holic (Școala Gimnazială "Otilia Cazimir" Iași): Educația sustenabilă - o investiție în viitor;

12. Dana Elena Coman (Colegiul Pedagogic "Vasile Lupu" Iași), (Bogdan Coman - Școala Profesională "I. Teodoreanu" Victoria): *Procesul de învățământ în contextul educațional actual;* 

13. Mihaela Ichim (Liceul Waldorf Iași): Ora de bază în învățământul Waldorf și adaptarea acesteia la realitățile actuale;

14. Cornel Carpen (Liceul Tehnologic Economic "Virgil Madgearu" Iași), Irina Lupu (Școala Gimnazială "Aron Vodă" Aroneanu): *Exemple de bună practică pentru învățarea geografiei în sistem on-line sau la distanță;* 

15. Daniel Răduianu (Colegiul Pedagogic "Vasile Lupu" Iași): *Elemente de hidrografie întâlnite pe bancnotele lumii;* 

16. Valerica Beatrice Nica (Colegiul Tehnic "Ioan C. Ștefănescu" Iași): *Școala de vară – online- modalitate de interacțiune cu învățământul universitar;* 

17. Elena Ivan (Școala Gimnazială Vânători, com. Popricani): *Modalități de lucru cu elevii ce prezintă dificultăți de învățare;* 

18. Vasilica Leana Botezatu, Mihaela Diana Ciobanu (Colegiul Pedagogic "Vasile Lupu" Iași): *Exigențe ale procesului de instruire on-line și hibrid în ciclul primar. Contextualizări în predarea geografiei;* 

19. Valentina Farcaş (Liceul Teoretic "Miron Costin" Iași): *Dezvoltarea personalității elevului de gimnaziu prin activități extrașcolare;* 

20. Marnela Hadarag (Liceul Teoretic "Miron Costin" Iași): Scurtă incursiune în practicile educaționale de promovare a talentelor în școala românească;

21. Octavian Mânduț - titlu rezervat;

#### Participanți la secțiunea Didactica Geografiei fără lucrare:

1. Negrea Văcărița Margareta - Colegiul Național "Mihai	24. Rusu Mihaela - Școala Gimnazială "D.D. Pătrășcanu"
Eminescu" Iași;	Tomești, Iași;
2. Astefanei Manole Irina - Liceul Tehnologic "Petru	25. Costineanu Ichim Constantin - Scoala Gimnazială
Rareș" Tg. Frumos;	Scobinți, Iași;
3. Marcu Carmen - Colegiul Tehnic de C.F. "Unirea "	26. Costineanu Ichim Andreea - Colegiul Național "Garabet
Pașcani;	Ibrăilenu" Iași;
4. Ursache Alina Gabriela – Colegiul Național de Artă	27. Andon Olivia - Liceul Tehnologic Hârlău;
"Octav Băncilă" Iași;	28. Şfarc Elena Ancuța - Școala Gimnazială Bivolari, Iași;
5. Ghiurco Anca - Liceul cu Program Sportiv Iași;	29. Aparascai Andrei – Școala Profesionala Gheorghe
<ol> <li>Irimia Adina - Școala Gimnazială Buhalniţa;</li> </ol>	Burac, Vlăsinești, jud. Botoșani;
7. Teodor Iosef – Colegiul Tehnic "Mihail Sturdza" Iași;	30. Ursulica Teodora Estera - Colegiul Național "A. T.
8. Cernat Monica- Liceul Tehnologic Special "Vasile	Laurian" Botoșani;
Pavelcu" Iași;	31. Iuliana Petronela Damian - Palatul Copiilor Botoșani,
9. Vântu Monica - Liceul Tehnologic "Dimitrie Leonida"	Cercul de Orientare turistică;
Iași;	32. Tofan Elisabeta - Colegiul Național "Calistrat Hogaș"
10. Monica Popa - Colegiul Tehnic "I. C. Ștefănescu" Iași;	Piatra Neamț;
11. Gheorghița Constantin - Colegiul Tehnic de Electronică	33. Ionuț-Daniel Strătilă - Liceul "Alexandru cel Bun",
și Telecomunicații "Gh. Mârzescu" Iași;	Botoșani;
12. Stegariu Lorina Daniela Lorina Scoala Gimnazială	34. Andreea-Claudia Alcaziu - Școala Gimnazială
Slobozia;	"I.Gervescu" Săvinești, jud. Neamț;
13. Hadarag Marnela – Liceul Teoretic "Miron Costin" Iași;	35. Pădurariu Bogdan - Școala Gimnazială "Mihai Drăgan"
14. Albăstroiu Simona - Liceul Tehnologic Economic de	Bacău;
Turism Iași;	36. Enache Aida - Scoala Gimnazială nr.1 Concești, județul
15. Şipoteanu Anca – Colegiul Național Iași;	Botoșani;
16. Cucuteanu Stefania - Colegiul Tehnic "Gh. Asachi" Iași;	37. Florin Cazamir - Colegiul Național "Emil Racoviță"
17. Cojocariu Oana Petrinela – Școala Gimnazială Valea	Iași;
Seacă Iași;	38. Duca Maria - Carmen, Liceul "Gh.Ruset-Roznovanu",
18. Onofrei Simona – Liceul Tehnologic Vlădeni;	localitatea Roznov, județul Neamț;
19. Anastasiu Valentina - Școala Gimnazială Șipote Iași;	39. Mihaela Ilisei – Școală Gimnazială "Elena Cuza" Piatra
20. Chirilă Elena - Colegiul Național "Mihai Eminescu"	Neamţ, Școala Gimnazială Nr. 1 Comuna Zăneşti, județul
Iași;	Neamţ;
21. Iacob Pavel - Școala Gimnazială "Ion Creangă" Tg.	40. Rodica Grindei la Școala Gimnazială Nr.1 Stăuceni,
Frumos;	județul Botoșani;
22. Rău Mihaela - Școala Gimnazială Horlești, Iași;	41. Prisacariu Alin, Universitatea "Stefan cel Mare"
23. Acsinte Alina - Școala Gimnazială Erbiceni, Iași;	Suceava/Liceul "Dimitrie Cantemir" Darabani

#### WORKSHOP/ATELIER

### Județul Neamț - Master Plan de Turism – Instrumente pentru dezvoltarea unei destinații sustenabile/ Neamț County Tourism Master Plan - Tools for developing a sustainable destination/Master Plan du Tourisme du Département de Neamț - Outils pour développer une destination durable

#### Moderator : Lect.dr. Mihai Bulai, Asist.dr. Lucian Roşu Orele 16<sup>00</sup> -17<sup>50</sup>

O echipă de cercetare a Facultății de Geografie și Geologie, Universitatea Alexandru Ioan Cuza din Iași elaborează în prezent Master Planul de Turism al Județului Neamț 2020-2030. Documentul propune o viziune de dezvoltare bazată pe turismul lent, responsabil, pe o creștere durabilă a turismului nemțean, ca element de diferențiere și distincție în cadrul sistemului turistic național.

Întâlnirea își propune un dialog constructiv între cercetători și actorii teritoriali din Neamț pe tema posibilităților de a impune sustenabilitatea ca principiu central al viziunii de dezvoltare.

Întrebările care vor anima discuția vor viza sustenabilitatea componentelor sistemului turistic, modalitățile de operaționalizare ale conceptului de sustenabilitate, viziunea actorilor asupra marilor investiții sustenabile viitoare, modalitățile de implicare a comunității locale, rolul administrației publice în crearea de politici durabile.

În final, workshopul propune identificarea unor instrumente de lucru pentru actorii din turism pentru a dezvolta durabil destinația Neamț.

A research team of the Faculty of Geography and Geology, Alexandru Ioan Cuza University of Iaşi Romania, is currently elaborating the Tourism Master Plan of Neamţ County 2020-2030. The document proposes a vision of development based on slow, responsible, sustainable growth of tourism in Neamţ County, as an element of differentiation and distinction within the national tourism system.

The meeting aims at a constructive dialogue between researchers and territorial actors in Neamt on the possibility of imposing sustainability as a central principle of the development vision.

The questions that will animate the discussion will focus on the sustainability of the components of the tourism system, the ways of operationalizing the concept of sustainability, the actors' vision on future large sustainable investments, ways to involve the local community, the role of public administration in creating sustainable policies.

Finally, the workshop proposes the identification of working tools for tourism actors in order to sustainably develop the Neamt destination.

Une équipe de recherche de la Faculté de Géographie et de Géologie de l'Université Alexandru Ioan Cuza de Iași Roumanie, élabore actuellement le Master Plan (plan directeur) du Tourisme du Département de Neamț 2020-2030. Le document propose une vision du développement basée sur une croissance lente, responsable et durable du tourisme dans le territoire-cible, comme élément de différenciation et de distinction au sein du système touristique national.

La rencontre vise un dialogue constructif entre les chercheurs et les acteurs territoriaux de Neamt sur la possibilité d'imposer la durabilité comme principe central de la vision du développement.

Les questions qui animeront la discussion porteront sur la durabilité des composantes du système touristique, les modalités d'opérationnalisation du concept de durabilité, la vision des acteurs sur les futurs grands investissements durables, les moyens d'impliquer la communauté locale, le rôle du public l'administration dans la création de politiques durables.

Enfin, l'atelier propose l'identification d'outils de travail pour les acteurs du tourisme afin de développer durablement la destination Neamț.

## **REZUMATE/ABSTRACTS/RÉSUMÉ**

### Secțiunea/Section/Session Geomorfologie și Pedologie/Géomorphologie et pédologie/ Geomorphology and Pedology

#### Assessment of the morphometric characteristics of the Cubolta-Republic of Moldova

Angela Cantir, Alexandru Gherasi, Ion Taran Institutul de Ecologie și Geografie, Republica Moldova, angelamadan87@gmail.com

The morphometric characteristics of a territory is an important part in the research carried out in order to have a complete picture of its relief and specific features that have a role in assessing the stability of a certain territory in the development of exogenous processes. Morphometry and morphography are the main elements that can achieve a complete description of geomorphological conditions within a given territory. This article presents aspects regarding the morphometric parameters that are achieved with the help of GIS technology, with the help of the numerical model of the terrain the following morphometric parameters were achieved: altitude, slope inclination, slope exposure.

#### Identifying vulnerability to erosion of the area located at the contact between Lipovei Hills and Timis - Bega Plain

Dorina Micu

West University of Timisoara, Romania, micu\_dorina89@yahoo.com

The main objective of this paper is to analyze the characteristics of the relief: the morphometric parameters (hypsometry, the slope of the terrain, the slopes, depth and drainage density), the morphological parameters (curvature in plan and profile), but also the influence of geological composition, of soils and how the land use to assess susceptibility to erosion at the contact between Lipovei Hills and Timis - Bega Plain, using GIS technology. To achieve this goal, I have had as purpose: the precise delineation of the area of study, the achievement of geological mapping with scale 1:200 000, manual digitizing contours from 5 to 5 m using a topographic map with scale 1:25 000, which had the result obtaining digital terrain model and his implementation to realize the hypsometric map, the slope of the terrain map, the exhibition slopes map, the depth drainage map, the drainage density map, the curvature in plan map and the curvature in profile map, the mapping of soils and the land use map, on which was drawn the assess susceptibility to erosion map . Achieving this map had as a result identifying the existence of a risk of erosion due to the composition of geological study area: sand, gravel, clay red and loess Quaternary age and clay shale, sands and gravels of Neogene at altitudes exceeding 200 m and where slopes exceed 16 ° classes and where the slopes is northwest, and the depth is 80 m drainage density is about 3 km / km.

#### A case study on land use change analysis using GIS in the Tigheci Hills, Republic of Moldova Tatiana Bunduc, Iurie Bejan, Petru Bunduc

Institute of Ecology and Geography, Republic of Moldova, tatiana.i.popusoi@gmail.com

Over time, anthropogenic pressure and its effects have been found in the geographical landscape of the Tigheci Hills. More pronounced changes in land use have occurred in the last two centuries. This paper aims to conduct a large-scale study of land use change. In this way, was taken as a case study a territory with an area of only 13 km2, where are met the following classes of land use / coverage: urban, pastures and hayfields, forests, arable land, vineyards and orchards, and waters. This research used a series of topographic materials (topographic plans with a scale of 1:5000), statistical (Land Registry) and satellite (aerial photographs,

orthophoto planes and Landsat images). After the massive deforestation of the past, in the 1970s in Tigheci Hills were made a series of plantings in orchards, with fruit trees (especially apple and plum), which, after the 1990s, were abandoned, the land becoming even more vulnerable to torrential erosion and landslides.

#### Geomorphological planform typology of the Bistricioara River channel (Eastern Carpathians, Romania)

Valeriu Stoilov-Linu, Mihai Niculiță, Dan Dumitriu

"Alexandru Ioan Cuza" University of Iași, Romania, linu\_valeriu@yahoo.com

The Bistricioara River is located in the central part of the Eastern Carpathians, having a basin of 781 km<sup>2</sup>, and is a typical mountainous river, with a mean discharge of  $6.38 \text{ m}^3/\text{s}$ . The catchment range of altitude is 1300 m, between 1746 and 486 m.a.s.l., and it is located in an area with a mean temperature of  $5.2^{\circ}$  C and a mean annual rainfall of 719 mm. Cartographic sources were used to assess river channel migration. Topographic maps covering the period 1890-1984 and aerial imagery data covering the 1984-2012 period were used to map the Bistricioara channel for six periods (1890, 1920, 1960, 1984, 2005, 2012). Remote sensing images from the Google Earth database were used to assess changes with higher temporal accuracy for the period between 2005 and 2018. A photogrammetric DEM at 5 m resolution was used to map the valley and terrace extension, in order to evaluate the BRT classification (Rinaldi et al., 2013, 2016) of laterally confined and partly confined typology. Historical human interventions in the Bistricioara catchment at channel level are related to the usage of water for milling and for transporting harvested wood. Later, trough bridge and road construction, the river channel was encased in several sectors. After 1960 the water level of Izvorul Muntelui reservoir provides the local base level, a situation that favored the general incision of the channel upstream, and the aggradation downstream. The results show that: (i) channel migration, especially after 1960 was limited by the anthropic intervention along the channel, by imposing confinement through stabilizing walls especially for road embankment protection, (ii) before 1960 there was the extended use of water force for mills and wood, along the main channel or through water deviation along anthropic channels, (iii) the Bistricioara channel was assessed as alluvial single-thread type 7 (cobble-gravel material and riffle-pool morphology) with sectors of wandering (type 11) and pseudomeandering (type 12), (iv) channel bed elevation trends show degradation upstream of the confluence with Putna river, and aggradation downstream, Izvorul Muntelui reservoir water level influencing the aggradation which should be monitored, since in a mountainous area the space of channel migration is limited and this can have huge social implications.

#### Landslides in the upper basin of the river Bahlui -Pârcovaci area

Bogdan Alexandru Burican

Colegiul Național "Ștefan cel Mare,, Hârlău, Iași, România, buricanbogdan@gmail.com

The study of regional geography with special theme dedicated to *Landslides in the upper basin of the river Bahlui -Pârcovaci area* proposes an analysis on the knowledge of the main physical-geographical characteristics of the studied area, the main types and forms of relief and highlighting morphometric features, morphological and morphological features of this area, the use of the land in the study area. By choosing this topic, it was wanted to update and complete the geographical knowledge regarding the river basin of Bahlui upstream of Hârlău, less studied in the literature. We paid special attention to the physical-geographical aspects and the relations between the hydrological processes and the human communities in the area subject to research. The paper *"Landslides in the upper basin of the river Bahlui - Pârcovaci area"* is the result of research conducted during 1994-2014, with the aim of analyzing the current morphological element but also a morphohydrographic artery. It offers the interested party a complex landscape with intense morphodynamics. Evolving on a friable geological substrate, the valley has specific climatic conditions, imposed by the channeling of air masses along it, a motley carpet of soils and a vegetation in which the steppe and forest species of zonal type are mixed with the meadow azonal ones.

Hârlău and the neighboring area, is an old Romanian hearth in Tara de Sus, located in the contact area of the Suceava Plateau with the Moldavian Plain. It presents together with its surroundings a valuable tourist fund, because here, at the ford of Bahluiului-Hârlău, in the Middle Ages, it was the voivodship residence of the Musatins and for a time the capital of Moldova. This situation favored early developed urban settlements, a flourishing economy, heavily trafficked roads (road, railway), diversified agriculture due to the relief and various soils. From this interference of natural and anthropic elements arose a geographical complex or a landscape whose analysis must primarily highlight the links between the components. It is therefore a transition zone, of forest-steppe type. The field information activity was completed with a rich bibliographic study, recording a large number of specialized works. To these are added the study, interpretation and processing of topographic maps (1: 100,000, 1: 50,000, 1: 25,000), geological, geomorphological, hydrological maps, the study of aerial photographs or classical photographs. The field research resulted in the correct identification of landforms and specific soil types, as well as their relationship with the flora and fauna of the area within the biogeographic layers, water sources in the river basin of Bahlui upstream of Cotnari, in establishing their quality and the main sources of pollution in the study region. The study "Landslides in the upper basin of the river Bahlui - Pârcovaci area" completes the literature on the contact region between the Suceava Plateau and the Moldavian Plain and is a useful study for specialists who are concerned with land survey research, opening new paths of investigations.

## Changements de certains éléments environnementaux de la Plaine de Carei, induits par les travaux d'hydro-amélioration de 1871 à nos jours

Gabriela Mențiu Liceul Teoretic Carei, Romania, gabriela.mentiu@gmail.com

Le but de cette étude est l'analyse des changements de certains éléments environnementaux survenus dans la plaine de Carei, où au cours des derniers siècles de nombreuses tentatives d'améliorations hydrauliques ont été faites, certaines sans succès et d'autres ne se terminant au XXe siècle. En plus de la bibliographie, quelques photocopies des documents sont utiliées, d'où il ressort qu'une fois dans cette zone il y avait de nombreux marécages dans les zones interdunaires, comme une série de lacs. Pendant les périodes pluvieses, la circulation était difficile. L'eau courante avait un débit élevé. Pour cette raison, le problème de l'assainissement était déjà posé au XVIIIe siècle. Les premiers travaux ont consisté à attacher les marais aux interdunes en creusant des fossés, ce qui n'a pas apporté les résultats attendus. En 1875, un syndicat a été créé, qui pendant 50 ans a dirigé et financé les travaux de drainage et d'assainissement à travers le canal Horea-Valea Neagră. Concernant les changements produits dans le réseau hydrographique du territoire, nous mentionnons également certains changements survenus dans les habitats et les écosystèmes spécifiques. L'objectif principal de l'étude est de mettre en évidence les changements consécutifs aux travaux d'assainissement de la flore et de la faune de cette zone, ainsi que du microclimat et des sols. Ainsi, l'article analyse les causes et les conséquences de la disparition de certaines espèces végétales et animales de ces écosystèmes et habitats, ce qui a conduit à la perte d'informations génétiques spécifiques, que l'espèce a acquises, stockées et transmises. L'étude représente une étape préliminaire pour des analyses complémentaires sur l'impact des activités anthropiques sur les zones sableuses de la plaine de Carei.

#### Monitoring crop phenology using spectral indices in NE part of Romania

Alexandra Petronela Stoleriu, Iuliana Gabriela Breabăn "Alexandru Ioan Cuza" University of Iași, Romania, stoleriualexandra@yahoo.com

In recent years, the use of satellite data is very practical and it is a very powerful instrument for monitoring crop phenology and agriculture field management, but also for sustainable development of agriculture and to improve productivity. The study area is located in Iasi county, between 47°21′0.86″ N and 26°49′37.07″ E, maize and wheat being the most important crops grown in the region. The analyses were carried out in a cropland area located in NE of Romania characterized by continental climate (hot dry summers and cool winter). Soils are mainly chernozem (50.26%), followed by anthrosols (12.42%). The aim of this study was to understand the

phenological stages of the crops and to monitor the crops taking into account the Sentinel 2 time-series images and spectral vegetation indices. In order to achieve this, based on the specifics of the agricultural land use, was selected eight satellite images, for 2018 to monitoring vegetation changes. Spectral indices included in the analysis were: Normalized Differentiation Vegetation Index (NDVI), Normalized Difference Water Index (NDWI) and Adjusted Soil Vegetation Index (SAVI). The result obtained by monitoring these spectral indices can be useful to have healthier vegetation by expanding irrigation areas but also fertilization management.

#### The assessment of soil organic matter quality in NE Romania based on FTIR spectroscopy

Elena Diana Bobric<sup>1,2</sup>, Eugen Rusu<sup>1,3</sup>, Nicoleta Melniciuc-Puica<sup>2</sup>, Iuliana Gabriela Breaban<sup>1,2</sup> <sup>1</sup>Institute of Interdisciplinary Research - ICI-UAIC, CERNESIM, Romania, dianabobric@yahoo.com <sup>2</sup>"Alexandru Ioan Cuza" University of Iași, Romania <sup>3</sup>"Romanian Academy", Iasi Branch

Fourier transform spectroscopy with diffuse reflectance characterizes the composition of functional groups that offers potential for understanding relationships between SOM content and other components. Based on the complexity of the SOM due to the heterogeneous mixing of functional groups, the FTIR working procedures and the interpretation of the data separately require to establish the imprint of the SOM composition. The most important use of IR spectrometry is to identify and determine the structure of chemical compounds or for quantitative determinations because Infrared radiation is characteristic of certain functional groups. The purpose of this paper is to demonstrate the quality of soil organic matter and which of the two types of hydrophilic and hydrophobic functional groups influence the soil quality more from the Neamtu river basin. As a methodology used to identify and determine the quality of organic soil materials it is a non-destructive method and depending on the wavelength ( $\lambda$ ) (50 ÷ 1,000µm) and the wave number ( $\tilde{v}$ ) (200 ÷ 10 cm-1) it is a IR far removed (FTIR far-infrared). The differences that appear between the absorption bands were observed between the range 3000-2800cm -1 being directly related to the type of functional groups and the chemical connections in the soil that are influenced by (thickness of the horizon, soil type, texture, type of use). The peaks are in the range: 3000–2800 and 1740–1600 cm-1 is proportional to the organic carbon due to the vibration of different functional groups, such as stretching and bending O - H bonds in water or OH groups of phenols and alcohols or NH deformation extension C = N and aromatic group C = C, aromatic and carboxylic groups.

## Secțiunea/Section/Session Riscuri climatice și gestiunea resurselor de apă/ Climatic Hasards and Management of Hydrological Resources/ Hasards climatiques et Gestion des ressources hydrologiques

#### Weather conditions (with focus on UV radiation) associated with COVID-19 outbreak

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Respiratory infectious diseases are highly influenced by climate and feature seasonality, whose peak is December to February in the Northern Hemisphere. SARS-COV-2 produced consistent debate regarding the relationship between its emergence and weather conditions. Our study explored these conditions, expressed by three main parameters - ultraviolet radiation, air temperature and relative humidity - that characterized Hubei (China), the source region of COVID-19 pandemic, in November 2019-March 2020. During Covid-19 outbreak, the low amounts of UV radiation (down to -273 kJ m-<sup>2</sup> in January 2020) are associated with the early stage environmental survival of the novel coronavirus. As well, this period was characterized by a high relative humidity during peak hours of the day, and a positive air temperature anomaly (+1.7 °C in December 2019), which also favored the outdoor people mobility in winter. Based on Hubei analysis, a presumed optimal weather frame was set in order to identify other world regions with similar weather characteristics. In brief, the "Hubei weather profile" was recorded in those regions of COVID-19 outbreak in February 2020, such as northern Iran, Italy or Spain. Our results, which focused on the role of the UV solar radiation, could be used as a prediction tool for identifying the world regions with a higher risk of future faster increase in COVID-19 cases.

### Mapping annual precipitation and temperature in Romania using Ordinary and Simple kriging Alexandru Antal

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Lately, climate change has negatively affected all regions of the world. Romania is one of the many countries where precipitation and temperature have affected all ecosystems. Unfortunately, the national network of meteorological measurements in Romania is limited, requiring the use of other methods. A tool often used in climatology are spatial interpolation methods within geographic information systems. This study uses two geostatistical interpolation methods: ordinary and simple kriging to estimate annual precipitation and temperature in Romania over a period of four decades (1979-2019). The data represent daily series of observations at meteorological stations provided by the European Climate Assessment and Dataset (ECA&D). Interpolation methods were evaluated through cross-validation, Taylor diagram and two statistical indicators (root mean square and mean error). All analyses were performed using ArcGis Pro from ESRI and statistical program language R.

#### The actual pecularities and problems of water use in the Botna river basin

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This article is dedicated to evaluation of water use in the Botna river basin – one of the biggest tributary of the Dniester River in the limits of the Republic of Moldova. Botna river basin occupies a total surface of 1518 km<sup>3</sup> and includes areas of 5 administrative districts from the central and south-eastern part of the Republic. In the study are situated over 60 settlements, including only 2 medium and small towns (Căușeni and Căinari).

The study is based on the approaches and methodology proposed by the EU Water Framework Directive and its methodological guidelines on the economic assessment of water use and on the national normative documents in the field and will be used in the elaboration of the Management Plan of Botna river basin.

In the years 2010-2018, the total volume of water used in the Botna river basin was, on average, 3.1 million cubic meters, of which 85% were captured from underground sources. Over 50% of the total volume of water was used for household purposes, about 1/3 - for agricultural needs and only 13% for industrial activities. Also, are registering an oscillating dynamics of total volume of used water, depending on: the capacity of the water pumping stations; transport capacity of public aqueducts; local water resources; the annual amount of rainfall; the economic activity of big agricultural companies and its capacity to records of abstracted an used water. As a result of rapid extension of public aqueducts in the rural area, is observed an increase more than 2 times the volume of water used for household purposes. In the same time, it is registered a  $\approx$ 4 times reduction of the volume of water used by agricultural companies. Also, there is a slow reduction of the water used in the industry. The key problems of water use in the research area are: intensification of climate change and reduction of water supply access of households and agriculture companies; incomplete inventory of water resources and frequent cases of unauthorised water use; low prices of water supply services reduced accessibility of the population to aqueducts; significant impact of diffuse pollution on agriculture; a large number of reservoirs in improper conditions, which do not cover water use costs and investments in water resources and aquatic ecosystems protection; insufficient and fragmented subventions in water sector.

#### Comparative multi-criteria assessment of hydrological vulnerability. Case study: drainage basins in North Eastern part of Romania

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Hydrological vulnerability is a changing underlying condition of all drainage basins, depending on the dynamics of potentially dangerous hydrological phenomena, the particularities of drainage networks, land use patterns and processes that shape landforms in extensive time periods. The socio-economical attributes and the hydro-technical infrastructure add up to the manifestation of this type of vulnerability.

This paper aims to assess the hydrological vulnerability level of 81 drainage basins in the NE of Romania for three distinctive time periods (1990-1999, 2000-2009, 2010-2018), using a multi-criteria approach. Two classical Multi-Criteria Decision-Making (MCDM) methods are combined in order to evaluate the hydrological vulnerability according to factors that refer to floods and hydrological droughts occurrence, hydro-technical structures coverage, the drainage network, land use and landforms characteristics. Analytic Hierarchy Process (AHP) is applied to weigh these factors and the resulting relative importance values are integrated in Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS), by which the alternatives represented by the catchments are ranked. Five classes of hydrological vulnerability are established based on a geometric progression and the transition of the drainage basins from one vulnerability class into another is analysed in the three periods.

The hydrological vulnerability of the study area tends to get moderated in time following an East-West direction, from the lower Moldavian Plateau, which is more subject to hydrological droughts, and the Siret Passage to the higher hilly and mountainous areas that lie in the West, which display a propensity for floods. The Negrișoara, Țibău, Cârlibaba, Bistricioara, Northern Bistrița, Bârnaru, Moldovița and the Northern Moldova catchments registered medium or higher hydrological vulnerability levels in at least two time periods. On the contrary, the Southern Bistrița drainage basin registered very low values of the parameter in 1990-2018, while the catchments located along the Jijia and the Miletin rivers maintained low hydrological vulnerability levels.

The unpredictability character of dangerous hydrological phenomena and the rapid land use transformations call for more integrative and suitable hydrological vulnerability assessments. Applying MCDM methods to evaluate the hydrological vulnerability contributes to further the knowledge in this domain.

#### Flood runoff and land cover changes in the Cubolta river basin

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The main aim of the research evaluation of flood runoff of the Cubolta river located in the northern part of the Republic of Moldova. The Cubolta river length is 109 km and basin are is of 869 km<sup>2</sup>. Flood runoff temporal and spatial distribution, its evolution and change is analyzed and described. The time series of the flood characteristics are represented by the information monitored at Cubolta hydrological station for 1966-2012. Average maximal discharge is 13.3 m3/s, flood depth - 4.46 mm, volume -3.9 mil. m3, total flood duration - 10 day, increasing faze is 3.7 days. General trend for peak discharge is decreasing and for flood runoff depth is increasing. The largest floods occurred in 1985, 1971, 1987. Spatial distribution of flood runoff and its changes due to land use management activities from the last 3 decades was performed using SCS-CN model. Flood runoff modeling was performed for ungauged tributaries of the Cubolta river in condition of equal rainfall of 100 mm, land cover for 1982 and 2013 and 3 soil moisture conditions: dry, wet and average. Average modeled flood runoff values are 61 mm, 30 mm in case of dry soil and 85 in case of wet soils. General dynamics shows that for the last 3 decades the flood runoff has slightly decreased.

## Multivariate analyses of the morphometry – lithology – suspended sediment load relationships in Jiu river basin (Romania)

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The paper aims to investigate the influence of morphometric and lithological features of the catchments on the suspended sediment load in Jiu River Basin (extended on 10.080 km<sup>2</sup> in SW Romania), with a variety of landforms (mountains, hills, plain) and diversified lithology. To identify which variables are more likely to control the spatial variation of the suspended sediment load, multivariate analyses were performed on 16 morphometric and lithological parameters (basin area, mean altitude, slope, basin perimeter, circularity ratio, basin length, form factor, elongation ratio, surface roughness, drainage density, maintenance coefficient, relief ratio, hypsometric integral, Dem of Difference, clay proportion, marls proportion). derived from the DEM (at 25 m pixel resolution) and from the topographic and geological maps of Jiu River Basin. Within the study area, 22 sub-catchments were considered, with areas between 25 and 9253 sq.km and with average altitudes between 257 m and 1476 m, controlled by gauging stations where the suspended sediment load was recorded during the period 2001 – 2010. In a first step, principal component analysis (PCA) was implemented to select the most relevant variables in relation to solid discharge spatial variability, to further classify the sub-catchments according to their morphometric and geological similarities. In a second step, the cluster analysis (CA) was performed, in order to group the drainage basins based on their morphometric characteristics. Finally, the canonical correspondence analysis (CCA) led to identifying the main explanatory variables for the suspended solid discharge within the sub-catchments. The effects of morphometry and dominant rock type were significant for the small (<200 sq.km), mountainous sub-basins and these effects tend to diminish with the gains in upstream area, stream length and order, and with the decrease of slope and relief ratio. The sedimentary cover of the subcatchments is mostly related to high rates of fine sediment deliveries during high flow periods. The factors relative to the form and hypsometry of the basins explain most of the average suspended sediment concentration variance (>75%). However, the multivariate analyses did not completely succeed in explaining the irregularities among the different sub-catchments for the highest concentrations in suspended sediments. This may be due to the effect of other variables not accounted for in the present study, such as the amount of the dispatched sediment particles during heavy rainfall – flood events, which are highly dependent on the seasonality, on the slope's stability and on the woody vegetation.

## Secțiunea/Section/Session Geografie regională și a mediului/Regional and environmental geography/ Géographie régionale et environnementale

## LEADER axis - an inclusive or selective instrument for the development of rural space in Romania?

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The year of Romania's admission to the European Union marked the beginning of a new stage of evolution for the Romanian rural area, a stage in which sustainable development became the main objective pursued. The support offered by the European Union to achieve this objective has materialized in the form of the LEADER axis, a financial instrument available to rural areas and intended for the economic and social development of rural communities. However, more than 10 years after the introduction of the program in the Romanian rural area, there can be observed territorial differences from the point of view of the LEADER axis results and the way in which it was approached and implemented. Therefore, the main goal of the present research is to question if LEADER program helped reducing the territorial inequalities between rural areas during the first and second phase of LEADER financing in Romania or if it actually increased them by the way of distributing its funds. In order to answer to this question, the characteristics of the initial level of development were analysed in relation to the spatial distribution of LEADER funds. Indicators taken into consideration (number of projects, funds per capita, funds per LAG, percentage of employees from the total population) emphasize a low correlation between the level of development and the spatial distribution of the LEADER funds. The uneven distribution of funds and number of projects across the territory of Romania indicates that there are other factors which contribute to the induced gap between different rural areas.

## Evaluating the quality of local strategies for sustainability and resilience in Romanian cities

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In East-European countries, following the abandonment of the socialist system, the urbanization process has been a difficult task. While the goal of administration remained the sustainable development of cities, multiple challenges emerged from the continuously changing legislation and planning regulation, the deficient enforcement of the existing rules or the lack of involvement of specific actors in the planning process. In the last decade scientists have understood the importance of achieving sustainability and resilience in delivering multiple ecologic, economic and social benefits, but between the lack of funding for new projects and the constant pressure of economic developers for the scarce land available in urban areas their presence was mostly reflected in policies and strategies. Our analysis compares the approaches present in the local policies and strategies of over 120 Romanian cities of different sizes and functions. After downloading the documents, we analysed it in pre-encoded databases containing information about: (i) main objectives for resilience and sustainability and the perspectives of development, (ii) indicators used for monitoring progress, (iii) institutions and structures responsible with achieving the goals. The objective is to evaluate the concordance between the principles of long-term visions associated with sustainability and resilience and the practical ways of delivering an efficient system of planning them and the identification of the most encountered strategies and instruments for the longterm implementation. Our results showed indicators of paper-planning for Romanian cities, with a reduced correlation between the objectives established for sustainability and resilience and concrete measures of practical implementation. Monitoring indicators where scarce, and when present were more in the form of descriptive indicators than performance ones. Most of the emphasis was put on public central and local actors, with other stakeholders (NGOs, economic agents or population) being ignored from the process. Serious improvements

have to be made to the quality of local policies and strategies if they are desired to contribute effectively in delivering sustainability and resilience to the cities.

## The use of interview method: environmental planning and regulation processes for growing greener cities

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Cities are challenged with a large number of environmental, economic and social problems which affect their structure and functionality. Thus, sustainable approaches like nature-based solutions address a large number of global and local problems faced by urban areas and can help achieve resilience and sustainability goals. Furthermore, the need for public involvement in environmental planning and regulation processes has been underlined in recent research studies and emphasized by leaders at all levels of government. Regarding this, the aim of the study is to obtain the opinion of the stakeholders about the possible integration of nature-based solutions into planning and regulation processes in order to increase nature experiences for urban citizens and to promote the development of greener cities. Altogether, 20 interviews were carried out with the stakeholders (including institutional, private, academic or civil participants). The participants in the interview mentioned the strengths and weaknesses of the two processes in Romania, having both the perspective of representatives of public institutions and that of experts and civil society (citizens and non-governmental organizations). Moreover, they highlighted the positive impact of different types of nature-based solutions like green infrastructure (vertical gardens, roofs, terraces, walls and green facades, green corridors) and blue infrastructure (ponds, wetlands, rain water harvesting and detention basins). The results can be a support for environmental protection authorities in order to improve the effectiveness of the planning and regulatory processes for reaching integrated growth and sustainability.

#### Recreational quality of urban green spaces. Case study - Craiova Ioan Eustatiu Marinescu, Gheorghe Curcan University of Craiova, Romania, marrinescu.ioan@gmail.com

Sustainable cities base their existence on urban green spaces. These places are intended to provide high quality-services for the recreational activity of urban dwellers. At the present, most of the green spaces became overcrowded and intensely used. Its the case of the Botanical Garden of Craiova, surrounded by blocKs of flats and intensely inhabited areas. There has been recorded an increased number of visitors as a result of the degradation and disappearance of smaller green areas in the neighborhoods like Craiovita and Brestei. Thus, the Botanical Garden became the place that serves almost exclusively one third of the city dwellers of 5 territorial units of Craiova. For this reason, we proposed a set of criteria for the analysis and assessment of recreational quality of green spaces, namely overloading, shift addressability and satisfaction. These criteria would explain why urban densification around the green areas contributed to the reduction of its recreational quality. The final outcomes of the study can contribute to better management of overcrowded uban green areas. It may also be a useful tool for local authorities and city planners.

#### Collaborative planning in environmental plans: practitioners' perspectives

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Collaborative planning refers to a process where stakeholders interact in face-to-face negotiations to reach consensus on shared problems. Although collaborative approaches are present on today's planning processes, further research is needed on their forms and intensities. Thus, this study aims to assess participation in the creation and implementation of environmental plans in Romania by combining data from a web-based survey

with planners and a content analysis of a sample of environmental plans. Our results show that the environmental plans do not perform well in ensuring the participation of the public in the planning process. Furthermore, when a variety of stakeholders participate and multiple participatory techniques are employed the implementation of the plans is more likely to succeed. Therefore, our study advocates for a need to ensure the participation of all stakeholders, especially the public, to produce environmental improvements, reduce conflicts and achieve more inclusive decisions.

#### Potential contribution of small green infrastructure in improving quality of life at urban level

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Small green areas are connectivity elements of green infrastructure in urban areas. They rarely are the central element of analysis in studies regarding green infrastructures or the contribution of small green areas in improving quality of life in cities. The study aims to determine the contribution of small urban green infrastructure in improving quality of life in urban areas. The study identifies small urban green infrastructure in Tineretului neighborhood and evaluates the services they provide in the community. The study area is Tineretului neighborhood in Bucharest. The neighborhood is mainly formed from collective residential buildings with 8 floors built between 1970-1990's. The results indicate an important number of public residential gardens, over 70% of the green infrastructure surface, abandoned land (8%), squares, sport and recreational areas (5%) and less than 5% for institutional gardens, playgrounds, street trees or single trees. Green area index is almost 4 m<sup>2</sup>/inhabit in a residential area with 82% density of buildings. Quality of life is improved by ecosystem services generated by green areas, especially regulation services. The balanced distribution of small green areas ensures the homogenous distribution of benefits all over the residential area. Among the main benefits we identified shadow, reduction of air temperature, evapotranspiration, reduction of noise level. Identifying types, distribution and services of urban green infrastructure are key elements in urban planning, most of all at local scale by solving everyday problems and participating in achieving sustainable development.

#### Aspects concerning the ecological coherence in the mountain area of the Bistrița River catchment in the Suceava County

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Given the current experience of the COVID-19 outbreak, the innate dependency of human health and resilience on the quality, health and coherence of natural and semi-natural ecosystems is brought to light. The EU Strategy for biodiversity 2030 states as its motto "bringing nature back into our lives". The present paper sets the purpose to identify some of the anthropic factors that affect the ecological coherence in the mountain area of the Bistrita River catchment belonging to the territorial administration of the Suceava County. Anthropic pressures cause changes in the ecosystem composition and structure and therefore the biodiversity's productive and support capacity. Along the water course there are several natural protected areas: ROSCI0010 Bistrita Aurie, Călimani National Park, ROSCI0196 Pietrosul Broștenilor -Zugrenilor Canyon, and also parts of the ROSCI0212 Rarău – Giumalău and ROSPA0083 Rarău – Giumalău Mountains. Even though some areas benefit from the status of natural protected areas, in order to ensure their long-term survival, the species need to be able to communicate and move amongst these areas, while having enough food, shelter and nesting resources. Solving this issue fulfils the prescriptions of the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, art. 10, which specifies that the management of features of the landscape which are essential for the migration, dispersal and genetic exchange of wild species is necessary. If one main aspect of anthropic pressure were to be mentioned, it would be habitat fragmentation. This paper will therefore offer a synthesis of direct observations complemented by the analysis of data obtained from the literature together with solution proposals for rebuilding the ecological coherence in the study area.

#### Complex poly-scale studies of the evolution of the historic-geographical landscapes of the nothern and north-western Black Sea regions

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A complex poly-scale historic-geographical approach integrates the knowledge accumulated in various scientific fields and makes it possible to present the historic-geographical landscapes of the old-developed regions as integral natural-anthropogenic geosystems. Numerous and multidimensional problems of the modern world have a self-evident, but not always obvious, geographical conditionality and spatial reflection, which are the objects of interest of specialists. At the same time, the geographical approach to understanding the global problems of humanity and their poly-scale nature is inseparable from the historical approach, and historicgeographical research is an integral factor in a comprehensive scientific search. This provides the basis for further geographical, historical, ethnographic, cultural and other scientific and practical research. Within the framework of the concept being developed, complex poly-scale studies of the historic-geographical evolution of some regions and landscapes of Central and Eastern Europe, the Mediterranean, the Balkans (at the macroregional level) and the Northern and North-Western Black Sea regions (at the meso- and micro-regional level) were carried out. The results presented include special geographical and cultural analysis (high-precision mapping and generalization, determining the place of the Black Sea in the framework of the Great Mediterranean), historic-cartographical and toponymic surveys (investigations in evolution of mapping of territories, place-name systems, transferred geographical names), interdisciplinary research of the unique archeological and architectural sites in the Dniester basin and Crimea, characterized by extremely high concentration of monuments of natural and cultural heritage and either intense or weak urbanization processes.

## Vers une base de données des zones minières de la région Sud-Ouest Olténie pour améliorer la résilience aux risques hydromorphologiques induits

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La région du sud-ouest de l'Olténie est connue économiquement grâce aux activités minières représentées par l'extraction et le traitement du charbon. Les deux grands périmètres carbonifères de la région chevauchent géologiquement le bassin Dacian et sont situés, dans leur ensemble, dans le Piémont Gétique et les Subcarpates de l'Olténie: le périmètre Jiu - Motru, à l'ouest, entre la rivière Gilort et le fleuve Danube, et le périmètre Berbești, à l'est, qui recouvre les gisements situés entre les rivières Gilort et Bistrița-Vâlcii. Dans ce bassin, le lignite est extrait dans des carrières à ciel ouvert (principalement dans le périmètre Motru - Rovinari) et dans une très faible mesure en souterrain (moins à l'ouest de Jiu, actuellement la plupart des mines opérant dans le périmètre Berbesti-Alunu). Dans ces deux bassins, mais aussi dans le reste du pays, dans les bassins charbonniers en conservation ou actifs, les activités d'exploitation et de traitement du charbon ont conduit à la dégradation des terres et à l'apparition de risques hydromorphologiques, dus par exemple à l'instabilité des haldes à stériles, dans un contexte de mauvaises politiques d'entretien des anciens périmètres miniers et du relief anthropique qui en résulte. Parmi les pires risques figurent certainement les glissements de terrain sur les pentes des haldes à stériles et la pollution des rivières par des sédiments d'origine anthropique (particules de charbon provenant de ses activités de lavage). Afin d'acquérir une résilience sur ces types d'aléas dans cette zone minière, les géographes sont directement intéressés par la conception de bases de données spatiales, pour quantifier les facteurs de risque et inventorier les éléments naturels et les objectifs anthropiques qui y sont soumis. Le but de la présente étude est, par conséquent, de rassembler les caractéristiques géographiques des entités spatiales liées à l'extraction du charbon, pertinentes pour évaluer et gérer les dangers de stabilité des pentes et les risques affectant les zones avec des activités d'exploitation et de traitement de charbon à ciel ouvert dans le sud-ouest de l'Olténie. La présentation se concentrera sur certaines étapes clés afin de créer une base de données spatiale, qui pourra être utilisée plus tard dans les études d'impact environnemental des risques hydromorphologiques induits par les

activités d'extraction du charbon, aussi que dans l'analyse de la résilience des communautés humaines dans les zones minières par rapport aux risques liés à ces activités:

i) La délimitation des zones occupées par les activités minières (extraction et / ou traitement du charbon) sur la base de documents cartographiques, de la littérature spécialisée, des rapports des directions minières et des ministères de tutelle ;

ii) Identification des zones à l'intérieur du périmètre des haldes à stériles sensibles aux risques hydromorphologiques.

Les résultats préliminaires seront exposés à travers quelques études de cas de la région analysée, avec l'emplacement, les types de dangers et les attributs spécifiques à l'objectif général d'augmenter la capacité de résilience et la gestion orientée.

#### Forest perturbations across the planet. A major pathway of global land degradation

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Global forests are vital terrestrial ecosystems for biodiversity and climate stability of the planet. Since these ecosystems are a major component of terrestrial systems, they are also essential for ensuring the health, stability and ecological functionality of lands throughout the world. However, forests are currently affected by many perturbations that impact not only biodiversity and climate stability, but also the overall functioning of land systems across the planet. This work is a review (based on international scientific literature) that analyzes the current pathways of worldwide forest disturbances, which can be considered important forms of land degradation. Following hundreds of representative scientific papers, it was found there currently are twelve forest ecological perturbations that are present across multiple spatial scales across the world – phenological shifts, range shifts, die-off events, insect infestations, deforestation, fragmentation, air pollution, defaunation, fires, composition shifts, net primary productivity shifts and biogeochemical shifts. These forest disturbances have the potential to negatively affect the forests' capacity to mitigate climate change and land degradation, being therefore a considerable issue in reaching some important UN Sustainable Development Goals by 2030.

## Secțiunea/Section/Session Turism, patrimoniu si biodiversitate/ Tourism, Heritage and Biodiversity/ Tourisme, patrimoine et biodiversité

## European Capital of Culture Program: challenging cultural identity and the socio-economic impact on Sibiu city

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The European Capital of Culture program is particularly important due to the multiple effects generated at economic level by the development of economic activities that can support the implementation of the cultural project: tourism (variety of cultural tourism products, intensification of tourist arrivals, increase in the number of accommodation and catering units), construction (sector that supports restoration, conservation and functional conversion actions), creative industries. At the same time, it is important to emphasize the role of the European Capital of Culture program in socio-cultural development, especially by increasing the active cultural participation of the local population, organizing various cultural events, intended to improve the image of cities. This study aims to analyze the role of the European Capital of Culture program in Socio-cultural development capital of Culture program in the role of the European Capital of Culture program in the role of the European Capital of Culture program in the role of the European Capital of Culture program in the role of the European Capital of Culture program in the role of the European Capital of Culture program in the role of the European Capital of Culture program in the economic and socio-cultural development of Sibiu city. For this purpose, the authors used tourist indicators (tourist arrivals, accommodation and overnight capacity), as well as economic indicators (number of employees, profit). The analysis of economic indicators highlighted a direct link between the title of European cultural and the positive dynamics of local economy of Sibiu city.

## Sustainable Thinking: The root of Sustainable Development

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Sustainable Development can be achieved when we follow sustainable thinking in our daily life. Practicing sustainable thinking and works are the best roots to gain the success of SDGs. Community participation to individual contribution both are vital for UN2030 agenda. Knowledge of Panchabhuta and awareness on sustainable practices can birth proper sustainable development. Human habits must be ecofriendly. Reuse, recycle and rethinking are important now. Youth motivation and participation are the way to rethink our works. We have to rethink about our work I.e. ' environment is your, but not Nature.' The time has come to start the movement on ' Lockdown for Climate.'

#### Ecological networks: a spatial planning concern in Romania

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Due to anthropogenic pressures, natural landscapes are globally undergoing drastic changes, including habitat and landscape loss and fragmentation, with long-term effects such as the decline of biodiversity, ecosystem resilience and ecosystem services. One of the most common recommendations for protecting biodiversity is to increase connectivity and create ecological networks that connect natural habitats and ensure the travel needs of many animal species, such as the large carnivores in the Carpathian Mountains. A solid design of ecological connectivity using modern methods and the application of the best scientific tools can ensure the preservation of connectivity. On the other side, in the Romanian Carpathian Mountains, the lack of correlation between spatial plans and national strategies for biodiversity conservation have led to the creation of physical barriers to the movement of large carnivores, caused by the uncontrolled expansion of built-up areas,

road development and fences around properties. This requires a rethinking of the spatial development of a locality, with ecological corridors and networks included in urban and spatial planning documentation. The article aims at proposing a new method of identifying ecological corridors for the brown bear species in a Romanian NUTS 3 region (Buzau County). Compared to other methodologies used to identify ecological corridors, this one uses the Corridor Design tool which is suitable for smaller areas and which has determined the weights required to obtain the county permeability map. The study is very important, acting like a bridge that connects spatial planning to nature conservation and land use by including ecological corridors and networks in spatial planning documentation. The method consists of a GIS approach combined with the CorridorDesign tool, which is the best suited for designing corridors in a heterogeneous landscape on a regional scale. An interesting result is that the existing Natura 2000 sites in Buzau County have been identified as being core areas of identified ecological corridors in the case of the brown bear, which suggests the need to propose the expansion of Natura 2000 sites in the future. It is the first study published at national level, which identifies the ecological corridors in the case of the brown bear based on a County Land Use Plan, which provides important information on road viability, traffic intensity and urban areas. The crucial advantage of this method is that it is addressed not only to ecologists, but to specialists in urban and spatial planning, embedding the ecological sustainability dimension in the concept of spatial planning, and considering key areas of biological diversity and relationships between species and ecosystems and habitats. At the same time, by highlighting the legislative gaps in Romania on the issue of ecological corridors and through the proposals to amend the legislation can transform the ecological connectivity into an operational concept, as a first step in designating ecological corridors in Romania. Last but not least, once the connectivity is obtained by the presented method, it contributes in the future to the identification of the measures of conservation of the ecological connectivity at county level by minimizing the potential impact of development plans. Further research is needed to improve the results, by combining the methodology with field activity at local level. The present analysis at county level can be considered as a starting point - either for a national level analysis, or for other counties located in the Romanian Carpathian Mountains for a real protection of habitats.

#### The Impact of Accessibility and Economic Performance on Toursim-induced Resilience

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During the last decades, tourism activities were promoted by local and regional policy-makers as a universal solution for rural areas' suffering from massive depopulation, technological delay, or economical struggles. A large debate flourished in the literature on whether and to what extent tourism could play a role in supporting rural localities. Some valid evidence was brought by researchers backing the cure-all role of tourism, as well as by those who criticized the limited, or even negative, impact of tourism on rural areas. However, following the economic crisis of 2008, the attention switched to a newer and more relevant topic: Does tourism increase the resilience performance of rural areas? Our paper tries to answer this question by focusing on both economic and demographic resilience, which are the most sensitive sectors during an important shock. Following a detailed territorial breakdown according to a twofold typology (spatial accessibility and number of employees), correlations were used to determine the impact of tourism activities on building resilience for each type of rural territory. The results indicated a positive effect of tourism activities upon economic and demographic resilience performance in highly accessible rural areas, while in peripheral areas, the impact was insignificant. This paper provides new insights into the various roles that tourism plays in rural areas and offers suggestions for local policy-makers.

#### **Collaboration particularities in the tourism area of Neamţ County, Romania** Alexandra Cehan, Ema Corodescu-Roşca, Mihai Bulai, Lucian Roşu "Alexandru Ioan Cuza" University of Iasi, Romania, cehan.alexandra@gmail.com

Collaboration is essential for the successful strategic management of tourist destinations. The importance of collaboration in tourism derives from its potential to lead a destination towards a sustainable development and to increase its competitiveness on the tourism market. Thus, the involvement of tourism stakeholders in decisionmaking and in collaborative processes at all geographical levels tends to become a priority for destination's managers. The aim of this paper is to analyse the collaboration behaviour of tourism stakeholders in Neamt County, Northeast Romania. Neamt County is a diverse tourist area composed of five smaller tourist areas, each one with its own identity. Three main research questions are addressed: (1) Do relationships between tourism stakeholders develop on at county level or are they rather locally embedded? (2) Are the public-private partnerships encouraged inside the destination? (3) Which entities have the most pronounced capacity to connect the stakeholders from all five tourist areas inside the county? Methodologically, these matters are addressed through Social Network Analysis techniques, following the field work that resulted in 72 interviews with stakeholders from all five tourist areas inside Neamt County. The findings reveal a rather sparse regional tourism network, with clear tendencies towards local collaboration. In terms of public-private collaboration, the intensity of relationships is rather reduced, with a low level of communication between the two sectors. Furthermore, only two main stakeholders stand out as central inside the regional network, respectively Neamt Council and North-East Regional Development Agency, which points out a high level of centralization of the tourism network. The results of the study have implications for policy making, indicating directions of intervention towards a better development of collaborative processes at a regional level.

#### Tourism of higher education: component of the educational tourism in the city of Iasi. Study case: Erasmus International mobilities of Ion Ionescu de la Brad University of Agricultural Sciences and Veterinary Medicine and Grigore T. Popa University of Medicine and Pharmacy Cezara Dulce, Ionel Muntele

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Educational tourism in the city of Iasi, regardless from which perspective is analysed, in - or out - going, is closely related to its status as a regional center of educational polarization. The main purpose of this paper is to analyse the evolution of ERASMUS international mobilities of the public universities of Iasi between 2013 and 2019, which, along with school trips, trips for seminars, conferences or symposiums, language schools and educational events shape the educational tourism in Iasi. The greatest attention is given to Ion Ionescu de la Brad University of Agricultural Sciences and Veterinary Medicine and Grigore T. Popa University of Medicine and Pharmacy, important higher education institutions of the city. Methodologically, the study is based on statistical information provided by the public universities of Iasi, more specific by their International Relations offices. We started with the documentation from specialised literature and with the analysis of the statistical data related to this subject. The creation of graphic and cartographic materials was the last step. The study area is the city of Iasi. The interpretation of the obtained results highlights a series of transformations, for example increases of the number of students involved in Erasmus+ international mobilities. It is a sign that educational tourism has a growing interest from students of the public universities of Iasi.

## Comparative analysis on climate change adaptation of two Natura 2000 sites in the Middle Siret sector

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Climate change is leading to a clear increase in severe weather events. Of these, at national level, the most significant are floods and droughts, Romania being known as one of the countries with the most significant cases of floodplains on the continent. The loss of natural areas has repercussions that extend beyond the extinction of rare species. Ecosystems, which are stimulated by the diversity of life within them, provide society with a number of valuable goods and services, important from an economic point of view, such as water purification, soil fertilization, carbon storage, etc. They also play a central role in combating climate change, protecting us from floods and other adverse effects of changing weather conditions. The Natura 2000 network aims to maintain, improve or restore the favorable conservation status of species and habitats of Community interest in Natura 2000 sites, taking into account the specific economic, social and cultural realities at regional and local level of each Member State of the European Union. The ecological network ensures the sustainable management of species and habitats of community interest in protected natural areas. The range of ecosystem services provided by Natura 2000 and other relevant protected areas and networks at national and regional level is often not recognized, but they meet a variety of human needs (clean water, clean air, recreation, flood protection), being a central pillar in maintaining the critical mass and variety of services needed to cope with changing conditions. The existing aquatic areas within the Natura 2000 network constitute an important element of the green infrastructure, a network of natural and semi-natural areas, able to offer a wide range of ecosystem services. To ensure long-term survival, protected species must be able to move between these areas. In this paper, we compare two Natura 2000 sites, ROSCI0434 Siretul Mijlociu, without management plan and ROSPA0072 Lunca Siretului Mijlociu, which has a management plan, having as common element the river Siret, in order to determine whether the actions aimed at good management of natural resources are solutions that support measures to adapt to climate change.

#### L'impact du tourisme sur le paysage urbain et sur les habitants de Paris

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Pionnier du tourisme culturel, Paris rencontre aujourd'hui des problèmes liés au tourisme de masse. Certes celui-ci n'est pas encore à une étape incontrôlable comme on le rencontre à Barcelone ou encore à Venise, mais si rien ne se fait, aurait-il encore une ville Européenne touchée par ce phénomène incontrôlé qu'est le tourisme de grande échelle? Est-ce que le tourisme apporte-il un impact sur le paysage urbain, mais aussi sur les habitants de Paris, et dans quelle mesure s'agit-il d'un impact positif ou négatif? Les objectifs proposés dans cette étude sont de savoir comment le tourisme de masse puisse-il exister dans cette ville, donc trouver chronologiquement les racines de ce dernier dans la capitale française. Mais aussi trouver les points négatifs de ce tourisme de masse à Paris spécialement, et de voir quelle est la réaction des habitants, mais aussi des touristes qui visitent la capitale française. Voir des réactions positives ou négatives pour mieux essayer de comprendre ce phénomène et ainsi trouver des solutions durables. Suite à ces résultats, la ville de Paris souffre réellement d'un tourisme de masse qui lui ont fait changer d'apparence pour correspondre à ce besoin constant des touristes, comme des espaces, magasins, restaurants ou terrasses spécialement créées pour ces derniers. Ces espaces n'ont pas été construit sur des lieux vides, mais bien à la place d'anciens commerces qui n'ont pas pu tenir face à l'augmentation massive du prix foncier et ont dû fermer les locaux. On peut donc conclure sur le fait que le tourisme de masse apporte à la fois des changements positifs dans le lieu où il agit, mais aussi des changements négatifs, drastiques pour les populations locales, qui sont obligés de fuir la capitale pour aller s'installer dans la banlieue proche ou même lointaine, ou les prix immobiliers sont beaucoup plus réduits qu'à Paris intra-muros. Il faudra donc trouver des alternatives pour satisfaire les deux camps à savoir les touristes et les habitants, pour avoir un tourisme durable.

#### Le tourisme culturel-religieux dans le comté de Suceava

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La motivation pour choisir le titre a été l'unicité des monastères du nord de la Moldavie qui ont conduit au développement du tourisme culturel-religieux dans le comté Suceava. Aussi, j'ai choisi ce titre grâce à l'importance du tourisme religieux concernant le côté spirituel des chrétiens.

Forme de tourisme culturel, qui existe depuis des siècles, et qui conserve encore quelques caractéristiques en ce qui concerne le pèlerinage proprement-dit, le tourisme religieux représente dans nos jours un phénomène complexe qui est en constante expansion et diversification, en gardant l'élément principal qu'il a consacré, c'està-dire la religion. Le point de départ de cette mémoire de licence a été la curiosité de savoir le potentiel touristique du comté Suceava. De plus, un autre élément est représenté par les aspects positifs et négatifs qui influence le développement du tourisme culturel-religieux. Au fil du travail, vont être observés les données qui mettent l'accent sur l'infrastructure touristique ainsi que sur les objectifs touristiques de cette région. Les méthodes utilisées au fil du travail sont: le questionnaire, l'étude de cas, l'observation, l'analyse, les représentations graphiques, les statistiques. Après les recherches qui ont été faites au fil du travail, a été démontré que le tourisme culturel religieux représente un facteur important dans l'économie du comté Suceava. Toutefois, l'aspect négatif serait l'infrastructure touristique de transport où peut survenir des inconvénients concernant le voyage vers les objectifs touristiques et la destination. Par conséquence, ce travail a contribué avec des nouvelles statistiques sur les infrastructures d'hébergement touristique, l'évidence de flux touristiques internes (sur le plan local, zonal, national) et externes (sur le plan international)

## The evolutionary profile of tourist arrivals in hotel accommodation structures: from lockdown to a new chance!

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The famous physicist Albert Einstein affirmed in his time: "The crisis is the most blessed situation that can occur over countries and people, because it attracts progress."<sup>1</sup> The direct and indirect observations, corroborated with the various persistent discourses in the public space, seem to lead to the idea that the tourist activity was particularly severely affected. This paper aims to verify this idea, by analyzing the evolution of tourist arrivals in hotel accommodation structures, between February 2019 - August 2020. The comparative analysis, having as reference level the previous period, demonstrates the intensity of the changes in the tourist attendance of hotel accommodation units. The use of geostatistical methods, focused on taking into account the influence of the number of cases of CoV-ID19 infection on tourist arrivals, allows the construction of hypotheses that will have to be verified through further research. For example, is the reduction in tourism activity in hotels a direct effect of the pandemic or an indirect one, due to the slowdown in economic activity in general, as a result of measures to limit the spread of the virus?

#### Bazinul superior al râului Slănic - Potențial turistic

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Cu izvoarele în M-ții Vrancei (sub vf. Furu Mare), râul Slănic străbate, până la confluența cu Buzăul, în localitatea Săpoca, un ținut mirific, de basm, ținutul de la curbura Carpaților. "Focurile vii", Grunjul de la Jgheab, culmea Ivănețu ce se oglindește în apele de smarald ale lacului Mocearu, platoul Meledic cu salba de peșteri și "lacul fără fund" sunt doar câteva dintre darurile cu care au fost hărăzite aceste meleaguri, locuri redate cu atâta măiestrie de Alexandru Odobescu în lucrarea "România pitorească". Localizat în apropierea satului Terca (Lopătari), fenomenul geologic "Focurile vii" este generat de gazele naturale din subteran (aproximativ

<sup>&</sup>lt;sup>1</sup> Quoted by: <u>https://www.capital.ro/einstein-si-criza-134012.html</u>

3000 m adâncime) care ajung la suprafață prin fracturile scoarței terestre. Cu înălțimi de până la un metru, flăcările eterne în nuanțe de galben-roșiatic sau albăstrui oferă un spectacol de neuitat, mai ales pe timp de noapte. Grunjul sau "Muntele Alb", la confluența Slănicului cu pârâul Jgheab, este un martor de eroziune hidraulică și eoliană, dezvoltat pe tufuri dacitice de culoare alb-gălbui-cenușiu, semn al vulcanilor de pe alte tărâmuri ce si-au trimis cenusa până la poalele Carpatilor. Platoul Meledic, situat între râul Slănic în sud, pârâul Meledic în nord, pârâul Jgheab în est și pârâul Sărata în vest reprezintă o adevărată "împărăție a sării". Dolinele simple și îngemănate cu versanți abrupți, cu diametru de până la 40 m și o adâncime ce poate atinge 25 m, lapiezurile adânc tăiate în sare, avenurile profunde săpate la contactul dintre sare și argilă și peșterile ascunse de ochiul trecătorului te invită să poposești pe tărâmul "alb". Renumită este Peștera 6S Mânzălești situată la nord de Lacul Mare, la baza unui versant abrupt. În 1980 a fost declarată cea mai lungă peșteră în sare din lume (1257 m), record detinut până în anul 1983 când în Israel este descoperită pestera ICRC (MALHAM) cu o lungime de 3100 m. Lacul Mocearu este situat la poalele sudice ale Culmii Ivănețu în cadrul unui larg platou (Plaiul Nucului, 850 – 950 m), martor dintr-o extinsă suprafață de nivelare. Rezultată în urma unor procese carstice si de sufoziune, cuveta lacustră se află într-un stadiu avansat de colmatare și invadare cu vegetație acvatică, cea mai mare parte a suprafeței lacustre fiind acoperită cu plaur plutitor. Tabloul mirific al naturii este completat de frumusetea si hărnicia oamenilor de la munte, oameni simpli care au păstrat cu sfintenie obiceiurile si datinile din străbuni, portul popular, mestesugurile și legendele locului. Muzeul "Timpul Omului" (Mânzălesti), unic în tară, ne transpune în timpurile străbunilor noștri; pomul vieții, iile și ștergarele, războiul de țesut, vasele de lut și piatra pentru măcinat grâne prind viață prin vocea blândă a ghidului, învățătoarea Cecilia Petrescu. Tot aici îl întâlnim pe moș Gheorghe Massa, descendentul unei familii de pietrari italieni, din Genova, aduși în zonă la sfârșitul secolului al IX-lea pentru a construi Castelul de la Meledic, castel ce rivaliza cu castelul Peleș. Câtiva kilometri în amonte, la Lopătari, autoritătile locale împreună cu Grupul de implementare și management al inițiativei Geoparcul Ținutul Buzăului au înființat Muzeul 7 locuri de poveste, ce ne fascinează cu lumea balaurilor, a căpcăunilor, a pietrelor magice și a leacurilor din bătrâni. Promovarea și valorificarea potențialului turistic reprezintă soluții viabile pentru revigorarea zonei aflate într-un declin demografic și economic după anii 90 (migrația tinerilor către marile orașe sau în afara granițelor, închiderea unităților de prelucrare a fructelor, dificultățile întâmpinate de agricultori în accesarea fondurilor pentru activitățile agricole).

#### Possible Types of Tourism in Localities with Mineral Waters in Brasov County

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The tourism is a traditional economic field with high development potential in Brasov county. A better capitalization of the natural and anthropogenic heritage available in this county can be achieved by practicing various forms and types of tourism, carried out during certain periods of the year or permanently. This paper focuses on the localities with mineral water sources in Brasov county, where, along with balneary tourism favored by the existence of mineral waters (including spa or wellness tourism), it could be practiced other forms of tourism such as: cultural tourism, rural tourism and agrotourism, scientific and eco-tourism, ecclesiastical (religious) tourism, sports tourism, business, shopping as well as educational and social tourism. The analysis considers 15 localities where different sources of active mineral waters (spring, fountains) and associated natural resources (muddy volcanoes, sapropelic mud) were identified. Some of these localities (Perşani - Băile Perşani, Rodbav - Băile Rodbav, Homorod - Băile Homorod, etc.) have other valuable natural and anthropogenic tourist sights (natural reserves, medieval fortresses, fortified evangelical churches, etc.) that could be valorized for local economic development by appropriate investments. The existing transport infrastructure (roads, railways) facilitates the access to most of the localities with mineral waters sources, but there are also locations where access is more difficult, such as Băile Rodbav or Veneția de Jos. Accommodation and food facilities are generally lessened and very poorly diversified. The appearance of some hostels, private houses ("guest houses") in some localities (e.g. in Zizin, Tărlungeni etc.), which can offer quality services, is an important step in the development of rural tourism and agrotourism for the areas with mineral water sources in the county. The efficient use of the tourism heritage localities with mineral water implies the involvement of all local and county

decision-makers, by investing and attracting funds (internal or external) in order to develop the specific infrastructure (transport network, material basis, training of specialists in different fields of tourism activity, etc.) and to attract tourists in these localities.

#### Dezvoltarea comunitară a destinației Neamț. De la percepții la realități geografice

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În industria turismului, percepția unei destinații reprezintă baza pentru marketingul turistic. Mai mult, în contextul în care fiecare destinație își propune să adauge elementul de durabilitate ca o componentă importantă în planificarea turistică, cadrul participativ reprezintă o componentă esențială. Planificarea dezvoltării turismului ar trebui să aibă la bază perspective și opinii obținute din comunitate și vizitatori pentru a obține o destinație turistică durabilă. Obiectivul general al acestei cercetări este de a studia percepțiile asupra dezvoltării turismului în județul Neamț, conform opiniilor localnicilor și vizitatorilor, cu scopul de a evalua calitatea percepută și durabilitatea destinației în contextul unui model de dezvoltare turistică participativă. Cercetarea de față propune o identificare a diferențelor de percepție asupra turismului din județul Neamț, existente între trei tipuri de actori: comunitatea locală, actorii implicați în turism și nu în ultimul rând turiștii. Analiza stadiului actual de dezvoltare turistică, analiza opiniei publice locale referitoare la modul în care turismul este gestionat și percepțiile vizitatorilor cu privire la destinație au fost cele trei elemente ce au permis identificarea compatibilităților și incompatibilităților referitoare la convergența comunității, experiențele vizitatorilor și caracteristicile destinației.

## Secțiunea/Section/Session Geografia Populației/ Geography of Population/ Géographie de la population

#### Spatio-temporal coordinates of road accidents in Romania – exploratory analysis

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Within the European Union, Romania registers sad records both in terms of the number of road accidents and in terms of the number of deaths resulting from these accidents. Annually, the country loses in road accidents the equivalent of the population of an average commune (around 2000 deaths). Through its national strategy to increase road safety, Romania has committed itself to reduce drastically the number of unwanted events, but the ongoing dynamics do not leave much hope for achieving the objectives.

Our research explores a database of over 150,000 road accidents registered between 2015 and 2019, a database provided by the Road Directorate of the Romanian Police General Inspectorate. The study aims to explore the spatial and chronological dimensions of the phenomenon, using methods of geostatistical analysis. The purpose of the analysis is twofold: on the one hand to verify the correctness of records and to correct possible errors, and on the other hand to improve the methodology of cartographic expression of events, in order to assist administrative decisions aimed at increasing traffic safety on Romanian roads.

#### Divorce, a regional business. A comparative study between Moldova and Transylvania regions

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Divorce may have a structural dimension of the territories in which it evolves. High values of the divorce rate can be a sign of well-being (dynamic economy, spatial and interpersonal interactions, high level of education, cultural emancipation, improving the place of women in society...), but it can also be a sign of territorial and social crises (poverty, illiteracy, alcoholism, demographic vulnerability). It is very easy to see that at small-scale geographical analysis - of Romania in this case - cannot have the ambition to bring final explanations. Our research aims to analyze the divorce in Moldova and Transylvania regions through a comparative study.

#### Demographic vulnerability – between geography, demography and sociology

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Studies on the complexity of the vulnerability concept have increased recently, especially against the background of the need to know the optimal means of risk management, vulnerability being the essential component in the risk equation.

Vulnerability analysis is necessary in optimal management and disaster reduction, especially an analysis of demographic vulnerability provides insights into how human communities are prepared to deal with disasters, but also how they can recover after their occurrence. Demographic vulnerability is based on socio-demographic processes and phenomena whose effects are felt at the level of the affected territorial structures and which are manifested as structural barriers resistant to change. Demographic vulnerability is a multidisciplinary concept in current use, most research integrating geographical, demographic and sociological features and thus providing a complex approach to the concept.

The aim of this paper is to conceptually and methodologically define the demographic vulnerability term in a multidisciplinary context. So, the paper will highlight the fact that the multidimensionality of demographic vulnerability results from the complexity of the concept, for a representation as close as possible to the territorial reality being necessary to incorporate notions, features and perspectives complementary to geography, demography and sociology.

The geographical approach in the study of demographic vulnerability is highlighted especially by the close connection with inhabited space, so that geography can demonstrate the implications that dysfunctions produced in the context of demographic vulnerability will induce in the dynamics and structure of territorial systems under analysis. A geographical analysis of spacial structures privides an elaborate view of the chrono-spatial distribution of demographic vulnerability, unlike other social science which, being a-spatial, prove incapable of capturing the multidimensionality of the concept.

#### Spatial dimensions of illiteracy in Romania, 1992-2011

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The present research aims to study this sociological phenomenon from a spatial perspective based on the last 3 censuses conducted in Romania: 1992, 2002 and 2011. The analysis of databases in terms of methods provided by statistics and geography has permitted the study of this issue from a territorial point of view and consolidate a path for the creation of the necessary legislative levers to minimize, in the first phase, and the eradication of illiteracy in Romanian society. In the attention of the Romanian and European public opinion, the evolution of the spread of illiteracy is a pressing issue and requires effective action by the both sides: public authorities and the civil society. The contemporary reality is transposed through an involution (absolutely natural) of the phenomenon in the last 30 years in Romania and its lately presence in a punctiform manner, with a spatial distribution in restriction, a fact also determined by the transitional character of the Romanian education system, influenced by the changing political system.

## Territorial differences in the relationship between the demand and supply of medical services in Vrancea county

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This analysis aims to investigate the territorial inequalities in the relationship between the demand and supply of medical services in Vrancea country. The main purpose is to emphasize how much the ratio between the demand and supply of medical services can vary within the territory of Vrancea county. Also, the secondary purpose of this study is to identify territorial groups of settlements characterized by a similar ratio between the demand and supply of medical services. In the first part of the analysis, the potential demand for medical services was analyzed. Therefore, in the beginning, we analysed the territorial differences in distribution of the main consumers of medical services (percentages of 0-4 years and over 65 years in total population). The result was that the percentage of these age categories throughout Vrancea county vary between 16% and 38%. Subsequently, the distribution of the seniors (85+) was analyzed (their percentage in total population). Seniors are the most vulnerable age group, being the most prone to various needs of medical services. In the second part of the analysis we studied the offer of medical services in the settlements of Vrancea county (territorial administrative units). The offer of medical services is provided by the sanitary infrastructure and the medical staff operating in medical units. For both components that provide the supply of medical services, the numerical evolution as well as territorial distribution were analyzed in order to identify territorial inequalities. Regarding the infrastructure, the analysis found that the dynamics (time evolution) of the four components of medical units is different. Regarding the medical staff, the analysis found that for each categoty of the staff working in medical units during the study period (2000-2018) was a progressive numerical increase.

#### Dynamique du réseau scolaire du département de Neamț dans 1990 et 2020

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L'objectif majeur de cette étude est de réaliser une comparaison entre l'organisation structurelle du réseau scolaire du département de Neamţ au début des années 1990 et à présent. Les années scolaires soumises à l'analyse sont 1990 – 1991 et 2020 – 2021, qui sont des bornes très importantes dans l'évolution du système d'enseignement roumain, qui a été transformé, réorganisé, réformé plusieurs fois dans les dernières trente années. Les réseaux scolaires et, notamment leurs composants physiques, les écoles, sont l'expression territoriale du système éducatif. On peut même affirmer, que le réseau scolaire reste la composante la plus stable en temps du système éducatif : l'école, en tant qu'immeuble, reste sur le même emplacement pour des dizaines, voire centaines d'années, tandis que, les autres acteurs du réseau scolaire, les élèves et les professeurs, sont plus mobiles en termes d'espace et de temps. Cependant, justement la stabilité spatio-temporelle du réseau scolaire est un témoin des transformations du système d'enseignement et de l'évolution démographique d'une certaine région ou pays.

Le département de Neamţ présent quelques traits démographiques spécifiques qui se sont reflété dans son réseau scolaire. Les premières années après la Révolution de 1989 ont mené à une déstructuration de l'industrie qui a déterminé la migration d'une grande partie de la population. Quand même, au début des années 1990, la population scolaire n'a pas été affectée par ces départs. La plupart des enfants sont restés à la maison avec leurs grands-parents. Après 2000, le phénomène de la migration de la population du département s'accélère et on assiste à une réduction de la population scolaire réfléchie dans l'organisation du réseau scolaire. Le nombre d'unités scolaires avec personnalité juridique diminue et on assiste à la naissance des vraies « pôles d'attraction éducatifs » bien que le terme soit assez forcé. Ce phénomène est encore plus visible dans le cas des communes situés hors de la isochrone de 30 minutes autour des villes du département, qui ont gardé un grand nombre d'élèves. Les différences de taille entre les écoles du département sont visibles aussi dans leur répartition territoriale : les grandes écoles sont l'apanage des centres urbains et il s'agit notamment des écoles avec plusieurs niveaux d'étude, tandis que les écoles situées dans la partie montagneuse ou dans la proximité des villes ont un nombre très réduit d'élèves. Donc, il existe une forte dépendance entre la façon dont le réseau scolaire est organisé dans le territoire et l'évolution démographique de la population du département.

Lié à la structure confessionnelle de la population, il est intéressant d'observer que le réseau scolaire du département de Neamţ présent une particularité : on compte trois séminaires orthodoxes, un séminaire pour les filles et un séminaire catholique. La tradition religieuse des monastères de Neamţ et le nombre des catholiques ont influencé eux aussi l'organisation du réseau scolaire.

Un autre facteur qui a un impact majeur sur l'organisation du réseau scolaire est le cadre législatif. La contraction du réseau scolaire est encore plus aiguë après la mise en œuvre de la Loi de l'éducation no. 1 / 2011 qui introduit deux principes dirigeantes pour l'organisation du réseau scolaire : nulle école avec personnalité juridique avec moins de 300 élèves et au moins une école pour chaque unité administrative territoriale. Ce changement de conception en ce qui concerne l'organisation du réseau scolaire a donné naissance à des situations paradoxales : pour l'année scolaire 2020 - 2021, le Ministère de l'Education a permis le fonctionnement des écoles avec moins de 100 élèves à côté des unités scolaires qui comptent plus de 1500 élèves.

Cette analyse est donc orientée vers la mise en évidence de quelques traits du réseau scolaire du département de Neamţ dans les dernières trente années : l'évolution de nombre d'écoles, la taille des écoles dus à la fluctuation de la population scolaire et la répartition spatiale des écoles.

## Secțiunea/Section/Session Geografia Așezărilor Umane/ Géographie de l'habitat humain/Geography of Human Settlements

#### Urbanité et centralité: le paradoxe des villes moyennes périphériques

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La ville est souvent décrite comme le lieu de la centralité maximale. Les réseaux matériels et immatériels convergent vers celle-ci alors que la densité généralement forte d'activités, de personnes et d'infrastructures physico-spatiales favorise les échanges et les innovations. Cette situation produit des effets attractifs proportionnels à la taille de la ville, effets qui dépassent largement le cadre physique de l'aire urbanisée pour s'étendre à l'échelle régionale, voire nationale ou internationale. Dans ce contexte, le concept de ville périphérique peut sembler inapproprié ou même étrange. Pourtant, la question du positionnement d'une ville à l'intérieur d'un système urbain demeure un élément fondamental des études urbaines. Il importe donc de revenir sur le concept de ville périphérique afin de juger de sa pertinence et, le cas échéant, de mieux le définir. S'agit-il d'une aporie ou d'un paradoxe? À la suite d'une recherche documentaire et d'une réflexion épistémologique, nous discuterons plus en détails de l'exemple de Saguenay, ville moyenne située dans un cadre régional périphérique.

## Playing with sustainable planning - analyzing the integration of playgrounds in the urban green infrastructure of Bucharest

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The structure and design of playgrounds is an important element in providing children with the opportunity of improving their physical and mental health. Considering the lack of space characterizing many urban areas, playgrounds can also represent through the functions and biodiversity they support, a contribution to the urban green infrastructure network. The main aim of the present study is to assess the efficiency of playground planning and their integration within a coherent urban green infrastructure network.

The Romanian legislation considers playgrounds as a category of urban green areas, but little attention has been given to their integration in the planning process. Our analysis focuses on the playgrounds network in Bucharest, based on the following data: location of 616 playgrounds in Bucharest; main structural and functional characteristics of the playgrounds and the spaces in the proximity; previous and current planning documents relevant for playgrounds.

The main results of the study are represented by: (i) spatial analysis of the accessibility of playgrounds for various categories of residential areas in Bucharest, hotspots and coldspots of distribution and proposals for the completion of the playgrounds network; (ii) connectivity analysis of the association of playgrounds with other categories of urban green areas which provide different benefits to children; (iii) document analysis of the position and role of playgrounds in the planning documents of Bucharest. Results could be useful for city planning as they emphasize which areas are lacking playgrounds. Also, the spatial analysis reveals, especially in the current epidemiological context, the importance of Bucharest becoming a compact city with adequate urban functions in the proximity of residents, playgrounds being an essential element for children.

## Habitat inclusif et résidences intergénérationnelles - une nouvelle réalité dans la géographie des établissements

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L'habitat fait l'objet de mutations permanentes générées par la dynamique socio-économique, et plus récemment, par la dynamique démographique. Après la périurbanisation et la gentrification urbaine, c'est autour d'une nouvelle réalité démographique qu'on construit l'urbain: le vieillissement de la population. La structure de l'article comprend une présentation du phénomène du vieillissement en tant que facteur décisif de la configuration urbaine-architecturale, une description des solutions contemporaines les plus représentatives pour le logement des personnes âgées (des asiles, maisons de retraite classiques aux complexes résidentiels intergénérationnels), et une incursion dans le paysage résidentiel roumain actuel. La conclusion du demarche met en evidence la diversite des solutions, et le fait que la parution des catégories varient d'un pays à l'autre, influencée par le niveau de développement et les pratiques culturelles.

# Mobilité et transport urbain au sud de la municipalité de Iași.

De l'indifférence administrative aux solutions civiques Adrian Covăsnianu, Liliana-Elena Covăsneanu Moldova Vrea Autostradă, Iași, Romania, covasnianu.adrian@gmail.com

La zone urbaine au sud du municipe Iași et aussi la Zone Métropolitaine Iași sont de vrais défis pour les institutions locales: Les autorités locales, y compris celles des communes voisines n'ont pas la capacité, les ressources et les moyens pour résoudre la problématique de la mobilité et du transport urbain. Le développement urbain déséquilibré ne se développe pas d'une manière liée au développement technique et urbain. En même temps, l'autorité centrale du chef-lieu Iași accentue le problème par une accumulation d'indifférence, d'incapacité et de manque de vision urbain à court, moyen et long terme. Compte tenu de ces "coordonnées", la société civile est obligée d'apporter des propositions techniques, raisonnées et réalisables qui constituent une solution intégrée. Dans cet article on va "radiographier", les principaux dysfonctionnements qui déterminent des embouteillages dans la partie sud de Iași qui ont comme effets négatifs des déséquilibres sur la productivité du travail et la santé publique et exercent une pression sur les infrastructures techniques existantes. Par la suite, une série des solutions seront proposées qui peuvent conduire à une amélioration de la qualité de vie des habitants du sud de la municipalité de Iași et de sa Zone Métropolitaine.

## L'utilisation des bases des données géographiques dans la digitalisation de l'administration publique

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Le nouveau cadre financier européen proposé pour l'intervalle 2021-2027 stipule comme action prioritaire pour les milieux résidentiels, surtout ceux urbains, d'investissements dans la digitalisation au but d'augmenter l'efficience de l'administration publique et d'avoir des relations équilibrées avec les citoyens (POR 2021-2027). Quelques modèles de bonnes pratiques ont été déjà initiées en Roumanie, accélérées toujours par le contexte pandémique contemporain. Le rôle des bases des données dans l'administration publique, par l'association des données spatiales, démographiques, économiques ou d'autre type, surtout dans l'espace rural, constitue la provocation des dernières dix années. L'objectif de cet article a été celui de rendre une analyse scientométrique minutieuse sur le rôle des bases de données spatiales, l'utilisation de la technologue UAV dans l'administration publique, ou mêmes la typologie des données utilisées.

## A test of territorial resilience: the urban hierarchy and the dynamics of creative industries in Romania

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The advantage of a big city from the eastern EU is that, once the local economies have opened up to the global market, it can benefit from a second development boost, as to the regional one the international one has been added. From this perspective, secondary cities, the ones which are situated right after the capital in the urban hierarchy, are at an advantage compared to the ones lower down in this hierarchy. With an already well defined regional hinterland, easy to identify especially due to the daily or weekly influx of students and other categories, these cities have an enhanced capacity of producing highly qualified workers and of attracting the elite. Thus, Romania-s regional cities (Cluj, Iasi, Timisoara etc.), have accumulated during their recent development new functions that used to be specific only to the capital, becoming aeronautical hubs, able to link the region to the international flows, or centers for creative industries or for IT&Outsourcing, sought out by the big multinational companies.

The proposed approach signs in exploratory coordinates, seeking to highlight in a trans-scalar manner the spatial behavior and evolutionary stage of a sector, which is difficult to detect in his accelerated dynamics.

**Our main hypothesis** consider that the creative industries economic convergence takes place differently, if one will address its mechanism at different scale – Global, East European regional scale, national scale, regional and (infra)local scale.

Basically, our intention was to verify if the creative industries growth process presents scale sensitivity.

In order to test this hypothesis, **the analysis** will use many statistical and cartographic constructions of which will be presented the potential of spatial interaction, weighted barycenter, spatial, territorial and hierarchical autocorrelation.

## Urban renewal of the historical city center of Iaşi. Gentrification from a post-socialist perspective Bianca Elena Solomon, Mihai Bulai, Zahra Alabrash

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The historical city center of Iasi, Northeast Romania, has a high symbolic value for the whole city and for the surrounding region of Moldavia (4.5 mil inhabitants), as it hosted its historical capital headquarters for more than 300 years. It is an area of around 1 square kilometer, with complex functions, uneven development, characterized by longitudinal NW to SE main axes that drain the flow of pedestrians and vehicles. However, it does not currently capitalize its assets, as there are many unused plots, decaying heritage buildings, unproductive commercial units and a deep gap between well-arranged main axes and neglected secondary streets. In order to revitalize their city centers, many European cities have undergone changes in their physical, functional and social structure, associated with the concept of gentrification. Our hypothesis is that the gentrification process, applied in certain conditions, adapted to Easter European cases marked by post communist transition is beneficial for the renewal of the historical center of Iasi. The study is based on field observations regarding functional, social, demographic, economical, legal and urban planning characteristics of the studied territory, the analogy with processes undergone by other European cities (Budapest, Prague) and the study of urban design and arrangement. GIS and CAD (Computer assisted Drawing) will be used to assess urban surfaces and volumes as well as framing photographic material. The results of this study show that gentrification and its direct physical and functional effects will sustain the revitalization of the historical city center provided that some conditions are met. The sustained involvement of the local community and authorities paired with the establishment of optimized urban policies are key steps for an appropriate approach to urban renewal of the studied area. Although the policy makers mainly focus on physical, aesthetical aspects of urban revitalisation, the historical city center of Iasi must frame, as well, its functional assets and its social balance.

# The role of public transport in the modelling of urban and periurban structures. Challenges of the post-socialist transition in the Metropolitan Area of Iași

Manuel Foșalău, Oliver-Valentin Dinter, Adrian-Mihai Cimpu, Lucian Roșu "Alexandru Ioan Cuza" University of Iași, Romania, manufosalau@yahoo.com

Public transport, both private and personal, had always been a subject of great interest not only for the authorities, urban organisers and political deciders, but also for the citizens. Either talking about the road to the workplace, commercial centers, public events or an ordinary walk in the park, everyone thinks about the means of transportation, time spent in traffic, cost and accesibility, first of all. These matters determined the unwritten laws of the land market, the role of the central and peripheric areas and of the urban amenities.

In the context of the accelerated rising of new residential neighbourhoods, of the population growth in the metropolitan area of Iasi and, in relation to these, of the traffic density growth on the main routes towards the city, this paper discusses this matter from the geographical perspective and through GIS analysis. These factors reach an uncontrolled extent that is difficult to manage without a clear legislative framework and without a sustainable vision, that takes into account the future of the city.

This paper studies the Metropolitan Area of the city of Iasi and identifies communes for which the decisions were taken respecting the urban policies, based on criteria such as time spent in traffic, frequency of the means of transport, fuel consumption or tickets price. Taking into account recent territorial expansion of public transport during the past years in the neighbouring villages, such as Breazu, Miroslava or Sorogari, we try to evaluate the utility of these decisions and to identify the best areas for the upcoming extensions.

#### New Residential Complexes and Conflicts in the Urban Landscape of Iasi Municipality

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The uncontrolled urban sprawl in the post-communist era represents a phenomenon that caught the interest of Urban Geography researchers (more precisely specialists in Urban Planning and Real Estate Geography) as well as architects and sociologists. The transition to capitalist economy in Central and Eastern Europe determined a chaotic spatial distribution of new residential complexes (in greenfield areas of the suburbs) built to satisfy the fast-growing demand of the citizens.

As a consequence of the post-socialist transition, Iasi Municipality recorded a fast pace of Real Estate investments, especially in the residential complexes of collective housing. Mostly located at the border of the built area of the city and extending over this limit, these complexes form extended and heterogeneous residential areas that in most cases connect the urban area with the surrounding villages (e.g. Păcurari - Valea Lupului, Galata – Miroslava, C.U.G.- Valea Adâncă etc.).

A complex is different from the surrounding housing units not only because of the design, but also because of the building's level, which is usually higher than the individual housing that is normally found in the periphery (mostly have a P+E+M or P+M level). Having these considered, this paper's purpose is to identify the residential complexes that deviate from the rules as some of the collective housing have up to 14 levels, in contrast with the usual suburbs landscape.

This study emphasises the irrational and heterogenous land use of the urban space because of the lack of urbanism rules that should prevent the disorganized evolution of the city.

## Using deep learning to determine land use dynamic in post-socialist city of Iaşi Adrian Mihai Cimpu, Lucian Roşu, Oliver Dinter, Manuel Foşalău "Alexandru Ioan Cuza" University of Iasi, Romania, am.cimpu@gmail.com

Spatial analysis in GIS included machine learning tools for decades, beginning with basic imagery classification to advanced algorithms to help identify various patterns. Deep learning is now used in GIS more and more often in all areas, from agriculture, hydrology to urbanism, offering the researcher a quick yet detailed and complex analysis and output. To offer a brief description, deep learning works as a usual supervised classification on satellite imagery, but with each iteration, the model gets to identify patterns, in land use for example, more easily, and the samples collected for the classification can be later used for another area. In our paper, deep learning is used to classify the land use dynamic in post-socialist city of Iași. The capital city of the province of Moldavia, once capital of Romania, plays a significant role regionally and nationally. Here, a vast number of economic activities molded the space to its own need in the last couple of centuries, and now since the fall of the socialist regime, the city has undergone a series of changes that modified its spatial structure, leaving behind the vast industrial spaces and emerging new challenges regarding urban sprawl, a sensitive topic for sustainable development. Our main purpose is to underline the changes that took place in the city of Iasi and its own land use dynamic with the help of deep learning analysis, in order to understand how spaces were used and how they are put into value now. Of course, there are studies and analyzes that showed how land use changed, such as Corine Land Cover, but the scale of the studies done are not relevant in our area of study, hence the necessity to have a detailed scale to underline precisely the changes.

#### Roads quality as a key factor in reducing time-response of first responders (firefighters)

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Time-response constitutes the time passed betweend the announcement of the intervention and the time at which an intervention truck arrives at the scene of an incident. This time varies based on the distance between the fire department and the adress of the incident but a road that is in good condition will help the firefighters get there faster. This is a common problem in the studied area, because basic insfrastructure such as roads is in very bad shape. Even though a fire truck can't exceed 50 kmph since it is a big and heavy equipment, there are frequent situations when the trucks cannot reach this speed because of the numerous potholes.

Because there are is no data regarding the quality of roads for Iași County we decided to use information from a database regarding the traffic accidents. So, for every location of an accident we extracted data about the state of the road (if it was a smooth surface or a potholed surface) and the constitution (asphalt, gravel or clay). The next step was to overlap the results regarding the accidents to a map revealing the index of damages after major fires, because we supposed that a higher damage index is linked to a delayed time-response. The results have confirmed our supposition that the quality of roads is connected to time-response delays, but what was interesting is the fact that the constitution of the road and the state of the road show different patterns than the total number of accidents, and these two indicators show where are the biggest problems, which is in the profoundly rural areas. In conclusion, roads quality has a great impact in reducing or delaying the time-response of first responders and the solution to this problem consists in the interest of local administrations in investing for better infrastructure. In addition to that, an alternate solution might be the foundation of volunteer fire crews.

## Secțiunea/Section/Session Geografie Economică/ Economic Geography/ Géographie économique

#### The state of the sustainable development in Romanian regions

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The main goal of the presentation is to present the methodology of the measurement of the sustainable development goals developed by a research group of the Research Centre for Sustainable Development, Cluj. We will present the indicators employed in the measurement, the database created, the statistical tests and the method of calculation of the SDG index. The later is a composite index, which incorporates the 17 particular indexes of each of the 17 sustainable development goals defined by the United Nations. Finally, we will examine the spatial distribution of the SDG index in Romania.

## Structure and dynamics of economic activities in the Northern Development Region of the Republic of Moldova

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The purpose of this study is to analyze the regional macroeconomic indicators of the Northern Development Region of the Republic of Moldova, for a period of 5 consecutive years, 2013-2017. The North development region includes the municipality of Balti and 11 districts, with a stable population number of 974.6 thousand people, or approx. 27.5% of the total number of stable population in the republic. The economicmathematical and analytical-comparative methods were applied to the research, and the official data of the National Bureau of Statistics of the Republic of Moldova were used as materials. The regional Gross Domestic Product in current prices from the study region, in 2017 was approx. 16.8% of GDP per country. During the analyzed period, the regional GDP of the region increased by  $\approx 1.4\%$  times, or by 9.1 billion MDL, from 21 billion MDL in 2013 to 30.1 billion MDL in 2017. GDP The regional value of the study region is composed of the total gross value added ( $\approx$ 86.6%) and net taxes on products (13.4%). The gross value added in the analyzed region, during the years 2013-2017, increased by  $\approx 1.5$  times, or by 8.1 billion MDL, from 18 billion MDL in 2013 to 26.1 billion MDL in 2017, the average being 22.1 billion MDL. Taxes on products increased by a slower step,  $\approx 1.3$  times, on average amounted to 3.4 billion MDL. The highest share in gross value added by economic activities has agriculture (on average 23%), followed by manufacturing (on average 14%) and wholesale and retail trade (on average 9%). At the same time, it is worth mentioning that some economic activities in the region increased at a faster step than the gross value added in the Northern Development Region, namely: other service activities ( $\approx$ 2.2 times), construction ( $\approx$ 1.8 times), trade ( $\approx$ 1.8 times), manufacturing ( $\approx$ 1.7 times), transport ( $\approx$ 1.7 times) and water distribution, sanitation, waste management ( $\approx 1.6$  times).

## Turkey's New Geopolitics in the Middle East, between imperialism and democracy

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While the European Union was facing a new reality, the Brexit, in the Middle East a traditional ally changed its geopolitical strategy. With economic interests that made it develop common projects with the Russian Federation and an authoritarian leadership, corroborated with a lower interest of the USA in the area, but with a great advantage at the negotiating table, as it still hosts the largest number of refugees in the world, Turkey turned itself into a hostile player. The most recent two geopolitical movements, the dissensions with Greece and Cyprus over territorial claims in the eastern Mediterranean and the direct involvement in the Nagorno-Karabakh conflict between Azerbaijan and Armenia, best reflects Recep Tayyip Erdogan's new vision. Today, Turkey seems to have definitively left the European road, acting like it's Russian model, thinking

imperialistically and becoming more active in the area. However, changing the geopolitical strategy overnight can be dangerous in an area where society is boiling and frozen conflicts can ignite at the slightest spark.

#### Importanța industriei în Slatina pentru dezvoltarea localității

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Municipiul Slatina, este poziționat în sudul țării, în partea central-nordică a județului Olt și în vestul regiunii istorice Muntenia. După punerea în functiune a fabricii de producere a aluminiului, această unitate industrială a devenit emblematică pentru municipiu, care era descris frecvent drept "orașul aurului alb". O pondere importantă în economia și industria municipiului Slatina au și companiile Pirelli Tyres, Prysmian, TMK-Artrom, care sunt situate în partea estică a orașului, pe strada Drăgănești. TMK—Artrom Slatina — este deja o unitate de productie de tevi de otel cu traditie pe platforma industrială a Slatinei. Fabrica de tevi de otel de la Slatina a fost înfiintată în 1982 ca întreprindere de stat si a început productia în 1988. Compania Pirelli este prezentă în Slatina din anul 2006, cu o unitate de producție de anvelope din gama de vârf la care lucrează în prezent 3.000 de angajați. Unitatea de productie de anvelope de la Slatina va deveni cea mai mare fabrică Pirelli din întreaga lume, până la sfârșitul anului 2017, după extinderea capacității de producție în urma unei investiții de 105 milioane euro, începută în anul 2012. Fabrica de la Slatina produce anvelope Premium pentru mărci auto de prestigiu precum BMW, Mercedes, Audi, Porsche, Alfa Romeo si Jaguar. În urma traficului rutier foarte intens pe strada Drăgănești, Primăria Slatina a luat decizia supralărgirii acesteia la 4 benzi de circulație. Și totuși, o analiză făcută în anul 2014 la nivelul tării, releva faptul că în 24 de județe cea mai mare "industrie" este comerțul, în timp ce doar trei județe din România se pot lăuda cu o pondere a industriei prelucrătoare de peste 50% - Olt, Argeș și Alba. În județul Olt, Alro Slatina, Pirelli, Prysmian sau TMK-Artrom țin în viață economia unui județ în care doar 40.000 de oameni lucrează în companii, potrivit datelor de la Registrul Comertului. Mare parte din investiții se leagă însă de un singur oraș, Slatina.

## Secțiunea/Section/Session

# Dezvoltare locală durabilă, inovare socială și reziliență teritorială/ Sustainable local development, social innovation and territorial resilience/Développement local durable, innovation sociale et resilience territoriale

## De l'utilité de la prospective stratégique pour construire le développement local durable. Leçons d'une expérience régionale en Centre-Val de Loire (France)

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Par définition, le développement territorial durable (DTD) s'inscrit dans le temps long et sa mise en œuvre à l'échelle régionale ne peut s'envisager sans une démarche de prospective stratégique, au sens de Gaston Berger (1958) ; autrement dit une démarche de type pluridisciplinaire, qui intègre la prise en compte du passé aussi bien que de l'avenir à long terme, et intègre les discontinuités et les ruptures possibles. En d'autres termes, une stratégie de DTD à quelque échelle territoriale que ce soit, en l'espèce régionale, nécessite de dépasser les approches purement prédictives, telles que celles qui sous-tendent les modèles déterministes de prévision fréquemment développés par les économistes, les économètres et les statisticiens. A cette méthode prévisionniste « traditionnelle » s'oppose celle des prospectivistes qui élaborent des scénarios. Ceux-ci n'ont pas la prétention d'être des photographies de l'avenir, mais simplement des explorations d'avenirs possibles permettant de mettre en évidence des macrotendances, sans faire l'impasse sur les ruptures possibles, aussi bien celles que l'on risque de subir que celles que l'on aura provoquées (De jouvenel, 2004). Ces scénarios peuvent prendre la forme de récits, permettant de se projecter à un horizon temporel éloigné, et de proposer des « coups de projecteur » sur le long terme, préparatoires à la décision pour formuler des préconisations et étayer la prise de décision en termes d'action publique et d'aménagement du territoire, dans une perspective de DTD.

L'objectif de notre communication est d'illustrer comment la prospective appliquée aux territoires, notamment de niveau régional, permet d'anticiper des évolutions plausibles afin d'orienter les choix stratégiques en vue de répondre à des enjeux de durabilité. Nous nous appuierons à cette fin sur les travaux de la Section Prospective du Conseil Economique, Social et Environnemental de la Région (CESER) Centre-Val de Loire, qui à travers un rapport récent (septembre 2020) propose des scénarios de transformation de l'espace régional, à l'horizon 2050, sous l'effet de la création de deux métropoles institutionnelles, Tours et Orléans. Cet exercice permet de soumettre aux responsables de la Région, dotées en France de la compétence d'aménagement du territoire, comme à ceux de l'Etat, des pistes d'action pour aller vers un développement plus durable et plus cohésif du territoire. Notre communication sera donc centrée sur l'évaluation de l'apport d'un tel exercice en vue de la construction d'une stratégie à long terme d'aménagement et de développement régional. Nous commencerons par rappeler les caractéristiques d'une démarche de prospective territoriale avant de présenter les travaux du CESER Centre Val de Loire, et d'en analyser la portée.

#### Integration of food security issues into county planning agendas

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Authorities in European countries have developed various strategies to integrate agriculture on the spatial planning agenda. Some countries have included agricultural land in green infrastructures to protect it from conversion to built-up areas, others developed specific policies for protecting fertile land. Such strategies are often applied by integrating them into the spatial planning agendas at different planning levels. The aim of this research is to provide an overview of the current stage of food security integration in Romanian county policy documents. To conduct this research, we collected all spatial planning documents adopted at county level and publicly available. The database consists of county plans for territorial management, development strategies, sustainable development strategies and risk management plans. The database includes

approximately 200 policy documents. Considering the large amount of information, traditional document content analysis methods are too time and resources consuming to be applied. Thus, the documents analysis was conducted using text mining with in R software. Text mining is the process of structuring large amounts of text by detecting patterns in the use of certain words and by identifying the way they group in topics. Preliminary results show that food security is most often addressed within the following spatial planning aspects a) protection of agricultural land against natural hazards (e.g. drouths), b) economic competitivity, c) climate change, d) protection of cultural landscapes such as vineries. However, food security per se is not a topic addressed explicitly.

### Understanding the social innovation process in a small post-socialist industrial town: Fieni, Romania

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The paper is focusing on finding and understanding the social innovations in a small Romanian industrial town, Fieni. Situated in the south part of Romania, in Dâmbovița County, the industrial past of Fieni started in the first decades of the XXth century, with two industries that became emblematic in the communist times: the cement and light bulbs activities. Nowadays, the town is facing different social and economic difficulties caused by the consequences of the production decline, more obvious after 2000. The aim of the study is to evaluate the development of the social innovations from temporal, typological and participative point of view in a small urban community of less than 8,000 inhabitants. The methods rely on organising three workshops with the local population, decision makers and some investors. The first workshop was oriented to the assessment of the social sustainability in Fieni. The second one took into consideration the historical conditions that explain how the social innovations occurred in time and their currently approach in the context of different socio-economic challenges generated by the closure of the light bulbs' factory and the retechnologisation of the cement plant. The third workshop was focused on analysing the most important directions towards which social innovations are going to progress. The results obtained during the workshops validate whether social innovations may represent or not a support for the future local socio-economic development of Fieni in post-industrial times.

#### Axes geographiques dans la logique du developpement regional soutenable

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Le mémoire se propose d'approfondir les supports d'auto-organisation de l'espace sous la forme des axes géographiques, concernant le rôle des axes naturelles, sociales et économiques de la perspective du développement régional soutenable. Le rôle des géo-complexes axiaux est important dans l'organisation et le fonctionnement de l'espace géographique, notamment dans le cas des territoires complexes sous aspect tectonique-structurel, comme c'est le cas de notre pays. Il y a beaucoup d'études sur la dimension déterministe des grandes modèles tectoniques -structuraux et morpho-hydrographiques, mais assez peu avancent dans la direction du déchiffrement des particularités structurelles, relationnelles et fonctionnelles des axes géographiques regardées comme territoires complexes ayant des propriétés distinctes, qui comportent une perception et une gestion adéquate de la perspective de l'optimisation de leurs valences socio-économiques la sur la voie de la planification de la perspective du développement régional soutenable. La spécificité du thème inscrit l'approche actuelle dans une préoccupation actuelle de la géographie et le mode où elle conditionne ou favorise certaines actions géographiques anthropiques qui mènent finalement à l'acquisition d'une individualité sur la voie de la cristallisation des complexes territoriaux ayant différentes formes, structures et fonctions. La structuration et l'évolution des espaces physiques dans la direction de l'individualisation des géo-complexes de type axe constituent l'une des plus représentatives conjonctures par lesquelles les facteurs géographiques coordinateurs la tectonique, le relief, le réseau hydrographique etc., favorisent la répartition, la typologie et la dynamique des systèmes anthropisés habitationnaux, agraires, industriels, de transport, touristiques etc.

# Secțiunea/Section/Session Identitate Teritorială și Dezvoltare/Territorial Identity and Development/ Identité territoriale et développement

## 1. A. Theory and Methodology for Researching Territorial Identities

## Is It Possible to Develop a Methodology to Detect Territorial Identity? Some Preliminary Reflections

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For a long time, the term "territorial identity" has been widely used in geography without an adequate theoretical reflection, as for other terms (e.g. "place"). Since the 90s of the last century, a considerable scientific literature has been growing rapidly around this topic, which has extensively analyzed the concept of territorial identity both on a theoretical and an applicative level, examining case studies referable to various geographical scales. On the contrary, very few studies have focused attention on methodological aspects. The development of a reasoned research methodology, discussed and legitimized by the scientific community, especially with reference to the local scale - that is, the one referable to contexts of limited territorial extension (e.g. the neighborhood of a city or an aggregate of small rural municipalities) - would help to avoid the indiscriminate, distorted and instrumental use of the notion of territorial identity, favoring a conscious and effective use of it, both on a social and a programmatic level. But how can be territorial identity detected? Examining what aspects? Using what methods and tools? Is it possible to develop a methodological model? What are the risks and limits to be aware of? The presentation aims at answering these questions with reference to the local scale, first by recalling some shared theoretical understandings in the scientific debate on territorial identity, then by presenting some examples of applicative research, and finally by proposing some preliminary methodological indications.

#### Territorial Identities and the Geography of Well-being

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Geographers and other scholars of well-being increasingly acknowledge the importance of place for wellbeing. Most of this work focusses on the importance of where people live and by whom they are surrounded. This paper expands such scholarship by exploring the role of spatial relations and territorial identities in the construction of self-reported. In 2015, I conducted qualitative research on the impacts of austerity on young adults from a disadvantaged urban neighbourhood in Dublin, Ireland. Building on interviews from this project, I identify how different spatialities in the city and beyond play a role in the construction of territorial identity and local well-being in Ballymun. In particular, I identify three themes in which territorial identities play a role in constructing local well-being. First, young adults employ spatial reference groups, in which they compare territorial identities and produce their well-being in relation to the identity of other places. Second, the territorial identity of their own neighbourhood allows them to identify the perceived neighbourhood needs to foster youth's sense of well-being. Finally, young adults assess their levels of well-being in relation to spatial norms of wellbeing grounded in the territorial identity of their neighbourhood. Together, these themes provide a framework to study the webs of meaning involved in the geographies of well-being and to disentangle the complex relationships of territorial identities to urban well-being.

#### Urban Image Assessment as a Tool in Sustainable City Development

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Cities have been affected by the process of urban revitalization because they wanted to be included in the global market competition where they try to attract more economic resources and consolidate an important position, transforming their urban representations at the level of perceptions. Some cities have chosen to remodel the urban spaces, projecting an image that attracts the visitor and the resident, but at the same time, they try to manage the problems and tensions associated with this process of urban transformation. Thus, the image of the city is increasingly exposed to recent advances and to changes in infrastructure. This paper will focus on urban image assessment as an important tool in the sustainable development of a city. In this realm, the case study of Craiova city serves as a model of urban evaluation and will be explored. The study on the perception and knowledge of urban space in Craiova was conducted using a multiple perspective approach following two levels of analysis: the cognitive level that is based on the classical model of K. Lynch city analysis (1960), which is reflected by the identification of the five elements in the urban space: paths, edges, districts, nodes and landmarks, and the evaluative level through which the attractive, repulsive and indifferent spaces in the city will be determined according to JL Nasar's analysis (1997). The obtained evaluations through these analyses can lead to positive transformations (improvements) of the urban space, namely there will be identified the urban environment preferred by residents, the imaginability, the readability and the attractiveness of urban spaces in Craiova, concluding with the importance of urban image analysis in terms of urban sustainable development.

#### Recreating the Digital Image of the Derelict Parquet Factory of Rupea - Homorod, Romania

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This research aims towards a digital reconstruction of an old, almost unknown, factory from a small town of central Romania. Focusing on the methodology and less on the case study of the derelict Timber and Parquet Factory of Rupea-Homorod, this paper's main objective is to research the history of the place from an urban planning perspective. There are many purposes for this research, but the main one is to identify solutions for the future reconversion of this brown field into something useful for the community. This research covers the field investigation of the ruins, collecting information from the locals and drawing a birds-eye view of the factory, based on the collected old photographs from the locals. It is worth mentioning that there is no picture preserved with the complete image of the factory and the reconstruction is based on pictures, which, in most cases, accidentally captured parts of the factory in their background. The research is oriented towards urban history, with a strong investigative characteristic, putting fragmented information together, like puzzle pieces, offering a holistic story from beginning to end of a century and a half old factory, to which the origin of a settlement is directly linked.

## 1. B. Politics & Territorial Identities

#### Territory, Identity and Territorial Development - An Overall Approach

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The words, especially those distilled to the concept stage, are never innocent. This statement becomes more obvious as we move further towards the social sciences, compelled by their nature to carve out concepts that describe symbolic realities, materialized or not. Social constructions of other social constructions, the concepts of these sciences carry with them considerable ideological loads which, paradoxically, tend to be forgotten over time. Thus, those concepts end up acquiring an elastic coating, ready to fit whatever the user wants. These protean words ultimately become forms without content. In this communication we intend to question the current state of some extremely active concepts, with major scientific and practical impact: territory, territorial identity, territorial development. We deliberately use the terms *territory, territorial* due to their multiscalar or trans-scalar application capacity and due to a lower semantic branching than in the case of the terms *space* or *region*. Thus, we will be able to approach more cautiously pairs of very little similar concepts (*space-region, spatial identity-regional identity, spatial development-regional development, spatial planning / regional planning*), keeping our freedom to question both the ideological contexts in which they were promoted, as well as their subsequent evolution. The analysis is focused on the epistemological and societal tension created by the opposition between the rushing currents of ideas promoted by what is called *postmodern / postcolonial studies* and the impetuous rise of neoliberal ideas. The accuracy and current congruence of the analyzed concepts, relative to the realities they describe, will be tested in the context of the dynamics intended to build the territory of the Community / European Union.

#### **150 Years of Senatorial Elections in Romania (1866-2016)** Ionel Boamfă

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We intend to analyze the regional particularities (at the level of provinces and / or counties) of the electoral process, carried out in a century and a half of elections for the Senate (upper chamber of the Romanian Parliament). Although the existence of such a chamber is older – starting with the existence, between 1859-1862, of the Central Commission in Focsani, and the first attestation of the Senate (under the name of Corp Ponderator/Pondered Corp) dates from 1864 – the first designation by vote of Romanian senators produced in 1866. As the last senatorial election so far was in 2016, we are dealing with 150 years of electoral life of the upper house of the Romanian legislative. In the analysis of this electoral process, we encounter several problems: the first is related to the variability of the administrative division, both internally (number and territorial configuration of administrative units – counties) and externally (changes in the country's borders, especially in the first part of the analyzed interval, until 1945). Also, the designation of senators was not always done in the same way: if in the period 1866-1918 the senators were elected by a very small percentage of the country's adult population, in the interwar period the universal suffrage was passed, however, exercised only by the adult male population, and since 1990 – to the vote exercised by the entire population aged 18 and over, under similar conditions to the election of deputies. In addition, before 1940, several senators were not elected by the county electorate, but only by a part of it: university professors, who send a representative from each University (Iasi and Bucharest, until 1918, when were added, since 1919, Cernăuți and Cluj), in the period 1926-1937, a number of senators were voted by county and local councilors in each county and others - by corporate institutions (chambers of agriculture, industry, trade and labor), so that, at the 1939 elections, only the members of these institutions would vote. On the other hand, before 1940, some senators did not have their place in the legislature after an election, being "legal senators": the representatives of the cults, the heir to the throne, the former presidents of the Chambers, those who had been deputies and / or senators in at least 10 legislatures, the former prime ministers and ministers who had been in office for at least 4 years, the presidents of the Romanian Academy, generals who had commanded military units in 1916-1920, at least 3 months, or those who had led the General Staff. In 1939, the new Carlist Constitution (1938) granted the sovereign the right – Carol al II-lea / Charles II – to directly appoint a part of senators. We add, finally, without exhausting the series of problems, the fact that, after the military-legionary dictatorship suspended, in September 1940, the parliamentary life, practically uninterrupted, from 1857 (from the election of the ad-hoc Assemblies that demanded the Union of the Principalities), the government installed by the Red Army in March 1945, decided, before the first post-war (November election 1946), to abolish the Senate, which reappeared in 1990. In these conditions, if regarding the senatorial mandates, we will take into account all the data (including those related to senators designed only by a part of the electorate and the legal senators), the analysis of electoral variables for the entire period (turnout, electoral preferences of voters) we will take into account only the elections held at county level.

## Political Mobilization through Populist Actors' Appeal to Territorial Identities in the Republic of Moldova

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Syriza, Podemos, Evo Morales, The Tea Party, Marine Le Pen, the Alternative for Germany - populist political actors across the political spectrum are often portrayed as having increasingly gained in significance in different parts of the world since the end of the 20th century. For deeper insights into their political mobilizing strategies, several theoretical approaches to populism have been elaborated in the social sciences and humanities such as the popular agency approach or the Laclauan approach. Yet how can the often-claimed increasing success of populist actors in the political arena nowadays be explained? Drawing from the ideational and discursive-theoretical approach to populism, this paper argues that populist actors' success in mobilizing support for their political projects can be explained by their appeal to people's territorial identities. With the example of current populist narratives of political parties in the Republic of Moldova, this paper illustrates that populist actors seek to mobilize voters by appealing to their territorial identities in their electoral campaigns. In their electoral narratives, populist political parties strategically select the most suitable territorial identities depending on their respective overall political goals and party representation. Through references to various discourses on the national and international scale, they confirm, contest, or re-negotiate different already existing territorial identities for the inhabitants of the Republic of Moldova. These theoretical and preliminary empirical research findings highlight the need to analyze the impacts of populist narratives on people's construction of territorial identities in the everyday life. Likewise, they suggest that research may yield alternative in-depth insights into the mobilizing strategies of populist actors by focusing on the confirmation, contestation, or construction of specific territorial identities in their electoral narratives.

## European Citizens' Perception of Women's Involvement in Political Life. Evidence for Romania and Other Central and Eastern European Countries

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In the last years, reaching the gender equality within decision making positions, especially in politics, was a highly discussed/debated topic and many researches and reports were made in this direction. The present work attempts to understand the Romanian society tendencies in what concern gender stereotypes and typologies regarding women's involvement in politics. The aim of the present research is to analyze the public perception of Romanian citizens' compared to the average opinion of the European citizens on women's involvement within the political life and gender discrimination. In this sense, there were selected some key-questions from the two Eurobarometers (Gender Equality, November 2017 and Discrimination in the European Union, October 2019). Six questions regarding the perception of women's involvement within the political life and a Gender Stereotype Index were selected. The data was analyzed in order to highlight certain typologies of the analyzed countries in regarding the gender equality in politics. Comparing the results from the Central and East European countries with those from Western and Northern Europe highlights major differences in thinking. The results show that lowering the gender stereotypes remains a significant challenge for Romania, as in here one of the lowest values of gender tolerance is encountered and women's responsibilities within the family is still representing an important aspect. Moreover, the created typology (ascending hierarchical classification) places, once again, Romania in the category of countries where gender discrimination, including (or especially) within the political life has high values. A behavior that characterizes other countries in Central and Eastern Europe too, but it cannot be overlooked the fact that in Romania more acute.

#### 2. A. Approaches to Crisis & Territorial Identities

#### Old Trees Cannot Be Re-planted: When Energy Investment Meets with Farmers' Resistance

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Lignite open cast mining arouses disagreement due to controversial land use. In particular, this concerns the situation when a mining operation interferes with a well-managed agricultural area. In a case like this, the planned investment comes across farmers' resistance, who are strongly attached to a certain place and their farmland. The presentation summarises the results of the study on farmers attachment to their farmland who are exposed to potential resettlement due to a newly planned surface mining operation. The research was conducted among a traditionally farming-oriented community who expressed its unwillingness to the lignite operation and enforced displacement. The data were collected via a questionnaire form that was designed, as such, to include the three aspects of place attachment: a place of living (family home, village), the community in a place (family, neighbours), and surrounding environment (farmland). The measurement of the three aspects of place attachment (farmland) that were to be affected by the potential energy investment (open cast mining based on the "Oczkowice" lignite deposit).

#### A Territorial Approach to Disaster Management Capabilities

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The capabilities theory of Amartya Sen has a great influence in the fields of social justice and human development. Although more used in economy and policy, the theory can also become a coherent foundation for studies in disaster management and sustainable development of territories. A broader view on the natural disaster from both human capabilities perspective is essential to have the appropriate disaster mitigation strategies and planning measures. Current approach studies the relation between natural and anthropogenic disasters from two complementary perspectives: 1) management capabilities as the abilities to respond and cope with disasters; 2) the influence of disasters on human capabilities to achieve a higher degree of wellbeing and (sustainable) development. The study is mainly a theoretical approach that reviews the state of art on this topic, but it also implies an overall analysis of territorial differentiation concerning disaster management capabilities at a different scale. The paper also gives examples and preliminary results on the influence of big disasters on human capabilities, tackling the issue of social justice concerning changing access and use of resources (modernization, technologizing, and industrialization) and concerning fulfilling the basic needs of individuals and society. The conclusions converge towards the idea that sustaining and increasing human capabilities can represent an overall purpose when managing the disaster. These extreme events can increase disparities and create more injustice or, by the contrary, they can be opportunities to change territorial structures and functionings and to boost wellbeing for all social categories.

## Territorial Identity and Land Use Conflicts in the Urban-Rural Fringe: The Perspective of Stakeholders in Northern Germany

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Struggles over territorial identity are often expressed as land use conflicts. Urban-rural fringe regions are described as particularly prone to such conflicts as they are the physical space where urban and rural identities, and thus interests, meet. So far land use conflicts in urban-rural fringe regions have been collected by analyzing actual land uses or land use preferences (through GIS or PGIS) or through media analyses. However, the perspective of the stakeholders involved in these conflicts has to date been neglected. Yet the conflicts that local

actors perceive are the ones that will cause frustration among them, and therefore need to be addressed in territorial planning.

This paper analyzes stakeholder perceptions of land use conflicts in the Northern German city of Schwerin and its surrounding municipalities. Conducting 32 semi-structured interviews with local land use actors, 149 different land use conflicts that these actors are aware of were identified and then clustered. Then, qualitative content analysis was used to analyze actors' perceptions of these conflicts. The paper thus provides a broad overview of the land use conflicts that actors in urban-rural fringe regions perceive, and of how they perceive them, and therefore of the struggles over territorial identity shaping these regions. In doing so, the paper also aims to identify different actor types with varying conflict perceptions. The findings of this paper contribute to improving our understanding of which conflicts matter to local actors in urban-rural fringe regions. The paper is furthermore relevant for learning how to identify these conflicts, and to better and in a more targeted way deal with (different types of) actors. Thus, the findings of this paper help us to better understand struggles over territorial identity address them in local planning.

### Paterns of Depopulation and Urban Shrinkage for Small Towns. Oltenia (Romania) as Case Study

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The dynamics of the urban system in Oltenia is closely correlated with processes of historical, socio-economic and political nature that have significantly influenced the hierarchical distortions of urban settlements. In this sense.A as a result of forced industrialization and legislative interventions, small towns in Oltenia have undergone disruptive dynamics during the post-communist period and they individualize by a rather marked demographic "poverty", massive migration of the labour force, a pronounced economic restructuring and implicitly, a loss of urban characteristics. The paper aims to assess the patterns of shrinkage for small and medium sized towns in Oltenia, considering not only demographic (migration rate, natural increase, feminization index, share of elderly population and mean age), but also economic (number of employees and unemployment) and social indicators (number of households, libraries, doctors, students, education units and hospital beds). Thus, stating from thirteen indicators, and using the multivariate analysis and the aggregation method, two composite indicators were created and used: CIsh.c and RDC (Regional Demographic Change) for three time intervals (1992-2018, 2018-2030 and 1992-2030). The first composite indicator was used to identify the directions along which variations are higher for the principal components. According to overall trend for RDC (1992-2030), after examining the population trend for every town, we identified four categories, differentiated by ageing, population evolution and shrinking, showing that some towns are more resilient to shrinkage than others, due to a combination of factors. Almost a third must cope with significant shrinkage and faster ageing, while only 10% are not predicted to shrink. Subsequently, based on the CIsh.c, three major categories of town were observed: persistent shrinkage, mild shrinking or slow evolution toward shrinking, where the vast majority of towns are found (includes two different types of towns - mining towns, where there still is a delayed restructuring of state-owned enterprises, but mainly towns characterised by the agrarization of local economies), and stagnant/ stabilized shrinkage. This analysis provides empirical confirmation that many small towns in Oltenia are in fact shrinking, despite different economic and demographic background, and that mainly the demographic indicators (population decrease, out-migration and ageing), followed by economic ones, are the most important factors for urban shrinkage in the region. However, these towns do not only face loses of population, but also a mismatch between the physical urban structure and the population needs.

## 2. B. Local and Regional Identities

#### Postdecembrism. A Still Ongoing Urbanism Reality. Case Study: Cluj-Napoca, Romania

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Turning point, threshold, mutation, change, revolution. All these concepts are used to describe the year 1989 in the history of Romania. But that year meant more than a new, truly democratic system, and a market economy. It introduced a new urbanistic mindset, a new system for cities and villages, based and at the same time made for private property. 30 years have passed since communal holdings, socialist realism, systematization and "Ceauşima" made room for urbanistic capitalism, property restitution, liberalization, globalization and decentralization, sprawl development, but also attempts, some more successful than others, to attain sustainability and digital/smart city status. While the urbanism of the destitute 40s-50s or the one of Ceauşescu can be debated and/or critiqued in their entirety, the urbanism after December 1989 has not fully unraveled itself, has not "matured" and consequently cannot be reviewed as successful or not in modelling the dynamic of Romania's urban and rural areas. Despite this scientific "setback", we will utilize the urbanistic reality of the City of Cluj-Napoca after 1989 to comprehend what has happened in this particular city and, by extension, in Romania as a whole from a territorial development standpoint and attempt to see where this system is heading.

#### Territorial Identity in the Digital Era. The Role of the Smart Communities

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Territorial identity is cause and result of reiterated interactions of individuals with their geographical and relational space. Territorial identity, in fact, on one hand defines the physical configuration of socio-economic relations that take place in a given territory, on the other it represents the outcome of immaterial elements such as: long processes of social and territorial organization, rooted social capital and social cohesion. According with this view, territorial identity influences local evolutionary processes, shaping the performance and the potential of endogenous development of territories and gives insights on the capacity of territories to share visions, ideas and plans for future development. From this perspective, nowadays the technological revolution, that brought us in the so-called knowledge society, puts territories in face of new opportunities and challenges. As reaction to globalization and the loosing of landmark caused by the huge data and information availability in the "net" and by the mass media proliferation, the research of an identity and the need of a feeling of belonging is more and more strong in the today's society. The information and communication technologies (ICT's) - which initially helped to erase socio-territorial boundaries and to strength a feeling of belonging to a single community in which we are all interlinked and interdependent - have now become the main tools for build local, and smart, communities. These, in addition to being places of confrontation, are also and above all places of sharing of subjective and objective knowledge (and therefore of continuous learning) and therefore become particularly important in vulnerable contexts or characterized by a certain degree of risk. There are several experiences that go in this direction, i.e. creating shared spaces built around shared values that emerge to deal with problems felt as "public". These experiments of "collaborative mapping" take on different dimensions and different themes from time to time. They range from analytical, investigative, critical and vindictive dimensions to proposals, monitoring, evaluation, deliberation, on the most varied topics: from the abandonment of public buildings (such as confiscated property), to security and the protection of territories. Are thus defined spaces in which, through self-organization and civic hacking dynamics, problems that are perceived as public are discussed and public goods are co-produced. These last are intended not as goods produced or owned by a public administration, but as the result of a process of social interaction. In this perspective, the paper aims to describe these dynamics and the digital tools through which social practices of re-appropriation and collective redefinition of public goods and construction of territorial identity are nourished.

#### Local Identity and Suburban Development in Iași's Metropolitan Area

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Starting from the well-known fact that local governmental interests do not always match those of the community, evaluating social consequences associated with suburban development is an essential process for efficient territorial planning. To that end, a questionnaire-based survey was conducted and data were obtained from 1003 participants living in the metropolitan area of Iasi. Respondents were classified by demographic characteristics and questions ranged from closed-ended to semi-open and open-ended. The questionnaire included the same 22 items for all 20 communities in order to assess perceived overall conflictuality between inhabitants and perceptions of neighbourhood satisfaction and safety. The main objective of this study is to identify differences in the local identity among peripheral communities living in Iaşi's metropolitan area. Consequently, the results of the analysis were interpreted statistically and the differences between communities were captured into various maps by using specific GIS-based methods.

#### Analyse multicritere des disparites regionales en Roumanie pendant la periode 2000 – 2016

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Dans le contexte de la cohésion européenne, les disparités soulèvent un intérêt particulièrement important pour les pays membres de l'Union Européenne. Au niveau de la Roumanie, les disparités ont été étudiées uni critère, surtout du point de vue économique ayant comme indicateurs principal le Produit Intérieur Brut (PIB). L'objectif de cet article est d'analyser l'évolution des disparités régionales au niveau NUTS III (ce qui correspondent au niveau départemental de la Roumanie), pendant la période 2000 - 2016. La nouveauté de notre étude consiste dans une approche multidimensionnelle des disparités régionales, qui vise à comparer l'évolution des disparités économiques avec l'évolution des disparités sociodémographiques. En appliquant la méthode de prise de décision multicritères TOPSIS a été employée le calcul de deux indices synthétiques: l'un économique et l'autre sociodémographique et on a obtenu le classement final des départements, pour chaque année, sur la base des distances les plus courtes à la solution idéale et le plus éloignés de la solution idéale négative. Les résultats mettent en évidence la croissance des disparités économiques. Ensuite, les analyses statistiques montrent un manque de corrélation entre développement économique et développement social pour la première partie des années 2000, suivie par une émergence graduelle de la dépendance entre les deux dimensions du développement. Ainsi, pendant la période analysée, le niveau de développement social des régions NUTS3 devienne de plus en plus dépendant de leur niveau de développement économique, de telle sorte qu'aujourd'hui cette relation est assez forte est significative (ce que n'était pas le cas au début des années 2000).

## 3. A. Development & Territorial Identities

#### Touristification and Territorial Identity in the Inner City of Palermo

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After the bombings of 1943, the historic centre of Palermo was left with several crumbling buildings and a social situation of some concern. Therefore, over the last sixty years all kinds of representations of Palermo have revolved around the presence of criminal organizations and the risks of living in the most dangerous areas of the city (including the city centre). These representations started to change around the beginning of the new century, when the inner city of Palermo underwent an intense process of redefinition of its territorial identity. Several key factors may be used to explain this process: from traditional economic reasons concerning gentrification and touristification, to culture-led approaches to urban policies that support the organization of megaevents

(Manifesta 12, Italian Capital of Culture, etc.). Participation processes taking place in the city centre have also furthered the scope and range of these changes, trying to mark a distance from the past. This presentation aims to provide the results of ongoing action-research held in the inner city of Palermo, with the goal of describing the imageries that both local social actors and foreigners and tourists are shaping in their redefinition of what Palermo is—or should be.

## Graffiti &Street Art's Impact on the Local Identity. Case Study: Bucharest, Romania Andreea-Loreta Cercleux

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The paper aims to analyse the evolution and interpretation of the graffiti phenomenon in the Romanian capital, Bucharest, as a way of communicating, expressing and transmitting opinions and messages, taking into account the history and development trends at international level. Whether we are talking about primary forms of graffiti or its development towards urban art, the phenomenon has a short history in Romania, its spread occurring after 1990. The methods rely on field research, mass media documentation, collecting data from different institutions and online communities. The purpose of the study is to see if the graffiti & street art changes the image and identity of Bucharest. In order to find if the graffiti & street art participate nowadays to the local identity, the main steps of the study include: the analyse of the factors that shaped the context of graffiti & street art beginnings in Bucharest; how the phenomenon took shape; the dynamics of its components in different types of places in the city where these graphic representations generally have developed; the study of meanings conveyed by diverse types of stencils or mural works; finding the similarities and differences between graffiti & street art in Bucharest and from international metropolises or cities. Last but not least, it is studied whether in recent years the graffiti & street art phenomenon has reached locally a stage of growth that generate touristification.

## Spatial Analysis of the Possible Economic Effects of Second Home Tourism. A Case Study: Apuseni Nature Park

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Second home tourism has become an increasingly visible phenomenon worldwide. However, due to their non-commercial nature, second homes have often been marginalized in the tourism literature. Moreover, although previous research has noted the economic importance of second homes in tourism and other sectors, there is a general lack of analysis from a spatial perspective. Therefore, the aim of this study is to shine new light on these debates through an examination of the role of second homes' locations in the possible local economic effects. Using the geographical information system (GIS) framework, a cluster analysis was performed in order to identify the main spatial patterns of second homes in relation to the level of development of the tourist and general infrastructure that second homeowners could access. The results showed that, depending on the spatial patterns, second home tourism could generate possible economic effect of different types and intensities.

## "The Village as a Place of..." Anchoring Territorial Identity of the Countryside. Examples from Poland

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The aim of this presentation is to discuss how inhabitants of selected villages in Poland perceive their living space, what meanings do they assign to it and what is important for them in their nearest neighborhoods. We try to answer the question whether there are any general patterns referring to the process of transforming the space into a "place", defined by social valuation of rurality, strengthening local identity and place attachment. Research was based on semi-structured interviews and in-depth interviews in order to extract narratives about

selected villages that are constructed by the inhabitants themselves. Individual stories that we have collected along the study reveal an image of the countryside as significant, often beloved and close places, marked with a special meaning and value for interviewees, shaping their sense of self and place attachment. Interpretation of these narratives is structured into six categories (anchors) focused on: 1) the village as a place of identity and generational continuity; 2) the village as a place of attachment and rootedness; 3) the village as a place of cultivating traditions; 4) the village as a place of remembrance of important historical events; 5) the village as an important, close and familiar place; 6) the village as an attractive place to live. According to interviewees, their living space is marked by places that are important and familiar to them. Specific values and meanings of these individual places is usually perceived similarly within the whole community. The research focused on social valuation of rural areas is of high practical importance due to dynamic, yet often opposite processes shaping contemporary countryside, i.e.: declining and ageing populations, multifunctional rural development, loss of local services and higher costs of living, empowerment of local communities and reinforcement of social and territorial identity. Considering perceptions about living conditions and everyday lives of individuals will be crucial for planning practice to shape future development of local communities in rural areas.

## 3. B. Heritage and Territorial Identities

## Heritage Management and Territorial Identity Dissemination through Non-Formal Education Methods: Living Library and Cantastorie. Babel Project – A Case Study

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The present study aims to present two methods developed and used to collect and promote intangible heritage: cantastorie and living library. They have been adapted and tested in Romania, Italy, Spain and Portugal in the context of implementing the Erasmus+ KA2 strategic partnership project "BABEL: developing innovative educational techniques for the dissemination of literary and oral heritage". One of the main challenges in promoting oral heritage and presenting territorial identity refers to capturing their nuances and delivering them to the public, while stimulating the general interest on disseminating and preserving them. The main findings of the study are related to the positive impact of these techniques which are based on the pillars of non-formal education. Their flexibility and participatory approach (stemming from horizontal learning) encourage peer-to-peer exchange of knowledge, strengthening and enriching the sense of place in the community.

## The Role of Visual Imagery in Interpreting and Documenting the Elements of Cultural Identity. Case Study: The Romanian Atheneum, Bucharest

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The built heritage through the plurivalences it associates (antiquity, architectural, aesthetic, symbolic, authenticity) is characterized by uniqueness and irreversibility, beind frequently associated with the cultural and implicitly tourist image of cities. Due to the antiquity of architectural heritage and the special relations established with the place and the people, under the direct influence of the socio-cultural and political factors, it ensures the accumulation of symbols that codify the urban space. As a result, heritage buildings are associated with elements of territorial identity. Visual imagery is used as a tool in arguing the process of selecting significant buildings for local/ national culture to be promoted among the general public. Most of the time, the selection process aims at identifying representative buildings, a process that feels the influence of socio-cultural and politic factors. The article is focused on the cultural evolution of the Romanian Athenaeum, a symbolic building of the national culture. Based on a rich background of historical illustrations and recent observations, the authors analyzed the symbols associated with the Romanian Athenaeum, in different historical stages. The authors interpreted the visual imagery both in terms of its role in promoting the Athenaeum as cultural

institution, but also as tourist attraction. At the same time, the decoding of the symbols allowed the identification of the narrative of identity and politics built around this iconic building.

#### "Built to Last". Defining Identity by the Statues of Czernowitz/Cernăuți/Chernivtsi

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Monuments are examples of evocative art or visible manifestations of a specific culture. They represent, in a way, milestones of the constitution and evolution of the public consciousness, proposing to direct or fix in the collective mind specific ideas and values and to shape the civic sense. As an engaged art form (loaded with a political message), they correspond to the sensibilities of historical epochs, the desire of the authorities to convey a message of sustainability of power, the groups attitudes towards the regime, the commands of the time or to some horizons of waiting. Besides, the monuments contain a dose of risk; they may be destroyed or demolished in the event of political or state change. In other words, the reversal of perspective occurs when the message transmitted through the statues becomes inappropriate or contrary to the new administration. The statues of the city of Czernowitz/Cernăuti/Chernivtsi - the capital of the historical province of Bukovina - are a generous subject of study given that the repeated change of power (Austrian, Romanian, Soviet, Ukrainian) has brought with it the transformation of the politics of memory and identity. Each of the political regimes that the city went through wanted to prove the legitimacy of owning this territory. In this way, denying or eliminating the old symbols of the former administrations was as significant as assuming a new identity. Our paper aims to analyze the relationship between political identity, public memory and the urban space of Chernivtsi, presenting how the cultural landscape was shaped and remodeled according to the loyalty, creed, sympathies and political or ideological ambitions of successive regimes in the capital of the historical province of Bukovina.

## Comics for Pioneers. Representations of Modernisation and Class Identities in Socialist Romania Oana-Ramona Ilovan

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Only few studies reflected on the relationship between official propaganda materials and edutainment in mass media dedicated to children and youth in socialist Romania. My research focuses on filling in this gap. Therefore, the aim is to show how representations of development and space, of class and political identities are constructed in the Romanian society through comics in *Cutezătorii* [The Daring Ones] youth magazine. Textual and visual discourse analyses were employed to show how the propaganda machine of the Romanian Communist Party contributed to forming these representations of territorial identity and the Romanian political culture, while enabling the construction of the young's identities. The discoursive strategy of power consisted of placing stories in building sites, and of narrating continuously the characters' key features, such as: love for work, love for the country, heroism, and honesty serving to the construction of the modernised socialist Romania. The worker has the role of a metonymy in the material construction of socialism. The harsh living and working conditions on the building site, of these hard-working people, although represented as such in these comics, are downplayed by the final and overall message of the comics: it is worth the sacrifice.

# Secțiunea/Section/Session Les territoires de la vigne et du vin dans la mondialisation : approches spatiales, paysagères et par les acteurs

## «L'internationalisation » de la viticulture française à l'aune de l'évolution de l'encépagement(1958-2017)

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Cette communication résulte d'un travail de plusieurs années consistant à reporter sur un fichier Excel tous les cépages du cadastre viticole de 1958 pour toutes les communes viticoles de ce recensement soit près de 21.000 communes. Il continue le travail commencé précédemment sur les appellations en 1958 et comparé aux données de 2010 présenté lors du colloque de Bordeaux en 2012.

Ce travail est pratiquement achevé. Il ne manque plus que le département de l'Ariège, soit 220 communes. Nous disposons également de la répartition des cépages en France 2010 et en 2017 pour une analyse diachronique de près de 60 ans (1958-2017). Nous avons réalisé des cartes en tenant compte de la transformation du cadre spatial des communes entre 1958 et 2010.

Il faut entendre par internationalisation la diffusion internationale de certains cépages français et donc une concurrence pour la viticulture française. Cette internationalisation n'est pas récente : elle remonte au moins à l'après-crise phylloxérique, mais elle s'est accentuée depuis la fin du XXe siècle. Cette « internationalisation » a joué aussi sur l'espace viticole français.

La distribution passée et actuelle des cépages ainsi que leur évolution montrent que le vignoble français évolue de manière évidente :

- aucun cépage n'est réparti de manière homogène sur l'ensemble du territoire ;

- Si des concentrations sont bien visibles en certains pôles, on constate souvent des espaces de diffusion à la périphérie ;

- il existe une séparation spatiale entre les cépages des vignobles du Nord-Est français et les autres régions ;

- en 1958, la répartition des cépages est dépendante des grandes régions viticoles, n'excluant pas une distribution plurirégionale : des cépages sont typiquement atlantiques, d'autres sont spécifiquement du Sud-Ouest, alsaciens, bourguignons, provençaux, de la vallée du Rhône, de la vallée de la Loire, etc ;

- « l'internationalisation des cépages français » (merlot N, cabernet sauvignon, chardonnay, pinot N, sauvignon, syrah,) est visible sur le territoire français par une diffusion dans l'espace depuis les pôles de concentration de 1958 en direction de zones périphériques, en relation avec la création conjointe des IGP, mais pas seulement. Elle aboutit à une plus grande mixité spatiale des cépages ;

- l'essentiel des combinaisons actuelles des cépages correspondent majoritairement aux AOP ;

- une simplification voire une banalisation de l'encépagement (de très nombreux cépages ne sont plus utilisés) est une réalité découlant de « l'internationalisation » de la viticulture française, de la contraction des espaces viticoles français de plus de la moitié de ses surfaces en 60 ans et de l'évolution de la consommation de vin en France : du vin aliment au vin plaisir ;

- ce processus de simplification n'exclut pas un retour aux cépages modestes, mais un retour encore très timide...

# Les exportations européennes de vins vers les Etats-Unis : Quels impacts des taxes Trump et de la pandémie du Covid-19?

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Ce travail est basé sur une approche compréhensive du commerce international du vin et contribue à une meilleure connaissance de la dynamique des échanges internationaux des vins et aux stratégies de l'adaptation de l'offre et de la demande. Cela s'inscrit dans le prolongement des travaux menés, par exemple, aux Etats-Unis (Sumner, 2010; Lapsley, 2010), en Australie (Anderson et Nelgen, 2011) et en Italie (Mariani et al., 2020).

Les Etats-Unis sont le principal marché mondial de consommation de vins en volume et en valeur. Ils sont également le principal importateur mondial de vins en valeur et représentent donc un enjeu important pour les pays exportateurs. Les importations américaines de vins ont été marquées par une demande croissante de vins au cours des vingt dernières années (Coelho et Montaigne, 2020 ; Mariani et al., 2020).

Au cours des derniers mois, deux phénomènes majeurs ont impacté les exportations européennes de vins vers ce pays. Tout d'abord, l'accroissement des taxes à l'importation de vins par l'administration Trump (+25% sur les prix) en réaction à une décision de l'Organisation Mondiale du Commerce reconnaissant l'illégalité des aides publiques européennes à Airbus (I). Cette mesure a impacté principalement l'importation de vins tranquilles français, espagnols et allemands. Les exportations de Champagne et de Cognac n'ont pas été impactées par ces taxes. Cette taxe influence la concurrence au sein du marché européen, car les exportations de vins italiens et ceux en provenance d'autres pays exportateurs européens (Portugal, Roumanie...) n'ont pas été concernées par ces taxes. Cette mesure fiscale a changé la structure des exportations européennes mais également l'offre (les vins titrant plus de 14 degrés ne sont pas concernés par la mesure).

Le deuxième phénomène est lié à la crise sanitaire internationale du Covid-19 (II) qui a freiné l'ensemble des exportations européennes et internationales. Les Etats-Unis ont été particulièrement concernés par le ralentissement des importations de vins.

L'objectif de ce travail consiste donc à analyser l'impact de ces deux phénomènes sur les échanges de vins tranquilles et effervescents entre l'Europe et les Etats-Unis. Pour ce faire, nous nous appuyons sur une base de données originale pour appréhender la dynamique des échanges et des acteurs concernés.

Nos résultats montrent les effets de la disruption sur les pays exportateurs des vins européens et nous permettent de discuter les conséquences au regard des instruments de la politique vitivinicole européenne.

#### Le vignoble de Bordeaux : un vignoble en crise profonde

Michel Réjalot

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Depuis une bonne dizaine d'années et même davantage, le vignoble bordelais est largement décrit comme traversant une crise. Cette crise se caractérise du point de vue économique, mais aussi social et identitaire.

D'un point de vue économique la notion de crise se rattache à la baisse de la consommation, plus particulièrement sur le marché intérieur, mais aussi sur les marchés extérieurs, dont certains, encore jugés prometteurs il y a quelques années, n'auraient nourris que de faux espoirs. Les prix traduisent logiquement ces difficultés, stagnants à des niveaux très bas, notamment pour toute la production d'entrée de gamme, mais aussi pour les segments intermédiaires. Les stocks demeurent élevés tant dans les chais de la propriété que du négoce.

Cette crise économique persistance induit par contrecoup une crise sociale, bien lisible dans la réduction du nombre d'exploitants, de vinificateurs, dans la concentration des structures foncières comme entrepreneuriales et dans la baisse régulière des surfaces plantées. Certaines mutations dans les types d'emplois, associées à une recherche acharnée de baisse des coûts de production, se traduisent probablement par une précarisation des postes et des conditions de travail et possiblement des revenus d'une certaine catégorie de main d'oeuvre.

Tout cela résulte pour beaucoup d'observateurs de l'accroissement d'un hiatus entre les attentes des marchés d'un côté et les caractères organoleptiques, l'image et les représentations affectant les vins de Bordeaux

de l'autre. Ceux-ci semblent désormais incarner à peu près tout ce que les nouvelles générations de consommateurs de vins, développant des modes de consommation alternatifs, rejettent assez largement : les vins rouges, plus ou moins concentrés et alcoolisés, puissants, associés à des repas solennels et protocolaires.

## Le renouveau du monde viticole en Lorraine : des actions originales pour relancer un vignoble déclinant

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La Lorraine connaît une réelle renaissance de son vignoble qui avait presque totalement disparu au cours du 20ème siècle. Ce renouveau est principalement porté par le dynamisme revivifié de la filière locale, par la mise en place d'indications géographiques (2 AOP, 1 IGP et un dossier d'IGP en cours), par un accompagnement politique constant et par l'engouement des consommateurs lorrains en faveur des productions locales.

Dans ce cadre, plusieurs actions particulières furent déployées illustrant parfaitement le dynamisme et le renouvellement de la viticulture en Lorraine :

- une initiative foncière très originale portée par la filière et les collectivités territoriales pour une restructuration foncière et l'installation de nouveaux viticulteurs;

- de multiples politiques publiques en faveur du renouveau viticole en Lorraine;

- une volonté environnementale de plus en plus affirmée vers un vignoble orienté à 100% vers l'agriculture biologique.

## Secțiunea/Section/Session Didactica Geografiei/ Didactics of Geography/ Didactique de la géographie

#### Activitatea geografică ieșeană a lui Simion Mehedinți

Ionel Boamfă Universitatea "Alexandru Ioan Cuza" din Iași

Starting from a recent "signal", we made a documentation, which revealed that, before becoming the first holder of a University Department of Geography in Romania (in 1900, in Bucharest), Simion Mehedinți was the holder of such a role at the *Liceul Internat of Iași*, established in 1895, today the *National College "Costache Negruzzi"*. According to the *Yearbook* of the famous educational institution from Iași, Simion Mehedinți was the titular of this post between 1896-1899. This mention sheds new light on the professional-didactic activity of Simion Mehedinți in the field of Geography, which, in these conditions, did not start in Bucharest, but in Iași.

## A relevant Geography. A case for teaching Geography throught the theme of Covid-19 Mona Chiriac

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This article argues the importance of teaching Geography through the lens of relevant themes, using as an example the extremely current topic of Covid-19. The aim is twofold: that of highlighting ways to bring geographical education from the periphery of the national curriculum into the very centre of it, through relevant content and teaching methods and that of showing ways Geography connects to the most unexpected events of humanity. The article highlights the key geographical concepts which can be studied using this theme and it analyses the curricular content and specific geographical and transdisciplinary skills which can be taught in this manner, making reference to the national Romanian curriculum and the international one. It also briefly addresses the importance of choice as a means to increase motivation in studying themes of current interest and the importance of purposeful classroom talk as a way to develop higher order thinking skills and self-regulating metacognitive strategies. Thus, it reaffirms the important role geography plays in youngsters' education, aiming to change the public's perception on this subject. Towards the end, the article suggests a series of other relevant topics which can be used when teaching geography and which could contribute to the redesign of the national curriculum of geography through current and relevant content, skills and teaching and learning methods.

#### Lecție practică: Plan de desfășurare al excursiei școlare pentru o zi

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Tema propusă de I.S.J.Dâmbovița:"Excursia școlară,metodă activă de învățare și dezvoltare a competențelor și abilităților practice. Activitate practică de dcumentare în orizontul local Valea Cricovului Dulce".Propunătorul a subtritat"Cum să organizezi o excursie când nu ai nimic de văzut", valorificând într-un mod neașteptat regiunea pe lungimea de 25 Km, cât are traseul până la izvoarele Cricovului. Exemplificare metodică:

Tema: Cracterizarea fizico- geografică, economică, ecologică a zonei "Valea Cricovului Dulce"; elemente de istorie și spiritualitate locală. De ce acest traseu? Aproape întotdeauna când am plecat, am știut unde trebuie să ajung, am avut un punct de final al drumului. Sunt locuri unde nu am mai fost și îmi doream să ajung, sunt poate recomandări din partea prietenilor, recomandări găsite pe internet ori în presă. Iar uneori sunt locuri unde am mai fost și prima impresie mi-a creat dorință de a reveni în acel loc. Alții preferă să meargă unde îi duce drumul, dar mie mi se potrivește mai puțin acest stil de a călători. Te ajută să studiezi câteva date despre locația unde vrei să mergi, și cele mai bune informații le vei obține de la prietenii care au fost deja acolo sau pe internet, de la alții care au fost înainte ta în zonă. Site-urile specializatea, forumurile sau blogurile sunt surse bune de informații utile, tata google probabil ți le va servi pe tavă. Este bine ca măcar un prieten sau cineva din familie să știe unde

mergi, pentru orice eventualitate. Prezenta activitate are o întrebare incitantă? Ce poți vedea pe un traseu unde nu ai nimic de vizitat? Participanți: Cadrele didactice din Centrul Metodic Moreni, specialitatea istorie-geografie și cadrele didactice din Comisia "Om – societate " de la Școala nr. 1 Moreni.

#### The capitalization of the project method in the study of the environment in high school

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This communication highlights the didactic value of the project as a method of geographical scientific research within the educational instructional process. In this respect, as a result of a research study, there is a way to motivate and attract high school students in an investigative approach to discover the quality of the environment in Slănic and to understand the impact of the human activity, being it difficult to perceive, in a small urban settlement. We aimed as a pedagogical research theme the project method because it is a method of cognitive experience, suggesting that the lesson does not consist only of artificially created situations, but also include authentic aspects of everyday life.

We proposed to experiment with the use of the project method with students, as it is understood as a research-action theme, oriented towards achieving a well-defined goal, combining at the same time the research action with the practical one. In addition, as a motivational impulse, through the project method, in the approach of systematic and causal analysis of spatial and environmental realities in the near horizon, it is favored students' development and functionality of critical thinking, their analytical spirit, ability to objectively interpret, as well as the ability to make decisions and take responsibility, which will help them recognize the importance of environmental issues for sustainable development. The present communication is structured in three parts that contain a corpus of theoretical approaches, as well as those related to the practical-applicative approach of the undertaken research. Precisely, in the last part, the general coordinates of the research are highlighted, each stage of the psycho-pedagogical experiment is approached, the analysis of the results obtained in each stage and the conclusions drawn from the analysis are performed. In connection with these aspects, the project method is thus a viable study model, as well as a promotion for students in environmental education, which is not enough if it does not have practical applicability.