



HUNGARIAN UNIVERSITY OF AGRICULTURE AND LIFE
SCIENCES

**THE CULTURAL ASPECT OF TRANSBOUNDARY RIVERS - IN
THE CASE OF THE LOWER JORDAN RIVER BASIN**

THE THESES OF THE Ph.D. DISSERTATION

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1. RESEARCH BACKGROUND

This dissertation reconceptualises rivers as socio-natural constructs rather than hydraulic conduits. It draws on the hydro-social cycle and hydro-hegemony frameworks to show how infrastructures, institutions and everyday practices co-produce flows, access and meanings, especially under conditions of asymmetric power and contested borders.

The Jordan River Basin is one of the world's most securitised and politically contested transboundary river systems, shared by Israel, Palestine, Jordan, Lebanon and Syria. Large-scale diversions (such as the National Water Carrier and the King Abdullah Canal), long-term over-abstraction and pollution have reduced discharge to a small fraction of its historical flow, accelerated Dead Sea decline and degraded riparian ecosystems. Hydrological decline and salinisation are further intensified by climate-change-induced shifts in recharge and drought, producing a visibly degraded river corridor that many residents perceive as unhealthy and inaccessible rather than as a living freshwater system.

At the same time, the Lower Jordan River Basin (LJRB) concentrates multiple cultural and spiritual meanings. Consecrated in Christianity, Judaism and Islam, the river is associated with rites of baptism, covenants and eschatological narratives. The UNESCO-inscribed Baptism Site "Bethany Beyond the Jordan" (Al-Maghtas) exemplifies a dense cultural landscape of pilgrimage, monastic life and ritual movement. For local communities, the valley functions as a site of memory, belonging and identity, but also as a landscape of surveillance, checkpoints and restricted crossings. Spiritual narratives, agrarian livelihoods and border security thus intersect in everyday life, generating an ambivalent river landscape that is simultaneously sacred, securitised and ecologically impaired.

Classic transboundary river analysis concentrates on allocation regimes, engineering works and environmental conditions. Cultural values,

heritage/tourism access and identity/attachment, however, can moderate compliance, stewardship and conflict behaviours. Yet culture is typically treated as residual or descriptive, rather than as a driver that can be systematically analysed alongside political, technological, economic and environmental forces.

This dissertation addresses that gap by developing an integrated framework that (i) compares multiple basins, (ii) systematically maps the drivers and factors of change, (iii) prioritises the under-represented cultural driver on an evidence base, and (iv) empirically examines how cultural significance, heritage and tourism, and identity and attachment are shaped by ecological conditions and border governance in the Lower Jordan River Basin.

2. RESEARCH QUESTIONS AND OBJECTIVES

The main research question guiding this dissertation is: *How can transboundary river systems be systematically analysed, and how can cultural drivers be examined in relation to political and ecological conditions?* The overall research objective is to develop an integrated methodological framework for analysing transboundary river systems, using the Lower Jordan River Basin as a case study to explore the interplay between cultural, political, and ecological drivers. To address this question and objective, the dissertation is organised into four analytical stages, each with its own specific research question and set of objectives.

Stage 1 – Comparative Design and Case Selection

Research Question 1: *What are the guiding criteria of case study selection when analysing landscape change in multilayered transboundary river systems?*

Research Objective 1: *To develop and apply a systematic set of criteria for the selection of case studies in the analysis of multilayered transboundary systems.*

Stage 2 – Drivers and Factors

Research Question 2: What Factors Should be considered when analyzing the driving forces of change in multilayered transboundary river systems?

Research Objective 2: To identify and evaluate key factors influencing the driving forces of change in multilayered transboundary river systems.

Stage 3 – Prioritizing the Cultural Driver

Research Question 3: Which driving force should be the primary focus in multi-layered transboundary river systems?

Research Objective 3: To develop and apply an integrated approach for analyzing the drivers of change within multi-layered transboundary river systems.

Stage 4 – Cultural Perception and Analysis

Research Question 4: What is residents' perception of the Lower Jordan River Basin as a multilayered border landscape, and how do political borders and the river's ecological state shape (a) cultural significance, (b) heritage and tourism access, and (c) identity and attachment across communities?

Research Objective 4: To assess residents' perceptions of the LJRB as a multi-layered transboundary river, focusing on cultural significance, heritage and tourism and identity and attachment in relation to political border and ecological conditions.

3. MATERIALS AND METHODS

The research is based on a four-stage, mixed-methods design that links a systematic, multilingual literature review with a structured comparative framework and an empirical survey in the Lower Jordan River Basin (LJRB). The literature review was conducted using Scopus, Web of Science, Google Scholar, and region-specific repositories, applying Boolean search strings around “transboundary rivers,” “Jordan River Basin,” “river governance,” “cultural landscape,” “place attachment,” and related terms, with a temporal

window from 2000-2025. Only peer-reviewed journal articles, books, and edited volumes on river systems, borderlands, and transboundary governance were included, with selective use of grey literature where it provided unique, empirically grounded insights. Sources were screened using explicit inclusion and exclusion criteria and then evaluated according to study frequency, representation of driving forces, thematic comparability, consistency with the research questions, and contribution to knowledge gaps.

On this basis, the dissertation operationalizes a four-stage analytical framework. Stage 1 (case study selection) employs a comparative Most Similar Systems Design (MSSD) to screen five transboundary rivers (Danube, Ganges, Mekong, Colorado, Jordan) according to transboundary character, conflict history, cultural and symbolic value, hydro-ecological transformation, and depth of existing scholarship. Fifty studies were coded for the presence of five driving forces (political, economic, technological, natural, cultural) and synthesized into a Driver-Forces Coverage Index (DFCI), while a separate matrix compared river basin, valley, and tributary segments against natural, cultural, and political-management criteria. This combined procedure justified the selection of the Lower Jordan River Basin as the core empirical focus.

Stage 2 (factor selection and gap-mapping) constructs a 200-study database to map the internal factors of each driving force. The five drivers are disaggregated into factors (e.g., for culture: heritage and tourism, identity and attachment, cultural infrastructure, etc.), and cross-factor matrices are created so that each cell represents a potential intersection (e.g., “cultural heritage and tourism x identity and attachment,” “hydrology x human intervention”). Systematic keyword searches are then run for each cell across the three databases, and the resulting publications are filtered by the same inclusion/exclusion criteria.

Stage 3 (driver prioritisation) applies a structured appraisal framework to the same 200-study database to determine which of the five driving forces should

form the primary focus. Each study is coded for each driver it addresses on a four-point ordinal scale (0-3) along five criteria: conceptual depth, empirical coverage, planning and policy integration, multidisciplinary engagement, and explicit identification of gaps. Descriptive statistics are calculated in Excel to obtain driver-level scores and percentages.

Stage 4 (cultural driving force analysis) operationalizes three cultural factors: Cultural Significance, Cultural Heritage and Tourism, and Cultural Identity and Attachment, through a structured survey. A purposive sampling strategy targets residents, policymakers, and students aged 15-65, yielding 445 valid responses grouped into seven demographic categories. Each cultural factor is translated into measurable indices (e.g., cultural meaning, awareness, conservation, and national access for cultural significance), captured through Likert-type items. The analysis employs appropriate parametric and non-parametric techniques, such as ANOVA, Welch's t-tests, Spearman correlations, chi-square tests, and logistic regression with robust standard errors, alongside effect size measures (e.g., Hedges' g , Cliff's δ) to compare groups and examine associations between cultural perceptions, ecological conditions, and border-related constraints.

4. NEW SCIENTIFIC RESULTS (THESES)

The new scientific findings from the present dissertation results are summarized in the following theses:

THESIS 1: Integrated framework for site selection, factor gap-mapping, and cultural prioritization in transboundary river basins

I developed an integrated evaluation framework that (a) uses the Driver-Forces Coverage Index (DFCI) check to justify site selection and spatial focus, (b) applies cross-factor gap-mapping to identify systematically underexplored factor combinations within each driving force, and (c) employs a criteria-based 5x4 evaluation matrix to prioritise drivers of

change. Applying this framework, I found that the Jordan River Basin is uniquely treated as a multilayered system across political, economic, technological, natural, and cultural drivers, I identified three persistently underexplored intersections, for each driving force, and I found that the cultural driving force consistently ranks lowest across evaluation criteria, while political, natural, and technological drivers rank higher and the economic driver occupies an intermediate position. On this basis, I selected the cultural driving force as the main substantive focus of the study.

According to the analysis, I identified the following key components and findings:

1. DFCI-based site selection across major transboundary rivers

I coded each of the 50 sampled articles on the Danube, Ganges, Mekong, Colorado, and Jordan for the presence or absence of five drivers (political, cultural, economic, technological, and environmental) and computed a river-level Driver-Forces Coverage Index (DFCI) as the proportion of studies that mention all five. Although the Jordan River contributes only 10% ($n = 5$) of the corpus, it achieves $DFCI = 100\%$, whereas the Danube, Mekong, Colorado, and Ganges record 20%, 33%, 30%, and 38%, respectively. This step shows that the Jordan River Basin is the only basin treated as fully multilayered in existing research. I then applied a compact evaluation High (+), Medium (+/-), or Low (-) within the Jordan River, which indicated high concordance at the basin scale, transitional conditions in the valleys and tributaries with strong local ecological and cultural values but clear governance and data gaps, confirming that the Lower Jordan River Basin is an appropriate spatial focus for the subsequent analysis.

2. Cross-factor gap mapping within each driving force

I developed factor x factor matrices and applied a structured evidence and gap mapping protocol to the 200-paper database, quantifying coverage at every matrix intersection and identifying, within each driver, three persistently

underexplored intersections. This revealed that cultural gaps cluster at low coverage levels (22.1-28.5%) in links between cultural significance, identity and attachment, and heritage and tourism, natural gaps at 32.2-33.5% in socio-ecological feedbacks connecting human interventions, hydrology/groundwater, morphology, topography/flow, and climate diversity, political gaps at 36-42% around public participation across jurisdiction, water management, and international relations, economic gaps at 33.4-37.6% around agriculture's relations to land-use trade-offs, inequality/access, and tourism/industry, and technological gaps at 33.6-36.4% in interactions between wastewater and treatment systems, agricultural and irrigation technologies, hydraulic and water-management infrastructure, and technological access and capacity. Together, these patterns define a targeted, cross-driver roadmap for future research.

3. Criteria-based prioritisation of driving forces and elevation of culture.

I constructed a 5x4 cross-matrix that scores each driving force (political, economic, technological, natural, cultural) against four criteria (Conceptual Depth, Empirical Coverage, Integration in Planning and Policy, and Multidisciplinary Engagement) using standardised 0-3 coding for each article and summarising results by driver and criterion. This implements established scoping and evidence-gap logic, making coverage and gaps quantifiable and transparent. The results showed that cultural scores (criteria average 0.34; 30% of studies addressed) are around eight times lower than political (2.56; 95%) and seven times lower than natural (2.47; 92%) and technological (2.45; 90%), while even the economic driver (1.06; 75%) scores roughly three times higher. These disparities confirm a structural bias toward hydro-political and techno-managerial framings and provide a rigorous basis for prioritising culture as the central analytical focus of the study and for rebalancing future river-basin research and governance around cultural dimensions.

THESIS 2: Determinants of cultural significance: demographics, national access, institutional recognition

Based on the survey analysis, I demonstrated that perceptions of cultural significance vary systematically across demographic communities, following a gradient shaped by religion, nationality/passport status, and place of residence. I reached that communities with greater national access to the river sites report the highest cultural value, while those facing political and territorial restrictions, regarding their nationality, report the lowest. This shows that, in contexts such as the Lower Jordan River Basin, cultural significance is primarily structured by access opportunities and institutional recognition rather than being an inherent or uniformly shared attribute of place.

According to the survey results, I identified the following ordering of perceived cultural significance:

1. Jordanian Christians reported the highest cultural significance, reflecting the influence of UNESCO-inscribed pilgrimage sites such as Al-Maghtas (Bethany Beyond the Jordan), which reinforce local pride and global religious recognition.
2. Palestinians with Palestinian passports living in Jordan and Israeli Jews showed elevated scores, consistent with both religious narratives and active pilgrimage practices supported by accessible and curated sites on both banks of the river.
3. Jordanian Muslims, Palestinians with Israeli passports living in Israel, and Palestinians with Palestinian passports living in Palestine occupied the middle range, reflecting more constrained connections to river sites and narratives. This suggests that accessibility, coupled with spiritual heritage, mediates cultural valuation beyond physical proximity alone.
4. Palestinians with Israeli passports living in Palestine reported the lowest cultural significance, aligning with political restrictions,

mobility barriers, and uneven access to riverfront sacred and heritage areas.

THESIS 3: Contextual mediation of conservation and cultural significance in river basins

Based on the survey analysis, I found that conservation efforts and cultural significance do not intersect in a uniform or direct way. Participation in conservation does not, by itself, raise cultural significance. By contrast, I found that perceptions of the impact of conservation showed a clear positive association with cultural significance at the bivariate level as respondents who believed that conservation was effective tended to value the river more highly. However, once demographic group and cultural awareness were included in the model, this association disappeared, showing that conservation's role in shaping cultural meaning is not universal but mediated by community identity and context.

According to the survey results, I identified the following ordering of findings:

1. Conservation involvement did not produce significant differences in cultural significance, indicating that participation alone is not sufficient to increase cultural valuation.
2. Perceived impact of conservation was moderately correlated with cultural significance, suggesting that conservation is most meaningful when people believe it produces visible results.
3. Adjusted models showed that group identity (e.g., Jordanian Christians scoring much higher than Palestinians with Israeli passports living in Palestine) explained the largest share of variation, while conservation involvement and perceived impact became non-significant once these group differences were accounted for.

THESIS 4: Political boundaries as structural mediators of cultural significance in river basins

Based on the survey analysis, I demonstrated that political boundaries significantly shape how communities perceive the cultural significance. Respondents who perceived political influence rated the river's importance lower, indicating that restrictions and limited access depress cultural valuation. I reached that territorial comparisons reinforced this pattern: communities in Jordan and Israel reported higher levels of cultural significance, while those in Palestine reported the lowest, reflecting the impact of restricted mobility and limited access to heritage sites. However, the direct effect of political perceptions weakened, once demographic group and awareness were included, while group differences remained strong, resulting that politics operates through territory, border regimes, and community identity rather than in isolation.

According to the survey results, I identified the following ordering of findings:

1. Perceptions of political influence lowered cultural significance, showing how everyday barriers such as checkpoints, permits, and restricted access weaken cultural bonds with the river.
2. Territorial residence shaped outcomes: Jordan and Israel sustained higher cultural significance through serviced heritage and pilgrimage sites, while Palestine's lower ratings reflected mobility barriers and fewer opportunities for access.
3. Adjusted models showed that group identity explains more variation than individual political perceptions.

THESIS 5: Cultural attachment shaped by heritage tourism and perceived economic benefit

I demonstrated, based on the survey analysis, that both tourism exposure and perceived economic benefit are modestly but significantly associated with cultural attachment. I found that tourism contributes incrementally to strengthening cultural bonds, indicating a limited yet reliable contact-mediated pathway to cultural value. I reached that communities perceiving

tangible economic returns from heritage and tourism report stronger attachment than those that do not, showing that attachment is not purely sentimental but also relational and instrumental, shaped by perceptions of fairness, reciprocity, and visible reinvestment.

According to the survey results, I identified the following patterns of association:

1. Tourism exposure: A small yet significant Spearman correlation with cultural attachment ($\rho = 0.124$, $p = 0.0089$, $N = 445$); attachment generally rose with higher exposure levels, with minor irregularity at level 3 consistent with small-effect sampling variability; $\rho^2 \approx 0.015$ indicates limited variance explained.
2. Perceived economic benefit: A Welch unequal-variance test showed higher attachment among those perceiving benefit ($M = 3.30$, $n = 286$) versus those not perceiving benefit ($M = 3.02$, $n = 159$), $\Delta = +0.285$, $t = 2.450$, $df = 309.048$, $p = 0.0148$; effect size Hedges' $g = 0.247$ (95% CI [0.056, 0.514]). This effect is practically meaningful as an incremental uplift in attachment where benefits are perceived.
3. Interpretation: Tourism functions as a contact-mediated mechanism (visits, rituals, interpretation, storytelling), while economic benefit operates through Social Exchange Theory, fairness, reciprocity, and visible reinvestment.

THESIS 6: Political accessibility as a mediator of cultural attachment

Based on the survey analysis, I found that political accessibility to heritage sites is significantly associated with cultural attachment in the Lower Jordan River Basin. The survey results indicate that restricted access, often shaped by political and territorial boundaries, reduces attachment to the river, while good access reinforces it. This shows that cultural attachment in the Lower Jordan River Basin (LJRB) is not uniformly distributed but is

mediated by mobility regimes and opportunities for lived engagement with heritage landscapes.

According to the survey results, I identified the following patterns of association:

1. A Welch's unequal-variance t-test comparing respondents with good versus restricted access showed a significant mean difference ($\Delta = +0.339$ Likert points, $t = 2.569$, $df = 165.361$, $p = 0.0111$), with a small but meaningful effect size (Hedges' $g = 0.293$, 95% CI [0.079, 0.600]).
2. Descriptive statistics confirmed this pattern: respondents with good access ($n = 341$, $M = 3.28$) reported higher cultural attachment than those with restricted access ($n = 104$, $M = 2.94$), underscoring that mobility constraints dampen cultural valuation.
3. Substantively, the results support place-attachment theory (Lewicka, 2011), which emphasizes that affective, cognitive, and behavioural bonds with place are formed through repeated, meaningful interaction. Restricted access interrupts these processes, while open access enables them.

THESIS 7: Demographic context and ecological identity as determinants of emotional attachment in transboundary river landscapes

I demonstrated, based on the survey analysis, that emotional attachment is broadly shared across communities yet varies modestly by demographic context and is not confined by political borders. I found that perceiving the river's ecological state as central to identity is a small but statistically significant positive predictor of attachment. I showed that attachment intensity is co-produced by cultural proximity, residence and mobility conditions, heritage engagement, political/territorial context, access opportunities, and ecological salience indicating a transferable model for understanding cultural belonging and self-concept in contested river landscapes.

According to the survey results, I identified the following ordering of emotional attachment:

1. Demographic ordering of attachment:
 - a. Highest: Palestinians with Palestinian passports living in Jordan ($M = 3.88$), reflecting spiritual proximity and cross-border cultural memory.
 - b. Middle-high cluster: Jordanian Muslims, Jordanian Christians, Israeli Jews ($M = 3.35-3.43$), indicating broadly shared attachments grounded in overlapping religious narratives and periodic ritual practices.
 - c. Lower: Palestinians with Palestinian passports living in Palestine and Palestinians with Israeli passports living in Palestine ($M = 3.03-3.10$), suggesting symbolic connection tempered by constrained access to heritage spaces.
 - d. Lowest: Palestinians with Israeli passports living in Israel ($M = 2.90$), consistent with structural marginalization, mobility restrictions, and socio-political tensions limiting embodied interaction.
2. Ecological identity-bivariate association: A small but significant Spearman correlation between ecological identity salience and emotional attachment ($\rho = 0.110$, $p = 0.0199$, $N = 445$).
3. Ecological identity-multivariable confirmation: Robust OLS with HC3 errors and community fixed effects retained ecological identity as a significant predictor ($\beta = +0.134$, 95% CI [0.039, 0.230], $p = 0.0058$).
4. Magnitude and consistency: Effects are modest (just over $\sim 1\%$ variance explained) yet consistent across methods, indicating ecological quality is a meaningful, identity-linked contributor to attachment.

THESIS 8: Political borders, belonging, and attachment

Based on the survey analysis, I demonstrated that political borders significantly influence residents' sense of belonging in the Lower Jordan River Basin, and this, in turn, shapes emotional attachment to the river landscape. The survey results indicate that while belonging is broadly shared, its distribution varies by community and is systematically constrained by political and territorial regimes. This shows that place attachment in the Lower Jordan River Basin (LJRB) is not only a matter of cultural or ecological identity but is also directly mediated by border governance and mobility restrictions.

According to the survey results, I identified the following patterns of association:

1. A chi-square test of independence showed a significant association between community membership and border-related belonging ($\chi^2(6) = 13.037, p = 0.0425$), indicating that strong belonging is more frequently reported among Jordanians (Muslims and Christians) and less among Palestinians living under restrictive territorial conditions.
2. A Mann-Whitney U test revealed that respondents reporting strong belonging ($M = 3.44, n = 260$) also reported higher emotional attachment compared to those reporting restricted presence ($M = 3.21, n = 185$), $\Delta = +0.23$ Likert points, $U = 26,617, p = 0.0489$, Cliff's $\delta = 0.107$. This confirms that perceived belonging reinforces attachment, even if the effect is modest.
3. A logistic regression model further identified emotional attachment as a significant predictor of strong belonging ($OR = 1.165$ per +1-point, $p = 0.0459$), while ecological identity influence was nonsignificant once attachment was controlled. This demonstrates that attachment functions as the more proximal driver of belonging under contested border conditions.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1. Research Summary

The dissertation formulates and tests a four-stage integrated framework for analysing change in transboundary river systems and applies it to the Lower Jordan River Basin. It shows that cultural values cannot be treated as residual: they are co-produced with flows and access regimes and are shaped by border governance and ecological status.

Stage 1 develops a comparative design and DFCI-based screening to justify focusing on the Lower Jordan as a uniquely multilayered basin. Stage 2 uses structured evidence and gap-mapping to identify systematically under-represented factor intersections across five drivers. Stage 3 demonstrates, through a criteria-based driver evaluation, that culture is the most neglected driver despite its substantive relevance, thereby justifying a cultural focus. Stage 4 empirically shows how cultural significance, heritage and tourism, and identity and attachment vary across communities and how they are mediated by accessibility, border regimes, ecological identity, and perceived political influence.

The results suggest that effective planning in border-river landscapes must co-design ecological restoration, access governance, and cultural strategies. Environmental-flow and water-quality targets need to be synchronised with improved, serviced access to heritage sites, more equitable mobility arrangements, and participatory processes that recognise diverse communities and identities.

5.2. Utilisation of Results and Practical Implications

- For basin planning and governance:

The DFCI and cross-driver gap-mapping provide a transferable template for transparent case selection and for identifying under-explored factor combinations in other basins. The flows-access-meanings framework can be

used by basin authorities to diagnose how access regimes and ecological conditions jointly shape cultural outcomes, and to design restoration and access packages that enhance both ecological integrity and social legitimacy.

- For cultural heritage and tourism policy:

Findings on cultural significance, tourism exposure, perceived economic benefit and accessibility can inform heritage management and tourism strategies that distribute benefits more equitably, reduce exclusion and avoid instrumentalising culture without local participation.

- For border and mobility regimes:

Evidence that political accessibility and border-related belonging mediate attachment underscores the need to align crossing arrangements, site servicing and interpretation policies with international standards on equitable and reasonable use (UN Watercourses Convention) and access to information and participation (Aarhus Convention).

5.3. Suggestions For Further Research

The dissertation proposes several realistic extensions:

- Comparative replication of the synthesis stages in other transboundary rivers to test whether the cultural under-coverage and specific gap patterns found for the Jordan recur elsewhere.
- Re-administration of the LJRB perception survey after major governance or environmental changes to observe temporal dynamics in attachment, belonging, and access.
- Scenario work linking environmental-flow and water-quality targets to alternative access regimes (e.g., serviced heritage sites, designated visiting times) to anticipate cultural responses and support planning.
- Stronger attention to equity, sampling, and response bias through probability-based designs, improved anonymity, and indirect questioning techniques in highly securitised contexts.

6. LIST OF PUBLICATIONS

6.1. Articles in International Journals

- 1) **Bzour, Ansam; Valánszki, István**, (2021): A study of developing a spatial entity greenway in the case of Irbid City - Jordan. *Landscape Architecture and Art* 18 : 18, pp. 104-112.
- 2) **Bzour, Ansam; Valánszki, István**, (2023): Investigating the effect of climate change on the land use and land cover of the Jordan River Basin. *Review on Agriculture and Rural Development* 12 : 3-4, pp. 89-96.
- 3) **Bzour, Ansam; Valánszki, István**, (2023): A new methodological approach for analysing river basins landscape changes. *Acta Horticulturae et Regiotecturae* 26 : 2, pp. 80-89.
- 4) **Bzour, Ansam; Valánszki, István**, (2022): Peri-Urban Green Areas and the Landscape Transformation in the Case of MENA Region. *Proceedings of the Fábos Conference on Landscape and Greenway Planning* 7 : 1, Paper 43.
- 5) **Bzour, Ansam; Mumtaz, Amala; Valánszki, István**, (2025): Contemporary Cultural Significance of the Lower Jordan River Basin: The Intersection Between Jordan River as an Ecological Political Border and the Cultural Significance. *Proceedings of the Fábos Conference on Landscape and Greenway Planning* 8 : 1, Paper 2427.

6.2. Peer-reviewed Conferences

- 6) **Bzour, Ansam; Valánszki, István**, (2021): The role of greenways in the revitalization of agricultural lands in arid climates. In: Fodor, Marietta; Bodor-Pesti, Péter; Deák, Tamás (eds.) *SZIENTific Meeting for Young Researchers 2020: ITT Young Talents Meeting 2020*. Budapest, Hungary: Szent István University, pp. 119-132.

- 7) **Bzour, Ansam; Mseddi, Amine; Valánszki, István**, (2022): Landscape Conflicts and the Potential of Use in Case of the MENA Region. In: Fodor, Marietta; Bodor-Pesti, Péter; Deák, Tamás (eds.) *A Lippay János - Ormos Imre - Vas Károly (LOV) Tudományos Ülésszak tanulmányai = Proceedings of János Lippay - Imre Ormos - Károly Vas (LOV) Scientific Meeting*. Budapest, Hungary: Hungarian University of Agriculture and Life Sciences, Buda Campus, pp. 126-138.
- 8) **Bzour, Ansam; Valánszki, István**, (2024): The Perception of Cultural Significance of the Jordan River Lower Basin. In: Fodor, Marietta; Bodor-Pesti, Péter; Deák, Tamás (eds.) *A 2023. évi Lippay János - Ormos Imre - Vas Károly (LOV) Tudományos Ülésszak tanulmányai [Proceedings of János Lippay - Imre Ormos - Károly Vas (LOV) Scientific Meeting, 2023]*. Budapest, Hungary: Hungarian University of Agriculture and Life Sciences, Buda Campus, pp. 330–337.

6.3. Conference Papers Abstracts

- 9) **Bzour, Ansam; Valánszki, István**, (2022): Peri-Urban Green Areas and the Landscape Transformation in the Case of MENA Region. In: Keszthelyi, Á.B.; Jombach, S.; Valánszki, I.; Filep-Kovács, K.; Kollányi, L.; Ryan, R.L.; Ahern, J.; Eisenman, T.; Lindhult, M.S.; Fábos, J.Gy. (eds.) *Moving Towards Health and Resilience in the Public Realm, 7th Fábos Conference on Landscape and Greenway Planning: Book of Abstracts*. Budapest, Hungary: MATE Institute of Landscape Architecture, Urban Planning and Garden Art, p. 136.
- 10) **Bzour, Ansam; Valánszki, István**, (2023): Investigating the effect of climate change on the land use and land cover of the Jordan River Basin. In: Gyalai, Ingrid; Czóbel, Szilárd (eds.) *20th Wellmann International Scientific Conference: Hódmezővásárhely, 3rd April*

2023. Hódmezővásárhely, Hungary: University of Szeged, Faculty of Agriculture, p. 64.

- 11) **Bzour, Ansam; Valánszki, István**, (2023): Cultural development of tourism and recreation in the Jordan River Basin: an overview of challenges, opportunities, and sustainable practices. In: *3rd International Conference on Water Management and Its Surroundings - Theoretical and Practical Aspects: Abstract Book*. Olsztyn, Poland, p. 63.
- 12) **Bzour, Ansam; Valánszki, István; Mseddi, Amine**, (2021): Land Use Conflicts and the Potential of Use Regarding the Changes in the Landscape in the MENA Region. In: Fodor, Marietta; Bodor-Pesti, Péter; Deák, Tamás (eds.) *Lippay János - Ormos Imre - Vas Károly (LOV) Tudományos Ülésszak: Összefoglalók*. Budapest, Hungary: Hungarian University of Agriculture and Life Sciences, Buda Campus, p. 33.
- 13) **Bzour, Ansam; Valánszki, István**, (2024): The perception of cultural significance of the Jordan River lower basin. In: Fodor, Marietta; Bodor-Pesti, Péter; Deák, Tamás (eds.) *A 2023. évi Lippay János - Ormos Imre - Vas Károly (LOV) Tudományos Ülésszak összefoglalói = Abstracts of János Lippay - Imre Ormos - Károly Vas (LOV) Scientific Meeting, 2023*. Budapest, Hungary: Hungarian University of Agriculture and Life Sciences, Buda Campus, p. 31.
- 14) **Passos Rosa, Tayana; Boromisza, Zsombor; Bzour, Ansam; Szani, Zsolt**, (2023): Framework and results of a design-based learning educational program with the local landscape in focus in a Hungarian high school. *Acta Biologica Marisiensis* 6 : Supplement 1, pp. 24-25. (7th Conference on Horticulture and Landscape Architecture in Transylvania, Târgu-Mureș, Romania).