

Hungarian University of Agriculture and Life Sciences Doctoral School of Environmental Sciences

UNDERSTANDING RELATIONAL VALUES THROUGH A HUMAN-WILDLIFE CONFLICT IN AN ENVIRONMENTAL JUSTICE FRAMEWORK

Theses of Doctoral (PhD) Dissertation

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1 Background

Environmental justice questions in conservation concern the unequal distribution of benefits and burdens, but are also rooted in cultural processes that hinder or render it more difficult to involve perceptions and cosmologies of different groups or cultures in conservation policy. Among justice theories, the three-dimensional theory of Nancy Fraser is eligible to assess environmental justice questions in conservation in its complexity, as it focuses on distributional, recognitional, and representational justice questions. Understanding the complexity of environmental justice is important because justice dimensions tend to interlock and appear simultaneously, and their effects can intensify each other.

The literature on environmental valuation also raised the question of involving the perceptions and values of different groups (like the cosmologies of indigenous people) in environmental policy. A new concept, relational value, which aims to involve values other than the intrinsic and instrumental value in the environmental policy, has emerged in part to solve this question. Relational value refers to the value of the relationship between nature and humans and incorporates values associated with nature that are anthropocentric, but not instrumental.

In my dissertation, I integrate the questions raised by the concept of relational value with the three-dimensional justice theory of Nacy Fraser and apply it in the analysis of a human-wildlife conflict in the Hungarian context. Using this complex analytical framework I concentrate on both the cultural and structural elements of the conflict that emerged between hunters and conservation around birds of prey and small game species.

2 Objectives

The practical aim of my dissertation is to offer an analytical tool that can assess the cultural, distributional, and political effects of conservation policies.

My scientific goals are the followings:

- to prove based on empirical findings, that the concept of relational value can be interpreted as a new epistemological approach to environmental values, which is concentrating on the context-dependent meanings of nature
- to integrate the new epistemological approach to environmental values with a critical analytical framework, which comprises the justice issues of cultural difference, the unequal access to natural resources, and the political representation in conservation policy, and which understands the interpretations of nature and justice dimensions in their historical context
- to analyze the symbolic conflict that emerged in the public discourses between hunters and conservation around birds of prey and small game species, and that is manifesting in the competing interpretations of nature, and to explore the social perspectives of Hungarian conservation experts on the value of biodiversity

- to analyze the human-wildlife conflict with the complex analytical framework in the social-economic context of the Jászság Special Protection Area (SPA)
- to analyze the participatory process of the management plan of Jászság SPA using the complex analytical framework

3 Methods

In my dissertation, I applied five methods and based my analysis on five sources of empirical data. I used 1. discourse analysis, 2. Q-method, 3. semi-structured interviews, 4. desk research (historical analysis and social-economic data), 5. participatory forums (Figure 1.).

- 1. I used discourse analysis to understand the symbolic conflict that has emerged around the birds of prey and small game species in the public sphere. While analyzing the discourses of hunting and conservation I focused on the competing meanings and interpretations of the relationship between nature and humans.
- 2. I used Q-method to analyze the social perspectives of Hungarian conservation experts (decision-makers, researchers, and representatives of NGOs) on the value of biodiversity.
- 3. I used semi-structured interviews and desk research to analyze the patterns of natural resource management and the interpretations of nature (especially the meanings attached to birds of prey and small game species) in their historical context in the area of Jászság SPA. I also focused on the distributional and recognitional environmental justice issues of the area, including the justice issues generated by conservation policy.
- 4. I analyzed participatory forums to understand the effects of the tools used in the participatory process (inclusion of stakeholders and economic incentive) on natural resource management, the interpretations of nature, and the environmental justice issues in Jászság SPA.

Empirical methods				
	Discourse analysis	Q-method		
Conservation policy national level	Analysis of competing discourses of hunting and conservation	Social perspectives of conservation experts on the value of biodiversity		
	Semi-structured interviews + Desk research	Participatory forums		
Local level of conservation policy, the participatory process of Jászság SPA management plan	The natural resource management patterns, interpretations of nature and environmental justice issues, including justice issues generated by conservation policy in Jászság SPA	The effects of the tools used in the participatory process (inclusionof stakeholders and economic incentive) on natural resource management, the interpretations of nature, and the environmental justice issues		

Figure 1.: Empirical methods

4 Results

1. I argued based on my empirical findings that it is possible to interpret relational values as a new epistemological approach, which understands values of nature as contextdependent meanings and interpretations of nature. My discourse analysis showed that the concept of relational value is raising relevant and legitim questions and that it allows a more profound understanding of the relationship between nature and humans. Despite the advantages of the concept, I argued that I could have a more comprehensive understanding of the conservation conflict by treating values of nature as different meanings and interpretations of nature. With that perspective, I was able to reveal the layered meanings associated with nature. I disclosed the altering and competing meanings of hunting and conservation concerning the role of humans in ecosystems. While the discourse attached to hunting consisted of the "humans as carers for game species" and "humans as part of ecosystems" conceptualizations, conservation discourse referred to humans as "custodians" of nature. All of these conceptualizations could have been fitted into the concept of relational value. But attached to the "humans as carers for game species" and "humans as custodians of nature" I could reveal more layers of meanings that were fundamental to understanding the conflict. The disagreement between the two discourses appeared most profoundly in the questions regarding human intervention in ecosystems, the meanings of carrying capacity, and the role of humans. The discourse attached to hunting supported human intervention in ecosystems and understood carrying capacity involving human use of ecosystems. It considered humans as responsible for game species and also as part of nature. Conservation was based its discourse on scientific arguments, and supported intervention only in necessary cases, to maintain or restore the integrity and health of ecosystems. The role of humans in the conservation discourse was referred to as "humans as custodians of nature".

The discourse analysis and the common frame of reference of the hunting and conservation discourse showed that it is difficult to insert interpretations of nature into value categories without losing some of the explanatory power of the analysis. I identified a couple of conceptualizations of the relationship between nature and humans. In the discourse attached to hunting, three conceptualizations were present: besides the ecological approach and the natural resource management, "hunting as a fair competition" was identified. Conservation discourse was characterized by intrinsic value and the ecological perspective, the latter was the common frame of reference for the two competing discourses. The ecological and natural resource management approach interlinked in game management and it was difficult to separate the ecological perspective from the category of instrumental value (especially in questions like the habitat restoration of game species, or the hunting of invasive species). Therefore I argued to understand values of nature as context-dependent interpretations of nature, which allows us to analyze the overlaps and connections between the two categories. In sum, I concluded that the concept of relational value could be interpreted as a "bridging" concept that facilitates the communication between environmental valuation and some of the non-positivist social scientific approaches.

- 2. As a result of the Q-interviews, I identified three social perspectives of conservation experts in Hungary, that were dominated by ecological arguments and the intrinsic value of nature. The "wilderness" conceptualization and the accompanying concept of untouched nature of the Arcadian perspective and the interests of future generations were also important in the perspectives. Although the question of future generations was a significant instrumental argument in the perspectives, ecosystem services and the economic value of nature were considered as merely a communication tool, that is eligible to convince the general public about the value of biodiversity. This could be a result of Hungarian conservation's lack of significant history in the application of economic incentives. The "rural idyll", or the cultural landscape, where people and nature are existing in harmony was emphasized only in the third social perspective. The relatively low weight of the concept of the cultural landscape probably can be traced back to the lack of resources in Hungarian conservation and the conventions of command and control traditions in conservation, which do not allow too many opportunities for private collaborations.
- 3. Analyzing the environmental justice issues of Jászság SPA, I found that the integration of agriculture into the global food system contributed to distributional justice issues and ecological problems in the area (Table 1.). The concentration of agricultural production and the smaller farmers' abandonment of farming was noticeable in the area. The concentration was also prevalent in animal husbandry, along with the shrinking of the animal husbandry sector. The intensification of agriculture contributed to ecological problems in the area as well, which manifested in the loss of small game populations (although other factors contributed to the phenomenon as well). The distributional justice issues that were generated by conservation policy presented in the utilization of

conservation subsidies (Natura 2000 compensation and agri-environmental schemes). During the application process, smaller farms experienced disadvantages compared to larger farms that managed to more successfully adapt to the "knowledge-intensive" subsidies, which demanded administrative and managerial knowledge. According to the empirical findings in the Jászság, the conservation subsidies also caused recognitional justice problems for some farmers. They felt, that some of the regulations of the agrienvironmental program forced them to follow, sloppy farming" and that subsidies haven't recognized the value of productive labor in the lands. Neither the role of "stewards of nature", nor the intrinsic value and ecological perspective of conservation weren't appealing to farmers.

Hunting and game management in Jászság SPA were characterized by the hunting associations' need for revenues, and the economic utilization of game species and hunting, especially commercial hunting was important in the maintenance of the hunting organizations. I argued that if hunting is more embedded in the local community, it can lead to a more just hunting practice. I assume that hunting in the area was embedded in the local community, but to declare it more firmly, more studies are needed. When examining the recognitional justice issues of conservation I found that such conceptualizations of the human-nature relationship, like hunters' "caring for game species" didn't match nature conservation's perspectives which are focusing on the intrinsic value of nature.

Table 1: Distributional and recognitional environmental justice problems in Jászság SPA

	Agriculture	Hunting
Distributional justice	The concentration of agricultural production	Hunting embedded in the local community leads to more just practice
Distributional justice rooted in conservation policy	Disadvantages in access to conservation compensation and subsidies	-
Recognitional justice rooted in conservation policy	Misrecognition of the productive labor practiced in lands	Misrecognition of "caring for game species"

4. Analyzing the participatory process, I found that the process could offer a solution to the ecological problem of the small game species' habitat loss with the new conservation subsidies. It also made progress in resolving the symbolic conflict between conservation and hunting and managed to recognize some of the values of hunters. The participatory process transparently involved the contributions of stakeholders, it also provided information for the stakeholders, and was a leap forward for conservation and other stakeholders to understand each other's perspectives. Despite the positive results of the participatory process, the analysis of the environmental justice issues showed that the plan hadn't incorporated some of the values that farmers associated with farming (productive labor on lands). Moreover, the participatory process hadn't changed the

disadvantages of certain farmers in accessing the "knowledge-intensive" conservation subsidies.

The ecological perspectives offered a common frame of reference for hunting and conservation during the participatory process, as it understood both game and protected species as part of the ecosystem. Conservation hadn't generated distributional issues concerning hunting and game management, but the ecological frame offered an opportunity to represent the problem of small game species' habitat loss and the interest of hunting. The regulation that were referring to maintaining or restoring habitats in arable lands could provide favorable conditions for small game species as well (Table 2).

Table 2: Distributional, recognitional, and representational justice in the participatory process

	Agriculture	Hunting
Distributional justice	Some of the farmers suffered disadvantages in applying for the "knowledge-intensive" subsidies	-
Recognitional justice	Subsidies hindered some values of dfarmers' to appear in the plan	Recognition of ecological perspective and "caring for game species"
Representational justice	Differences in representation (due to knowledge and recognitional issues)	Ecological perspective allowed to represent interests

5. I concluded while examining the connections between environmental justice dimensions, that the subsidies offered an affirmative resolution for the distributive justice issues. While they helped farmers to maintain farming, they hadn't restructured the political-economic system and the relations of production. Moreover, subsidies generated recognitional justice problems among some of the farmers, as they resulted in producing new groups within the farmers. They separated farmers into a group of agricultural entrepreneurs, who can adapt to the demands of subsidies, and to a group of farmers who cannot or didn't want to keep up with the requirements of the subsidies.

Finally, the recognitional justice issues both in the case of hunters and farmers raised the question of recognition in itself, without considering its political-economic context can lead to just and sustainable decisions in conservation. I argued that a solely recognitional conservation policy can help to involve the diversity of values and perceptions, but ignoring inequalities that are rooted in the political-economic system won't necessarily lead to just and ecologically sustainable decisions.

5 Conclusions and recommendations

- 1. Based on my empirical findings I proved that the new epistemological approach to environmental values was eligible to reveal the multi-layered, contesting meanings that were attached to the hunting and conservation discourses, and to understand the overlaps and connections between values and perspectives. In sum, I concluded that starting from the concept of relational value, it was possible to interpret environmental values as a new epistemological approach.
- 2. I integrated the new epistemological approach with Nancy Fraser's three-dimensional justice theory, which comprised distributional, recognitional, and representational justice dimensions. In my complex analytical framework, I considered the environmental justice dimensions as the product of historical processes.
- 3. I identified the symbolic elements of the human-wildlife conflict, which were rooted in the different meanings attached to nature and appeared in national-level discourses and local perceptions as well. I also analyzed the structural roots of the conflict, which could be traced back to intensive agriculture, which contributed along with other factors to the decreasing small game populations.
- 4. With the help of the complex analytical frame, I could analyze simultaneously the distributional and recognitional justice issues in the Jászság SPA, which allowed me to reveal the interlocking effects of the dimensions. In the Jászság I discovered that besides the recognitional problems, distributional policy contributed to the disadvantages of some of the farmers in accessing the conservation subsidies due to the "knowledge-intensive" features of the subsidies. I also argued that it is not sufficient to focus only on recognitional policies when planning conservation policies, the political-economic context should be part of the considerations as well.
- 5. I recommended that addressing both distributional and recognitional justice issues in agriculture necessitates a transformative distributive and recognitional policy that reorganizes those structures of society that are producing the inequalities. This could mean policies that are based on reciprocity, and solidarity and that are re-embedding the economy into the society and ecosystems. Community farming, cooperatives, or social enterprises could be examples of this type of production. Concerning the recognitional justice policies, this could mean an approach that deconstructs the cultural processes that are degrading to some of the values associated with farming and lands (like the value of productive work or autonomy). The re-embedding of conservation in the local community could happen through collaborative projects with farmers and the local community, supporting local products, and involving local people in ecotourism. The re-embedding of hunting necessitates the diminishing of the commodification of game species and hunting and the reduction of the dependence of hunting associations on market revenues.

6 New scientific findings

- 1. My first scientific finding is that I concluded, supported by my empirical findings, that starting from the concept of relational value it is possible to interpret environmental values as a new epistemological approach, that is focusing on the context-dependent meanings of nature.
- 2. My second scientific finding is that I developed a complex environmental justice analytical framework of the new epistemological approach to environmental values. I integrated the new epistemological approach into the three-dimensional justice theory of Nancy Fraser. I also incorporated the historical context of the epistemological approach analytical frame, which understands interpretations of nature and justice issues as the products of historical processes.
- 3. My third scientific finding is that I identified the elements of the contested public discourses of hunting and conservation. I found that the conflict revolves around the meanings attached to human intervention in ecosystems, the carrying capacity, and the role of humans in ecosystems. I also identified the ecological perspective as a common frame of reference between conservation and hunting.
- 4. My fourth scientific finding is that I revealed the social perspectives of conservation experts on the value of biodiversity. I found that the intrinsic value of nature, the ecological perspective, the notion of untouched nature, the interests of future generations, and to a lesser extent cultural landscapes were dominating the perspectives. Conservation, which is based on private property and economic incentives wasn't considered the most idealistic form of conservation.
- 5. My fifth scientific finding is that by using the complex analytical frame I identified the environmental justice dimensions that affected farmers and hunters in the Jászság SPA. I found that the structural issues of agriculture and the "knowledge-intensive" conservation subsidies contributed to distributional and recognitional justice problems among farmers. The participatory process didn't influence the disadvantages of some farmers that were rooted in "knowledge-intensive" conservation subsidies, and some recognitional issues that were important to farmers weren't answered either by the process. I concluded that the participatory process made a step towards the recognition of some of the values of hunters. Finally, I suggested addressing recognitional justice issues along their political-economic context can lead to more just and sustainable decisions in conservation.

7 List of Relevant Publications

JOURNAL ARTICLES PUBLISHED IN ENGLISH

- Berry, P., Fabók, V., Blicharska, M., Bredin, Y., Garcia Llorente, M., Kovács, E., Geamana, N., Stanciu, A., Termansen, M., Jääskeläinen, T., Haslett, J., & Harrison, P. (2018): Why conserve biodiversity? A multinational exploration of stakeholders' views on the arguments for biodiversity conservation. *Biodiversity and Conservation*, 27: 1741–1762. p
- Kovács, E., Fabók, V., Kalóczkai, Á., & Hansen, H. P. (2016a): Towards understanding and resolving the conflict related to the Eastern Imperial Eagle (Aquila heliaca) conservation with participatory management planning. *Land Use Policy*, 54, 158–168.
- Kovács, E., Kelemen, E., Kiss, G., Kalóczkai, Á., Fabók, V., Mihók, B., Megyesi, B., Pataki, G., Bodorkós, B., Balázs, B., Bela, G., Margóczi, K., Roboz, Á., & Molnár, D. (2017): Evaluation of participatory planning: Lessons from Hungarian Natura 2000 management planning processes. *Journal of Environmental Management*, 204, 540–550. p
- Primmer, E., Termansen, M., Bredin, Y., Blicharska, M., Garcia Llorente, M., Berry, P., Jääskeläinen, T., Bela, G., Fabók, V., Geamana, N., J., Haslett, L., Cosor (2017): Caught Between Personal and Collective Values: Biodiversity conservation in European decision-making. *Environmental Policy and Governance*, 27.

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- Fabók, V., & Kovács, E. (2019): A biológiai sokféleséggel kapcsolatos néző- pontok vizsgálata Q-módszerrel. *Szociológiai Szemle*, 29, 68–93. p
- Fabók, V., Kovács. E., Kalóczkai, Á. (2015): Érintettek percepcióinak feltárása egy védett ragadozómadarakkal kapcsolatos konfliktusban a Jászság SPA részvételi tervezési folyamata során. *Természetvédelmi Közlemények*. (21): 64-75. p
- Kovács E., Kiss G., Kelemen E., Fabók V., Kalóczkai Á., Mihók B., Pataki G., Balázs B., Bela G., Megyesi B., & Margóczi K. (2016b): Natura 2000 fenntartási tervek részvételi folyamatainak értékelése. *Természetvédelmi Közlemények*, 22, 112–130. p
- Mihók B., Kiss G., Kovács E., Margóczi K., Fabók V., Kalóczkai Á. (2016): Ki mondja meg, mi a fontos? – Részvétel és természetvédelem. *Természetvédelmi Közlemények*, 22, 131–154.p

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Fabók, V., Kovács, E., Bela, Gy., Termansen, M. (2015): A Q-Methodology Study of perspectives on biodiversity and ecosystem services in Hungary. In: European, Sociological Association ESA 2015: Differences, Inequalities, and Sociological Imagination: 12th Conference of the European Sociological Association: Abstract

- Book. Prague, Csehország: European Sociological Association, Institute of Sociology of the Academy of Sciences of the Czech Republic. 591-592.p
- Kovács, E., Kiss, G., Fabók, V., Kalóczkai, Á., Mihók, B., Pataki, Gy., Balázs, B., Bela, Gy., Megyesi, B., Margóczi, K. (2015): Evaluation of participatory management planning processes for Natura 2000 sites in Hungary. In: Visconti, P; Game, E; Mathevet, R; Wilkerson, M (Szerk.) Abstract book of ICCB-ECCB 2015: 27th International Congress for Conservation Biology and 4th European Congress for Conservation Biology. 370. p.
- Kiss, G.; Kovács, E., Kelemen, E., Fabók, V., Kalóczkai, Á., Mihók, B., Pataki, Gy., Balázs, B., Bela, Gy., Megyesi, B. (2017): Successes and failures of participatory planning Evaluation of participatory planning processes in nature conservation. In: (Un)Making Europe: Capitalism, Solidarities, Subjectivities: 13th Conference of the European Sociological Association: Abstract book. Athén, Görögország: European Sociological Association. 360-361. p.

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- Fabók, V., Kalóczkai, Á., Kovács, E. (2014): Fenntartási terv részvételi tervezésének lehetőségei az eltérő tudásformák megnyilvánulására és integrálására. In: Lengyel, Sz (szerk.) IX. Magyar Természetvédelmi Biológiai Konferencia: "Tudományoktól a döntéshozatalig": absztrakt-kötet. Budapest, Magyar Biológiai Társaság. 23. p.
- Kiss, G., Kovács, E., Kelemen, E., Fabók, V., Kalóczkai, Á., Mihók, B., Pataki, Gy., Balázs, B., Bela, Gy., Megyesi, B. (2015): 7 év, 25 terület. Részvételi folyamatok értékelése a természetvédelmi tervek készítésében. In: Anon (szerk.) A társadalmi részvétel és a kutató–laikus kutató együttműködés lehetőségei a társadalomtudományokban: Rezümékötet. Szeged. 12 p.
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- Fabók, V., Kalóczkai, Á., Kelemen, E., Kovács, E., Margóczi, K., Mihók, B. (2016): Natura 2000 fenntartási tervek részvételi tervezésének tapasztalatai és kapcsolódó módszertani javaslatok. In: Gallai, Zsófia (szerk.) Módszertani kézikönyv a Natura 2000 fenntartási tervek készítéséhez. Budapest, Magyarország: Printorg. 117-134. p