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# THE BIEBRZA HYDROSOCIAL LANDSCAPE. ANALYSIS OF ENVIRONMENTAL DISCOURSES IN THE LARGEST POLISH NATIONAL PARK

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The author analyses narratives about the environment in the largest national park in Poland. She attempts to present the socio-cultural aspect of water in Podlasie, based on the concept of the hydrosocial cycle as interpreted by Jamie Linton and Jessica Budds (2013), but extending it to the non-human world. In the Biebrza Valley there are many different environmental discourses, as well as conflicts related to the different approaches to the relationship between nature and humans. Two of them are dominant: the discourse of the employees and experts of the Biebrza National Park (“institutional”) and that of the dissatisfied inhabitants (“agricultural”). The author moves away from the relativistic understanding of knowledge, typical of ethnography.

KEYWORDS: Biebrza River, Biebrza National Park, hydrosocial cycle, environmental discourses, climate crisis, Anthropocene

### INTRODUCTION

The Anthropocene — although not yet formally recognized as a geological epoch, has already changed the reflection on human-nature relations (Binczyk 2017: 52). Taking into account the need of ecologisation of the humanities, including ethnography, I will analyse environmental discourses in the largest Polish national park from an engaged position<sup>1</sup>. I believe that the complex problem of environmental protection

1 I conducted ethnographic field research on the Biebrza river during four stays from April 2022 to March 2023, for a total of 40 days. I also used materials collected by the principal investigator, Dr. Małgorzata Owczarska. In total, we recorded 116 ethnographic interviews on the Biebrza river and many informal conversations, and we participated in numerous activities organised by both the Biebrza National Park (*Biebrzański Park Narodowy, BbNP*) and the local community. This article is an

should be treated as a priority, which in practice means that I will depart from the ethnographic relativism of knowledge and opt for ecological expert knowledge as the one that offers the best chance of reversing catastrophic anthropogenic trends.

The Biebrza Valley is a unique natural area whose axis is the river. By analysing the narratives about the environment that exist in this territory, I present the socio-cultural entanglements of water in Podlasie, a region of Poland at the centre of which the Biebrza National Park (*Biebrzański Park Narodowy, BbNP*) is located. When tackling the conflicts and narratives concerning the environment, I will consider that there are more-than-human participants involved: animals, plants, fungi, bacteria, minerals and rocks, peat sediments, and water that takes many forms, both visible and hidden in the landscape.

#### LOCAL KNOWLEDGE/EXPERT KNOWLEDGE

Expert (scientific) knowledge and local (agricultural) knowledge are two different perspectives for understanding the relationships between the various actors that make up the “environment”. Most social scientists, fearing the trap of colonialism or paternalism, emphasise the equivalence of these different types of knowledge. However, as Agnieszka Kowalczyk’s (2012) analysis shows, treating each type of knowledge equally may turn out to be tantamount to giving up critical work and taking responsibility, which would be a denial of the engaged research. As Kowalczyk argues, “lack of commitment on the part of the researcher is not a neutral attitude, but also an ethical position. The social researcher is a witness responsible for taking or refraining from taking action. In my opinion, writing in the field of social sciences can, and above all should, become a place of resistance” (Kowalczyk 2012, 109).

When considering the types of knowledge, the dispute between “theoreticians” and “practitioners” is of utmost importance. As Amanda Krzyworzeka, who conducts research among farmers in Podlasie, notes:

For farmers, knowledge has meaning and value only in action. It is not needed by those who do not make decisions, who do not work, and who do not use it in their daily activities. In this sense, farmers talk about the impracticality of “theoretical” knowledge, that is, knowledge that cannot be translated into specific actions. According to them, “theoretical” knowledge also includes that coming from a person who is not a practitioner and therefore does not enjoy the authority developed through his or her own activities in the field of agriculture. (Krzyworzeka 2011)

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Farmers' knowledge is verified by people close to them, such as family and neighbours, who vouch for it. "Valuable knowledge is also that which has been filtered through the local sieve of social networks, checked by friends, assessed by them, validated by their opinions" (Krzyworzeka 2011). This is where the connection between knowledge and values is most evident, because we can assume that the "local social network" consists of people with a similar worldview who accept what falls within the existing framework. Therefore, in order for knowledge to be implemented, it must be consistent with the attitudes, goals and values that operate in a given community. Knowledge that does not fit with one's worldview is usually rejected. When the environment is seen primarily as a reservoir of resources, it is difficult to acquire, accept and practice knowledge that supports new ecological solutions, and, for example, limits human activity in order to protect the natural world. "Ignorance in some areas may also be a reflection of a person's views, a way of expressing approval or disapproval" (Krzyworzeka 2014: 129).

According to Krzyworzeka, farmers in Podlasie understand ecology in a variety of ways, but most importantly economic thinking always wins over ecological thinking. In my research, I came to a similar conclusion: for local farmers, caring for the environment always implies caring for resources that can be used. Nature does not have an autotelic value, but it has practical value, it is calculable, and actions conducted in its direction should be profitable or at the very least not detrimental:

The issue of environment and ecology was approached in an extremely pragmatic way: if a certain action could save money (preferably in the short term) or make everyday activities easier, it was worth doing. In many households I observed actions that could be considered ecological, but it usually turned out that the motives of the household members were of an economic rather than ecological nature. (Krzyworzeka 2014: 233)

Sławoj Szynkiewicz, writing in the context of the indigenous cultures of Northern Asia, suggested that "contrary to the stereotype, the intimate closeness of humans with their immediate environment does not translate into a healthy attitude towards it" (2005, 116). According to him, there is a false idealisation of the relationship between indigenous societies and nature, a relationship which in some extreme cases can even lead to the destruction of human societies that are deprived of their food base due to their excesses. A "healthy attitude" in this case may mean not so much the recognition of the intrinsic value of nature, but above all its anticipatory and sustainable use. This conclusion is also relevant for contemporary rural communities.

“EXPERTS” AND “FARMERS” IN THE BIEBRZA VALLEY

Although in the Biebrza Valley there are many different discourses on the environment, two of them are dominant: the discourse of the employees and experts of the Biebrza National Park, which I will call “institutional” and the discourse of dissatisfied inhabitants, for whom the transformation of the 1990s coincided with the creation of the BbNP, which in some cases led them to identify the national park with the cause of their life’s failures. There are also other discourses that are less clear-cut and often intertwined: the lovers of the region (the so-called *biebrznicy*), ecologists and tourist service providers. They all have their own knowledge of nature, based on education and/or experience. However, I will reserve a term “experts” for individuals who represent knowledge based on scientific data, that is former and current personnel of the BbNP and academic experts (biologists, hydrologists, etc.) from outside. Another group of my interlocutors were people who had no training in life sciences, but who were actively seeking new information in this field, motivated by concern for the natural environment. The third group of interviewees were people who, by virtue of due to their work or farming background, were connected to agriculture and represented local knowledge based on tradition and experience.

In the following, I will focus on a disagreement between experts representing a state institution and (current or former) farmers, who believe that “the greatest threat to nature in the Biebrza is the existence of the Biebrza National Park.” This conviction stems from the fact that the BbNP has banned certain practices (e.g. mowing the river, motor navigation, poaching, burning grass) and imposed not only its vision of nature conservation, but also that of coexistence with nature, contrary to existing agricultural knowledge and practice. In turn, an expert associated with the park states:

You have heard stories about the Biebrza, that this is a landscape of coexistence between humans and nature. [...] It is not about humans and nature. Humans started to waste this nature. They dried up these meadows and dug drainage ditches. There are 540 km of drainage ditches are within the borders of the Biebrza National Park. That means that if there are 540 km of ditches, and the Park is 600 km<sup>2</sup>, there is one kilometre of ditches per square kilometre of the Park. (Expert, 10.12.22)

However, the idealised image of the relationship between humans and nature, which was supposed to exist in the past, remains for the locals as a model of relations and a state to which they would like to return. In their opinion, the National Park disturbs and forbids the development of a harmonious coexistence of people and nature on the Biebrza River.

Due to the specificities of the Biebrza landscape, water plays the most important role in the ongoing discussions — the river, ponds, swamps and peat bogs. In fact, in each of these narratives water has a different meaning and value, both material and emotional, its use or desire to use it is different, its purpose is different. Mediation between these positions can only be undertaken after deciphering the aquatic relationships and dependencies. I wanted this research, conducted in the field of transrelational ethnography, to have a practical value because, like Katarzyna Majbroda, I believe that:

The goal of transrelational ethnography, which I see as one of the trends in current anthropology, is not so much to keep pace with the changing world, but to mobilise it, to prepare for understanding the processes and phenomena that are coming, in a formula open to collaboration with various entities, also non-academic ones. (Majbroda 2021: 19-20)

Hereafter, I will present the main arguments of both discourses in the Biebrza hydrosocial landscape, attempting to create a simplified model of complex and multi-layered relationships. However, I must emphasise that during the ethnographic research, my perspective as anthropologist was constantly confronted with arguments from bioethics and animal ethics, which are an important part of both my training and identity as a scholar. Therefore, my conclusions may lie at the intersection of different disciplines and scientific worldviews. Moreover, in the face of the ongoing climate crisis, I consider the ecological responsibility of each of us to be one of the most important issues. I believe that local knowledge and practice can no longer be idealised as the best mode of relationship with nature. Simply being close to nature does not guarantee better knowledge of it. Farmers who know how to use (or even exploit) nature do not know how to protect it, and the measures they propose may be counterproductive, as I show below. Local knowledge does not always include global dependencies and connections and is powerless against them. In my view, in the face of the climate crisis, it is scientific and expert knowledge that should be a signpost. Its most important feature is that it is changeable and subject to constant review, whereas agricultural knowledge changes slowly and does not keep up with the changes.

I describe the water-saturated Biebrza landscape as a hydrosocial space, referring to the concept of the hydrosocial cycle as interpreted by Jamie Linton and Jessica Budds, but extending it to non-human beings. For these researchers, the hydrosocial cycle is “a socio-natural process by which water and society make and remake each other over space and time” (Linton, Budds 2013: 170). The hydrological cycle, which refers to the natural circulation of water in nature, is a process that humans

can only modify or disrupt. In the hydrosocial cycle, on the other hand, it is the relationship and dialogue between water and people that is most important, and I would add that it also includes other entities that revolve around the water ecosystem. Thus, the concept of the hydrosocial cycle is a theoretical and analytical means of studying water-social relations, assuming that water is not a background for human social relations, but an active, albeit unconscious, participant. In the case of the Biebrza landscape, it would not be an exaggeration to say that water dominates it, not only in the visual and aesthetic sense, but also as a causative factor.

Transrelational ethnography, which I have chosen as my method of analysis, allows us to treat water as an important and causal context, as it requires conceptualizing reality as systems of interconnected entities, where what was previously used to be treated as an insignificant background becomes an important element of research (Majbroda 2021: 10). Transrelational ethnography is helpful in the holistic approach to this multi-subject community, which

crosses borders, gathering and intertwining human and natural, environmental, climatic, biological, technological and material entities in specific arrangements, it provides an opportunity to notice the interdependence and coexistence of many elements whose different configurations make up the currently observed processes and phenomena. (Majbroda 2021: 6)

Therefore, I will describe activities and situations in which what is human is co-created by the non-human world, both animate and inanimate. Undoubtedly, the most important context, but also the causative factor, will be water — rivers, swamps and wetlands. Water is not an intentional entity, but due to the “transrelational perspective, what has hitherto functioned as a static and devoid of agency, and was thus perceived only in terms of the background of specific situations and phenomena, is an important, and sometimes decisive, element of the analyses undertaken” (Majbroda 2021: 11). The potentiality and multiplicity of water’s forms do not allow it to be pigeonholed. Water will always elude unambiguous categories, generating many points of convergence (and even collision) of the entities gathered around it. Taking into account the aquatic perspective allows more subjects to be included in the considerations, but this requires empathy with their different ways of experiencing, the separation of the senses and corporeal experience (Neimanis 2017).

## THE FIELD: BIEBRZA VALLEY

The Biebrza Valley is full of water — it is the area of the largest national park in Poland, covering over 59,000 hectares. The park was established in 1993 to protect the ecosystems of the river, wetlands, peat bogs and swamps. Before the Second World War, two areas in the Biebrza Valley were protected, creating the Grzędy and Czerwone Bagno Reserves. After the war they were merged. At that time, the main aim was to preserve the elk population (Raczyński 2013, 32). To this day, the Biebrza National Park is the largest elk sanctuary in Poland. However, now, apart from the most recognizable members of the deer family in Poland, the most famous inhabitants of the park are birds. Since 1995, the Biebrza National Park has been listed on the Ramsar Convention on Wetlands of International Importance. This is due, in part, to the fact that the Biebrza marshes are a unique national and continental refuge for water and marsh birds, especially the endangered aquatic warbler, a small and inconspicuous bird of the reed warbler family. Poland has the largest concentration of aquatic warblers in the European Union, with 29% of the world's population of these birds breeding here (BirdLife International 2017, 119). The Biebrza Valley is also a Special Bird Protection Area (*Obszar Specjalnej Ochrony Ptaków*) and a Special Area of Conservation (*Specjalny Obszar Ochrony Siedlisk*) belonging to the Natura2000 (network of protected areas in the European Union). Nearly 300 species of birds can be found in the area, either seasonally or all year round.

The axis of the protected area is the Biebrza river. Nearly the whole river lies within the national park, except for a short stretch at the river source. The river has a natural character, that is, it has undergone very little human intervention. It meanders strongly, constantly changes its course and floods in spring. In many of villages along the Biebrza River, the water is both a means of communication (the river) and a barrier (the marshes), and for centuries it has determined the layout of the villages and the customs of their inhabitants. Today, this influence has diminished as a result of technological development (bridges, asphalted roads, mechanical means of transport) and climate change (milder winters, less water in the landscape). The construction of the Augustów Canal (in 1839) and extensive melioration contributed to the observed decrease in the water levels and drying up of the marshes. Efforts are currently being made to restore water to the landscape. These are mainly activities carried out as part of several renaturation programmes of the Biebrza National Park.

In the Biebrza Valley, we are dealing with a specific cycle of dependency centred around the river: the nature of the Biebrza we observe today has been shaped by humans through regular mowing of sedges over the last few centuries. This made it possible to create habitats and feeding grounds for rare bird species (e.g. aquatic warbler, great snipe, greater spotted eagle, black grouse). Typical for many peat bogs is the tuft-valley structure, that is, there are less watered tufts and more watered valleys

in a compact area, which leads to a high diversity of flora and fauna in a limited zone. In addition to birds, the Biebrza wetlands are inhabited by reptiles, amphibians and invertebrates (for example, reptiles: viviparous lizards, sand lizards, slowworms, grass snake, adders; amphibians: various species of frogs, toads and newts; invertebrates: over 700 day and night butterflies, beetles, dragonflies, arachnids and crustaceans). An unresolved problem is the use of special mowing trucks (*ratraks*) to protect bird habitats, which destroy the tuft-valley structure of the peat bog that provides shelter for other animals, and leads to the direct killing of small animals living in the mowed area.

The nature of the Biebrza bears the mark of strong anthropopressure, and the Biebrza National Park tries hard to preserve it in the state to which it was brought by humans. Of course, this is an oversimplification, because for several decades human influence on the Biebrza has been destructive, along with changes in agriculture: the drying up of meadows, the abandonment of cattle grazing and the introduction of artificial fertilisers have upset the delicate balance of the riverine ecosystem.

The “wilderness” of the Biebrza Valley, that is, the succession of vegetation (overgrowth of the river and its backwaters, afforestation of meadows), will result in the disappearance of many species from this landscape. At the same time, there is a fight against new species, often classified as invasive (which is a direct and, in my opinion, controversial translation of human classifications into the non-human world). The whole of these procedures is a paradox, that shows once again that the nature-culture opposition is an artificial construct: the vision of the ideal nature of the BbNP is a human creation, a certain static state isolated from the history of this region, opposed to the dynamics of the processes that take place in nature, its continuous development and change. This environment is evolving, one of the experts told me:

The main problem of nature conservation that we have, not only in Poland, but all over the world, is the eternal dilemma of whether to protect processes [natural processes, that is, processes that take place without direct human intervention] or to protect the status quo. And now, if we protect the status quo, it is immediately doomed to failure [...] the protection of the processes is that we have this ecosystem much more stable. So it is nature, but not quite the way we would like. [...] it is certainly a dynamic ecosystem and management, because we are talking about environmental management, not about nature conservation, we should anticipate that we are protecting a growing child. And methods that were good 10 years ago are no longer good today. (Expert, 10.12.22)

The National Park therefore acts as a natural heritage park, still trying not so much to protect the imaginary “wild nature” as to control and tame it.

In the Biebrza Valley we have a unique environment from the point of view of biodiversity and with the abundance of water, inhabited or seasonally visited by a large number of species. Leaving aside the debate over the concept of species in biology (see Kaszycka 1996; Nilsson 2014, 23-39), and recognising the legitimacy of species categorisation as an operational tool, I would like to emphasise here what is only seemingly obvious: when we use the term species, we often lose the perspective of individuals belonging to a species, which always have an individual biography. In the current discussions on nature (as well as in conversations with people associated with the BbNP), I see insufficient interest in the individualistic dimension of species, and yet it is the subjectivity of the individual that is most important in ethical considerations regarding animals (including humans).

#### MOWING

Among the many key issues that exist in the local community, mowing is the most important, because it is at the crossroads of tradition and modernity, familiarity and strangeness, and the still opposing forces of economy and ecology, which arouse not only many doubts, but also many emotions. The grazing of animals and the mowing, first by hand, and now by machine, have created a specific type of vegetation and breeding conditions for many bird species that are unique on a continental scale. Let's take a look at what mowing has looked like:

Men used to mow these meadows first. They would mow it, it would take a week or so, there you had to rake it over and then you would fold it into these rolls, you would make a pile of the rolls, you would carry the pile to the haystack. The haystack was made of piles. I made many stacks. My job was on the stack. Because there was no way to take them home at that time. So they lay there, these stacks, waiting for the winter season, when it would freeze, and then they would take them to the farms, these stacks. (Former farmer, 09.02.23)

This seemingly trivial activity in a wetland is a source of problems and conflict. No one mows with a scythe in knee-deep water anymore, and farmers rarely choose to graze cows in these areas, because sedge grass is not nutritious and does not translate into efficient milk production. According to farmers, cows are reluctant to eat sharp and hard sedges and to enter flooded meadows. However, it seems unlikely that cow preferences play a substantial role in the decision to restrict grazing: human

interests and economic benefits are the decisive factors. Other forms of mowing include mechanical mowing (with mowers, tractors, trucks) and grazing by other animals (for example, Polish Konik). As agriculture withdrew from the marshes, the process of losing the semi-natural ecosystem of the marsh meadows began. They began to be replaced by common reed, shrub and tree communities, which are much less ecologically valuable. Another reason for the increased need for mowing is the constant lowering of the water level in the wetlands, which favours the succession of vegetation and the afforestation of these areas, since previously the stagnant water in the meadows prevented the growth of bushes and trees. The priorities of nature conservation in the BbNP have thus been defined, with the protection of wetlands and the species that inhabit them, especially the avifauna, as the main task. The flagship species expected to benefit the most from mowing the marshes is the aquatic warbler. However, mowing with mow trucks raises many doubts among both experts and locals:

And all of a sudden it's in line with nature to put 'tanks' in the Park. [...] And the noise, and they destroy everything, they do shit there, to be honest, with it. But here's the money. A programme that brought a lot of money. Everyone wrote a few sentences, earned their money, embraced money. [...] How it's ecological, well, I really don't know anything. [...] How much is this groomer doing to do, how much is he going to do there, one round after another, how much is he going to destroy. Will this help the warbler? Honestly, I doubt it. (Former farmer, 09.02.23)

They [mow trucks] destroy everything. There are these clumps, swamps, aren't there? It goes in, cuts everything, then like an airport. They're supposed to save the birds. Because birds in the tall grass, where will this bird find food? (Former farmer, 20.07.22)

The protection of the Biebrza nature consists primarily in the protection of birds. This is a decision made by humans, guided by anthropocentric criteria and his own scale of values for individual species. This can be described as a conflict in which species of flora and fauna undesirable for humans are on the losing side (see Korpi-kiewicz 2017: 34-35). The BbNP decided to use trucks to mow the swamp meadows because this is the only way to work in a very wet area and to mow large areas at once. Although *ratraks* mow meadows, they also damage the soil, irreversibly kneading the delicate "sponge" of peat bogs, levelling the tuft-valley structure and killing many creatures inhabiting wet meadows, including endangered and protected species of amphibians, reptiles and invertebrates. Everyone is aware of the harmfulness of *ratraks*, but it is argued that their use is the only available method of mowing large areas. BbNP staff and experts explain that they have looked very carefully at places

where mowers should not go. As a result, it was decided that they would go where the benefits of mowing outweighed the losses. However, the BbNP has no influence on land not owned by the State Treasury, where decisions are made by individual landowners. According to BbNP staff, *ratraks* have no restrictions there and cause much greater natural losses. Experts outside the BbNP also see the lack of land ownership as a problem: “reorganization [of mowing] requires ownership. The Park should own all the land” (Expert, 10.12.22). Therefore, a major limitation is land ownership, especially the lack of influence on the way and conditions of mowing outside the BbNP property. One of the BbNP staff members made an interesting comparison: “I’m afraid that *ratraks* are a bit like democracy, which means that no better system has been invented yet. This system is full of imperfections, but it works somehow” (BbNP worker, 26.07.22).

According to many people, mowing with *ratraks* is not only harmful to the environment, but it also costs a lot of money, which is a source of further misunderstanding. In addition, according to some local residents, the tenders for mowing announced by the BbNP favour entrepreneurs from distant cities:

But it’s companies from Warsaw, I don’t know where, they have tenders for these 1000 hectares, or whatever. And then the farmers mow and so on. He takes the money, hires people, they mow. And that’s how they earn. He doesn’t touch his hand, and he has money. (Former farmer, 20.07.22)

When the Park leases to a farmer, it wants a lot of money for the lease, and then it becomes unattractive. It’s not a penny thing, they’re really asking for a lot of money. And it’s kind of unattractive for cow feed now. (Businessman from a farming family, 21.07.22)

When I came here in ’75, there was a world of clean meadows here, it was clean. And now they let the *ratraks* in, God knows... Only God knows where these people come from. (Farmer, 26.09.22)

Thus, a stranger, also summoned by the BbNP, appears in the Biebrza meadows. This stranger is “townish” and “rich” (because he can afford to take part in the tender), but he takes jobs and decent earning opportunities from the locals.

BbNP staff have an answer to these allegations. As a government institution, the National Park operates in under the Public Procurement Act and is obliged to issue tenders under legally defined conditions. Various types of associations can participate in such tenders, but this requires the establishment of formal cooperation between smaller local farmers. However, the experience in recent years has shown that farmers are not interested in forming associations and participating in tenders under such conditions.

The problem of mowing is also related to the issue of controlling the work carried out, including the removal of the swath:

Well, one comes from Poznań, wins a tender for mowing a thousand hectares, and what does he do with this green mass? I am always arguing with park rangers at meetings [...] This one from Poznań has a cowshed in Poznań, and this one has it here, so this herb will be useful to him, and this one has to do something about it. No one will take it to Poznań, there is no one to sell it to. They have made such artificial pellet mills, but how can you make pellets from this that is wet, you have to use more energy to dry the pellets than to get results. (Non-farmer resident, 23.04.22)

This rational statement echoes the regret that the “man from Poznań” will leave the swath, which would be useful for the local farmers, lying on the mowed land. What is more, the work of non-local contractors not only does not benefit the environment but also deprives local farmers of the possibility of earning or using goods, and even harms the natural environment of the Biebrza river:

If only these activities with these *ratraks* were well controlled, because the task is: dry, take away. Nobody is doing it, mowing, now they don't even mow anymore, they use mulchers, they trample everything, it's all lying around. [...] The Park says they're in control [...]. And this mass lies there. Firstly, it produces this humic acid, secondly, it suffocates, it flows down the river, it rots. And with it, with this mass, fish, animals, everything, because after all, this is what the lack of oxygen that causes it. It takes, this green mass takes oxygen from the river. (Non-farmer resident, 23.04.22)

On a symbolic level, we are dealing with an outsider, represented by a capitalist from a big city, whose actions are deceptive in order to appropriate goods and destroy local natural resources. Indirectly, it is he who “takes oxygen from the river”.

#### “DIRTY” RIVER

In the above statement, the problem of the river's degradation appeared. According to the inhabitants of the Biebrza Valley, the river is currently “dirty”, not because of chemical pollution or waste, but because of an excess of vegetation in the water, because of mowed and uncollected grass that washes into the river with the rain from the meadows, and because of vegetation that overgrows the riverbed.

It was an intensively used river, so it cleaned itself. Now it is not cleaned, it is overgrown [...]. Now no one cleans it, because supposedly it can't be done. The Park is against it, as everything has to be super natural and left alone, and it's supposed to be self-regulating. And it doesn't work. (Businessman from a farming family, 21.07.22)

The main purpose of this narrative is to defend the old order. The locals may not realize that according to experts when the river becomes overgrown, becomes shallower and narrows, plants grow in it, but they are also carried by the water, which is a somewhat beneficial phenomenon, because it allows for even better water retention. According to the expert, the overgrowth of the river is associated with a slower flow of water. At the same time, we are experiencing a low water level more and more often, so the slower flow is beneficial for the peri-aquatic ecosystem. "Plants are very much needed because they help to stabilise the hydrological situation" concludes the hydrologist (Expert, 10.12.22). In addition, aquatic vegetation is a natural barrier to pollutants, collecting and filtering them. Furthermore, plants have the ability to oxygenate the water. These facts are known to experts, but not to the local population, who have no connection with nature conservation and who demand destructive measures for aquatic ecosystems in the belief that they will bring benefits.

In the last two centuries the Biebrza was used by raftsmen to float timber, for transport and for water tourism. Its bed was "clean", because the river was "cleaned": leaves, thickets and reeds were cut from it. Cows grazing on the banks made it easier to get close to the river, creating beaches. Anglers caught fish, poachers poached. The river was used in many ways, as the residents recount:

[The older generation] had to spend a lot of time by the water because it was the water that gave them everything. There was a lot of grain here, but hay was very important, because everyone had cows, and when you went to make hay [mowing], you had to cross the river for two weeks, so you had to stay there by the water. They would camp there with whole families, or actually whole villages, and work there and only come back when they had finished everything. (Agritourism owner, 24.04.22)

They left the water, the farmers left the water, they don't drive there, they don't mow there, they have their own meadows. [...] The cows don't go anywhere. I still remember when they used to drive the cows from Uścianek from across the river, which is 6 kilometres each way. We had to go there twice a day, I still remember those moments. And now the cows are there, the fodder arrives, in sealed tanks, in a barn where there are cows, there can't be swallows, there can't be a cat. Hens are not allowed in the yard, sterilisation of life. (Non-farmer resident, 23.04.22)

According to many inhabitants of the villages and towns along the Biebrza, in the past the river used to be more beautiful, cleaner and deeper. It was used, and therefore aesthetically pleasing: “once, probably during communism [...] barges sailed here and every bend of the Biebrza was regulated. [...] Just as the river flows and bends, there was a fascine here so that [the river] didn’t just take away the land. And it was nice” (Former farmer, 22.07.22). This is linked to a certain industrial aesthetic that is still dominant in social perception, manifested in the increasing use of concrete at the expense of green areas (Mencwel 2020). It is also partly connected to the issue of usability, which is dealt with on an ad hoc basis in order to achieve immediate results. The ecological advantage is less spectacular, more gradual and therefore still underestimated.

Today, the Biebrza is a “dirty” and overgrown river, and the BbNP is to blame for this, as it banned motorboats, the cutting of rushes and restricted fishing. In an idealized past:

The Biebrza was desilted, the banks were fortified with fascine, the Biebrza was a navigable river. [...] Rafts floated, floated down with this timber. And try to float it today, when even last year, with the high level of the Biebrza, it was difficult to cross the Biebrza in a kayak. This is a degradation of the river because there are no conservation measures. It should be mowed so that the water flows as it should, in a normal way. (Former farmer, 09.02.23)

“Normal” denotes what the river used to be like, as the more or less distant past is a permanent point of reference for the local population. In addition, the river must be wide and deep, according to the common perception. An overgrown, shallow and overflowing river is “degraded” in relation to the ideal image of a river. Furthermore, leaving it in its natural state is seen as a renunciation of its protection:

When we talk about the Biebrza, all these natural values have been created by man, not by nature, by mowing the meadows, by clearing the Biebrza river. It’s all human. And we [people in general: tourists, locals, naturalists] enjoy it. And we [people like BbNP employees] are now downgrading it. We don’t touch it. And for me it’s such a misunderstanding. It can’t be that: nature is beautiful, I don’t touch it. Yes, I made it with my hand. After all, humans have created it, so he has to take care of it, protect it and also intervene in it. (Former farmer, 09.02.23)

Hence, the Biebrza landscape is perceived as a human-made landscape that requires constant care and intervention. According to the expert:

The river does not need to be mowed if it is functioning properly. And the river is functioning less and less properly, because of the pollution it receives from agricultural areas, mainly nutrients, in short fertilisers. So, we know that the vegetation in the river is starting to become more luxuriant. But is the problem that the Park is not mowing, or is the problem that excess fertiliser is flowing in from the surrounding agricultural areas? In fact, in many cases, the people who are complaining are themselves the cause of the situation. (Expert, 06.10.22)

The “wild” river is aesthetically and practically unattractive in the eyes of the inhabitants, who are used to a certain image of the river from the times when it was used for their purposes. At the same time, both sides of the dispute declare their willingness to protect nature, but although they use the same terms, their understanding is fundamentally different. This is due both to the different goals of the parties (naturalists strive for renaturing, residents wish to continue using natural resources), the lack of ecological education (understanding what nature conservation is and the intrinsic value of nature), and the isolation of the Biebrza National Park from the community in which it operates, which leads not only to a lack of support for the activities of the BbNP, but also to a complete misunderstanding of these activities. Another problem is the lack of consideration of the Biebrza in a broader context — the network of rivers, climate change, global anthropopressure.

#### INTEGRATION WITH NATURE OR CENTURIES OF EXPLOITATION?

However, the question is where local residents are supposed to acquire ecological knowledge and what role the Biebrza National Park could play in this. The problem is the lack of transfer of expert knowledge from the BbNP to the local population. The BbNP is treated as a foreign entity, not only because it represents other interests and works against the short-term benefit of the human communities on the Biebrza river, but also because it uses a different language from the communities in which it is embedded. It is the hermetic language of specialists who, despite their declarations, find it difficult to talk about their activities in an accessible way. Of course, there are many reasons for this state of affairs and it is not a manifestation of ill will. There are systemic, budgetary, human resources and psychological issues at play: the understandable reluctance of individual employees of an unpopular institution to discuss difficult and potentially contentious issues in direct contact with local residents. In many cases, the conflict is only apparent and could be resolved through effective and friendly sharing of expert knowledge (although this would require a change in the stereotypical image of the BbNP).

First of all, we should be aware that the point of reference for the agricultural discourse is the past, when man exploited river resources freely. This is an ideal state against which the present is measured and evaluated, regardless of the fact that not only times have changed, but also the climate and the environment. The Biebrza river flows through agricultural areas, not industrial ones. The most serious factors affecting the state of the river are the melioration carried out since the second half of the 19th century and the fertilizer run-off from the fields for several decades. The low water levels that have been recurring in recent years, are caused by the general disappearance of water in nature and are a global phenomenon. And this is the starting point of the institutional discourse. Awareness of the disappearance of water from the Biebrza landscape is not yet widespread, as it is an exceptionally water-rich landscape. However, more and more people living in the Biebrza Valley are noticing a change in weather phenomena: sandstorms, less and less snowfall in winter, recurrent low water levels, violent short downpours that have replaced the light rain that used to last for many days. Yet, not everyone realises what this means: the earth cannot absorb so much water at once, thus much of it evaporates or “runs off” into the sea through watercourses. Wetlands are drying up. The BbNP, which was established to protect the most extensive and pristine peatlands in Central and Western Europe (Brzosko, Jermakowicz, Mirski et al. 2016: 30), has introduced many changes, and most of the legal prohibitions it proposes are interpreted in terms of oppression and restriction of existing freedoms. There is a sense of unequal treatment, of injustice, which is all the more acute because it has not been going on “forever” (it is not “sanctified” by tradition), but has its own specific time frame. All restrictions, both those related to the functioning of the BbNP and those related to the Natura2000 areas and EU regulations, are treated as having occurred “since the establishment of the Park”. The opening up of the area to tourists, while at the same time introducing prohibitions for the local population, has brought about changes that many feel are painful and harmful. According to this opinion, the BbNP has appropriated the water in such a way that it “organized itself on the river” (non-farmer resident, 23.04.22), which is both the axis of the BbNP and the centre of life and activity for the inhabitants. Joint use of the river became impossible due to conflicting interests of both parties. Only a part of the inhabitants decided to change the way of using the Biebrza.

A young entrepreneur from a farming family, accurately summed up the residents’ objections to the BbNP:

The park excludes humans from the ecosystem. This is my observation and I think that of many residents agree. [...] Humans have been there for centuries, in this ecosystem, in this Biebrza. They suddenly started to separate people, because of the

animals, the fish, the vegetation and everything. They just don't take into account that humans were there. In this whole ecosystem. (Businessman from a farming family, 21.07.22)

This statement reflects the posthumanist view of nature as *natureculture* (Haraway 2003), and humans as its inseparable part. If we accept Jamie Linton and Jessica Budds's approach to the hydrosocial cycle, the water world of the Biebrza must be seen as both shaping and being shaped by humans. The National Park as a state institution, but also (less conscious) political changes, the introduction of new technologies (fertilisers, silage for cows, bars instead of bedding in barns and pigsties) and EU regulations (think of the swallows and cats banned from barns) caused a rupture in the existing (or perhaps only imagined?) symbiosis of people, animals, plants and the river. Sławomir Łotysz, describing the Polesie marshes, makes a sad statement: "Cutting down forests, burning swamp meadows, destroying birds and overfishing — this is how one can briefly describe the 'fusion' of Polesians with nature" (Łotysz 2022: 120). It is highly probable that the centuries-long "human presence" in the Biebrza nature had a similar character.

The lack of understanding of the forced changes, the difficulty of finding one's way in the new economic situation and the lack of knowledge about the changing ecological situation led to resistance and, for three decades, to dislike the institution responsible for these changes. Those who reformulated their knowledge about water, produced its new social meanings, for example by changing the way it was used, coped with it in the best way. The Biebrza landscape is gradually changing from an agricultural to a touristic landscape. Those of the residents who have noticed this transformation find it easier to adapt to the new situation. This includes both locals and visitors. Among them there are also some "retrained" farmers who are confronted with a new way of looking at nature and are forced to change the optics from using nature to protecting the common good. Water becomes a resource of a different kind: it still brings benefits, but they are more mediated, woven into more-than-human relationships:

I live on water. I live on birds, and birds live on water, and so do I. We're at the height of the season right now, it's April, and I have guests in my house all the time and we have 100% occupancy, because they're all coming to see the water birds, to photograph them, to watch them, to enjoy them, right? We have a lot of migratory bird species. We are one of the coolest places for migrating ruffs in great numbers, thousands of them sit here on the backwaters, for geese, for ducks, it is simply paradise, bird paradise. (Agritourism owner, 24.04.22)

## CONCLUSIONS

In summary, it can be said that the creation of a national park in the Biebrza Valley has forced changes in the functioning of the local community. It was not only a promised stimulus for development (new jobs, attraction of tourists), but also a source of prohibitions and restrictions. Some residents felt excluded. Interestingly, this psychological withdrawal was correlated with a physical withdrawal from the water, due to the forced abandonment of certain water use practices.

In response to the accusations of some local residents, ecologists and park staff point to a lack of knowledge of natural processes and interdependencies and blame local farmers for the existing conflict. They point to a lack of understanding of the impact of agricultural activity on the natural environment (fertiliser run-off into the river, melioration of meadows, etc.) and ignorance of global climate processes (drying up of wetlands, greenhouse gas emissions). Expert knowledge about the need and ways to retain water in the landscape has not been assimilated by, or perhaps not been properly made available to local people who see more benefits for themselves in a river with a cleared bottom and banks, which they remember from their youth or childhood, than in an overgrown river, which is what the Biebrza has become. Interlocutors associated with the “institutional” or “ecological” discourse point out that there is a clear lack of connection between current impacts and long-term causes in the “agricultural” discourse, which is a manifestation of gaps in the field of environmental knowledge.

In this conflict, each side has its own arguments. There are two different approaches to environmental issues here. On the one hand, there is a concern for the environment as a value of national and even global importance, with protection based on rapidly changing and evolving expert knowledge. On the other hand, the natural environment is perceived as a local resource at the service of people who use it, based on tradition and knowledge of the exploitation of nature, which is often at odds with ecological issues. Although I am convinced of the need to compensate the inhabitants for the losses they have suffered as a result of the objective constraints imposed by the principles of nature conservation, I consider the issue of environmental protection to be a priority. As Dominika Dzwonkowska writes:

One of the causes of the ecological crisis is the utilitarian view of the value of the environment, i.e. from the perspective of its usefulness for achieving our goals. Therefore, recognising the value of the environment, which is independent of our goals, the value of the environment itself, could be the reason for ensuring proper care of the natural environment. (Dzwonkowska 2022: 110-111)

Since the climate crisis is already a scientifically proven fact that affects the lives of current and future generations, a paradigm shift in thinking and the subsequent change in behaviour is a requisite for human survival. Therefore, “proper care”, which should be understood as care based on scientific knowledge, is a *sine qua non* condition for the survival of the *homo sapiens* species. Paradoxically, it is the abandonment of anthropocentrism that can save humanity.

The Biebrza Valley, as a unique wetland, has a special place in narratives and ecological activities. The cooperation of its inhabitants in the field of environmental protection should be considered in terms of a mission and even an honour, not as oppression. As Sławomir Łotysz notes: “Today, when we know more about the role of peatlands in the global balance of greenhouse gases, the need to protect them has ceased to be a matter of fashion or worldview, and has become an increasingly accepted necessity” (Łotysz 2022: 115). The analysis of the hydrosocial cycle carried out in the Biebrza Valley leads us to conclude that some local inhabitants (especially farmers or people with an agricultural background) see the BbNP as a “foreign” entity that has taken possession of the nature they used to use and imposed its own rules. It can be assumed that this is related not only to the perception of the river and the wetlands, but also to the perception of nature in general: there is a clear conflict of interest between those who protect it and those who use it. As a representative of the institutional divide, the BbNP is constrained by directives, laws, budgetary limitations and rigid bureaucracy. In Poland, institutions are generally perceived as oppressive, incompetent, top-down imposed and acting against the interests of local communities. This is a legacy from the period of partition, when all state institutions were considered foreign and hostile to the Polish nation (Napiórkowski 2019: 43). This attitude towards law and institutions is still embedded in the mass consciousness, so that although the BbNP itself is an institution implanted in the local landscape, it can hardly be said to be integrated into the local community. The most common expressions to describe the BbNP’s actions are “the Park restricts” and “the Park forbids”. Interestingly, despite the 30-year history of the Biebrza National Park, younger generations often inherit the aversion to the BbNP from their parents and grandparents. The Biebrza National Park has failed to “raise” a welcoming generation of inhabitants; throughout its history, it has not become “its own” on the Biebrza River, but at best it remained “its foreigner”. The reason for this may be, apart from the above-mentioned lack of effective communication channels and transfer of expert ecological knowledge, may also be the failure to make a lasting impact on the life of the local community. The promotional and educational activities carried out, although very valuable and necessary, are not systemic and do not have a long-term impact. There is also a lack of support from local authorities or influential people.

Despite their great potential, the local tourist guides have not become such: they are a fragmented, divided group, not all of whom identify with the BbNP.

The Biebrza National Park has also failed to overcome the aversion to ecology. Ecology in Podlasie is treated with suspicion and reluctance, as a whim of urban people who do not have to deal with “real”, “wild” nature. It is also seen as a fashion imported from the West. One can be tempted to say that ecology — analogous to the soft patriotism analysed by Marcin Napiórkowski (2019: 36) — is an enlightening, educational and moralising trend that drives the local community into parochialism, ignorance and obsolescence. In Podlasie, ecology is often viewed as a hostile ideology (“eco-terrorists”), both in terms of politics and daily life, because the ecological attitudes and practices that the BbNP demands are in contradiction with the local traditions and the current use of the natural environment.

The concept of the hydrosocial cycle can be helpful in finding a solution for these issues because it “draws attention to how ‘water’ is created and how it configures social relations. Through the hydrosocial cycle, water becomes a means of exploring and analysing social practices and relationships, and tracking how the force infuses these connections so that they can be revealed and potentially acted upon” (Linton and Budds 2013, 176).

Given the complexity of not-only-human life in the Biebrza Valley, it is important to emphasise the absence of the voices of non-human subjects in both discourses. Even the “ecological” discourse is dominated by an anthropocentric vision of nature conservation subordinated to human interests dominates, which has nothing to do with the postulates of deep ecology (nature has an immanent value, independent of its usefulness for humans) or holistic ethics (the entire biosphere is considered an ethical good). And yet, as early as the 19th century, postulates for the protection of nature appeared, regardless of its usefulness for human society (see Dzwonkowska 202, 52). At the same time, the Biebrza National Park, like many other protected areas, is an anthropocentric creation. Humans decide which elements of the environment are worth preserving and maintaining. There is no room here for the free development of flora and fauna, all species must live within the limits set by humans. They are caught, shot, plucked or mowed down — all in the name of a certain image of “nature”. Guided by their vision, humans regard some species as desirable, others as unnecessary or harmful. The criteria vary, but they all belong to the world of anthropocentric values. We care primarily about what we consider beautiful, useful or valuable because of its rarity. This is not an indictment of national parks or other types of nature reserves, but merely a reminder of the fact that there is no such thing as “natural”. This “nature” of the Biebrza National Park is a human creation, both on the theoretical level — as a vision and legal goal of the protected area — and at the practical level — as a repeated practice of control, ordering, systematisation and

use. It is important to note, however, that the institution's relationship with the river breaks with this pattern: the Biebrza is left free to develop, to shape its channel, determine its course, and even organise the life of water creatures. The human influence on the Biebrza is limited, and the ongoing restoration processes, attempt to reverse the effects of past human interference. At the centre of the social conflict is the approach to the river, which has always been a part of the life of the inhabitants of the Biebrza Valley — tangible, material, and not just to be admired from afar.

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#### REFERENCES

- Bińczyk, Ewa. 2017. "Dyskursy antropocenu a marazm środowiskowy początków XXI wieku." *Zeszyty Naukowe Politechniki Śląskiej* 112: 47–59.
- BirdLife International. 2017. *European birds of conservation concern: populations, trends and national responsibilities*. Cambridge: BirdLife International.
- Brzosko, Emilia, Jermakowicz Edyta, Mirski Paweł, Ostrowiecka Beata, Tałałaj Izabela, Wróblewska Ada. 2016. *Inwazyjne drzewa i krzewy w Biebrzańskim Parku Narodowym i Suwalskim Parku Krajobrazowym*. Białystok: Stowarzyszenie "Uroczysko".
- Dzwonkowska, Dominika. 2022. *Wprowadzenie do etyki środowiskowej*. Warszawa: Wydawnictwo Naukowe UKSW.
- Haraway, Donna J. 2003. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Vol. 1. Chicago: Prickly Paradigm Press.
- Kaszycka, Katarzyna A. 1996. "Konceptje gatunku. Przegląd i ocena stosowalności do badań materiałów kopalnych." *Przegląd Antropologiczny* 59: 19–29.
- Korpikiewicz, Honorata. 2017. "Etyka wobec zwierząt. Teoria versus praktyka." *Edukacja Etyczna* 14: 27–41.
- Kowalczyk, Agnieszka. 2012. "Jak dotrzymać obietnicy nauk społecznych? O zaangażowaniu i „obiektywności” badaczki/badacza." In *Uniwersytet i Emancypacja*, edited by Marta Trawińska, Małgorzata Maciejewska, 95–110. Wrocław: Interdyscyplinarna Grupa Gender Studies.
- Krzyworzeka, Amanda. 2011. "Funkcjonowanie wiedzy rolniczej." *E-mentor* 40 (3). <https://www.e-mentor.edu.pl/artukul/index/numer/40/id/848> (Accessed 21.11.2023)
- Krzyworzeka Amanda. 2014. *Rolnicze strategie pracy i przetrwania. Studium z antropologii pracy i przetrwania* Warszawa: Wydawnictwa Uniwersytetu Warszawskiego.

- Linton, Jamie and Jessica Budds. 2013. "The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water." *Geoforum* 57: 170–180. <http://dx.doi.org/10.1016/j.geoforum.2013.10.008>
- Łotysz, Sławomir. 2022. "Bajecznie egzotyczne Polesie? Reportaż z krainy tęsknych pieśni Maksymiliana Emmera w perspektywie ekokrytycznej." *Kwartalnik Filmowy* 118: 113–125. doi: 10.36744/kf.1103.
- Majbroda, Katarzyna. 2021. "W stronę etnografii transrelacyjnej. Antropologia wobec Antropocenu, kryzysu klimatycznego i relacyjnie urządzonej rzeczywistości." *Etnografia Polska* 65 (1-2): 5–26.
- Mencwel, Jan. 2020. *Betonoza: Jak się niszczy polskie miasta*. Warszawa: Wydawnictwo Krytyki Politycznej.
- Napiórkowski, Marcin. 2019. *Turbopatriotyzm*. Wołowiec: Wydawnictwo Czarne.
- Neimanis, Astrida. 2017. "Water and Knowledge." In *Downstream: Reimagining Water*, edited by Dorothy Christian and Rita Wong, 51–68. Waterloo: Wilfrid Laurier University Press.
- Nilsson, Lennart. 2014. *Krukowaty czy sikora?* Uppsala: Oriolus Förlag.
- Raczyński, Jan. 2013. "Łoś nad Biebrzą." In *Tajemnice Doliny Biebrzy. Eseje naukowe o zwierzętach i roślinach*, edited by Jan. R. E. Taylor, 31–40. Białystok: Trans Humana.
- Sulimierski, Filip, Bronisław Chlebowski, and Władysław Walewski (ed.). 1880. *Słownik geograficzny Królestwa Polskiego i innych krajów słowiańskich Vol. I: Aa – Dereieczna*, 204. Warszawa: Druk "Wiek".
- Szynkiewicz, Sławoj. 2005. "Szara ekologia tubylców. Mistrzowie czy nieudacznicy w zarządzaniu środowiskiem." In *Horyzonty antropologii kultury*, edited by Jerzy Sławomir Wasilewski, Anna Zadrożyńska, Amanda Bruczkowska, 109–127. Warszawa: Wyd. DiG.

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