

FINNO-UGRIC INDIGENOUS KNOWLEDGE, HYBRIDITY AND CO-CREATION IN RESEARCH: THE KOMI CASE

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ABSTRACT

The aim of this article is to explore the effect of hybridity in the Komi hunters' knowledge system as well as the potential for mutual understanding in dialogue between ethnographers and their Indigenous partners. I discuss how the hunters exploit printed sources, both scholarly works and popular magazines, in their practice. In the empirical part of this study, I present three case studies that demonstrate different ways in which a potential hybridity of knowledge has appeared in a field encounter. The analysis shows that some pieces of the hunters' knowledge have a background in written sources, while they present scholarly evidence as facts from their own lives. At the same time, some similarities between the hunters' narratives and publications are possibly random. I argue that exploitation of scholarly works and popular publications by hunters brings together Indigenous and scholarly knowledge and supports the potential of collaborative research.

KEYWORDS: Indigenous knowledge • hybridity • Komi • hunting • worldview

Indigenous knowledge becomes increasingly hybrid in the contemporary world.* There are several prominent reasons for this process of knowledge transformation. In general, the hybridity of comprehension is related to diverse contacts with the non-Indigenous world, including the availability of internet resources as well as people's interest in popular and scientific literature. The Komi are no exception in this regard. The Komi inhabit the Arctic and sub-Arctic territories of the north-eastern corner of European Russia. For several reasons the Komi appear as a curious case for anyone exploring the effects of hybridity in the Indigenous environment.

Since the 19th century many scholars have considered Komi hunters' subsistence technologies and animistic worldview to be an archaic way of life. However, Komi hunting also maintains its specific position in contemporary ethnographies. Scholars

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and other intellectuals treat the Komi as forest people, and hunting as a source of characteristic features of Komi culture, although Komi hunting practice and beliefs have become increasingly hybrid over time. The Komi were baptised already in the 14th century and hunting has not been the dominant subsistence strategy for the Komi during the period covered by historical documents (Konakov 1983: 3–18; Zherebtsov and Korolev 2000: 5–12). As far as we can go back in time, their way of life has involved different religious impulses (Christianity and animism) as well as modes of subsistence (hunting, fishing, farming, reindeer husbandry).

Dialogue between the Russian Orthodox faith and animism has been a popular topic among scholars studying the Komi worldview. Estimates of a balance between these two spiritual factors vary significantly. Several researchers consider Russian Orthodoxy to be dominant because the Komi were baptised many centuries ago (becoming the easternmost Christian group by that time) and the Russian Orthodox faith permeates all of Komi culture (see, for example, Popov 1874; Nemirovich-Danchenko 1999 [1877]; Golovachev 2011 [1909–1911]; Kandinsky 2013 [1889]). The other camp of intellectuals argue that Russian Orthodoxy has a very limited effect on the Komi and has always remained superficial. According to this view, the Komi are still essentially ‘pagans’ and animism dominates their world perception (see, for example, Zhakov 1901; Abramov 1914; Zasodimskiy 1999 [1878]; Mikhaylov 2010 [1851]). These approaches oppose each other sharply, and constitute the leading domain of disputes over the proper Komi worldview.

However, there are also classical ethnographies that treat Komi culture as having an essentially binary structure. According to this view, the Komi behave like Christians while in a village but turn back to animism when returning to hunting in the forest (Sirelius 1998; Nalimov 2010 [1903]). This approach integrates both ideas although still appears a bit straightforward and simple.

Scholarly work analysing the connection between the Komi traditional world perception, subsistence pattern and modern ideologies, social reforms, or technological development are scarcer (see, for example, Belitser 1958; Buriylova 1978). During the early decades of the Soviet period, the state suppressed the Russian Orthodox Church (ROC) and its institutional presence in Komi areas became basically non-existent (see Rogachev 2001; Il’ina and Ulyashev 2009: 162; Siikala and Ulyashev 2011: 322; Vlasova 2018). Animistic ideas and customs remained more hidden and did not bother the communist officials too much. The atheist attack on the ROC was very severe and also directed scholars to avoid the topic and concentrate more on the animist qualities of Komi world perception (Sidorov 1926; 1997 [1928]; Limerov 2005; Sharapov 2006). However, Soviet reforms also affected animism through collectivisation that eliminated seasonal collective long-range hunting trips and thus hampered the social environment of animism (Lipin and Leete 2021).

Hybridity does not result only from the effect of external factors. People themselves search actively for possibilities to test and advance their knowledge and skills. Consequently, this quest for self-improvement brings the Komi hunters into touch with heterogeneous information from different sources.

I concentrate on the analysis of cases that indicate how the Komi hunters combine Indigenous knowledge and animistic traditions with information available from written sources. Over the years of my field studies, since the mid-1990s, Komi hunters have

continuously described local, group-specific views and practices. Some of these depictions appeared to me overly perfect or grotesque. To investigate my confusion I read some ethnographic research as well as the popular journals available to my field partners. Occasionally, while attempting to establish a variety of potential or actual sources for my Komi friends' knowledge, I have also discussed these issues with them. For this study, I chose three pieces of information, received from one hunter. This makes generalisation of my results problematic, even though my friend claims to reflect a widely shared frame of Indigenous knowledge.

The effect of books and journals on Indigenous knowledge may appear marginal today. The internet and mobile devices have become usual technological and cognitive space for many Indigenous people (see, for example, Blank 2013). Thus, ethnographers use more extensive virtual methods of research – web interviews, tests, observation of Indigenous ethno-bloggers, etc. (see Mann and Stewart 2000; Boellstorff et al. 2012; Markham and Buchanan 2012; Belorussova et al. 2020; Belorussova 2021; Sysoyeva 2021). The group of Komi hunters I have worked over the years has not joined the virtual world. They do not use internet resources and avoid even e-mail. Thus, for them printed sources serve as a valuable database of knowledge and our long-distant communication is limited to phone calls. We can also use internet channels but we need a common friend to mediate the exchange of messages between us. Obviously, this mode of indirect communication loses a little of its potential cognitive intimacy.

I intend to discuss Indigenous knowledge in the context of adaptation to climate change and preservation of customary law (comp. Bulanin 2020; Wheeler et al. 2020). I plan to analyse data taken from interviews I have recorded, as well as field diaries, to understand how the Komi people apply and adjust Indigenous knowledge. I concentrate on the individual perspective, although it has the potential to facilitate wider discussions of experiences that may transform the Indigenous understanding of things.

HYBRID KNOWLEDGE AGAINST AN INDIGENOUS BACKGROUND

In a broad sense, Indigenous knowledge (IK), traditional ecological knowledge (TEK) or local ecological knowledge (LEK) involve any notion that is connected to local culture (Sillitoe 2006; Casi et al. 2021). A bit more specifically, IK and TEK (LEK) imply archaic cause and oral transmission (IK Report 1998), although continuously changing and restructured (Casi et al. 2021: 181–182). Indigenous knowledge is holistic, covering subjects such as worldview, preservation of diversity and sustainable economic development. In general, Indigenous knowledge enables local communities to maintain their cultural identity (IK for Development 1998; IK Report 1998; Sillitoe 2006; Magni 2016). The United Nations Declaration on the Rights of Indigenous Peoples emphasises the importance of IK for sustainable development and environmental protection (UN Declaration 2007), in addition to which the United Nations consider IK a significant factor in global development (Magni 2016).

Indigenous knowledge is threatened in regions with intense immigration and rapid climate change (including the Arctic). IK has been in the focus of international discussions regarding sustainable development since the 1990s, both among scholars and policy makers. The World Bank, UNESCO and other mainstream institutions also

emphasise the significance of IK when talking about the problem of sustainability. (IK for Development 1998; IK Report 1998; Briggs 2005; Magni 2016; Casi et al. 2021: 182)

Several problems are related to recognising Indigenous ecological knowledge. Tensions between IK (TEK, LEK) and scientific comprehension have lasted for a long time. Dominant societies have often marginalised the Indigenous peoples and their knowledge. Another variety of problem is connected with romanticising the Indigenous knowledge and attempts to look at it as a global solution, thus decontextualising Indigenous ecological knowledge (IK Report 1998; Briggs 2005; Sillitoe 2006). But these ambivalences make Indigenous knowledge cognitively intriguing and valuable for research, especially as regards the Indigenous peoples of the Russian North, Siberia, and Far East. The Arctic Council has the topic of Indigenous knowledge constantly on its agenda. According to the Ottawa Declaration (1996), the Arctic Council recognised the role of Indigenous knowledge in comprehending the Arctic in a dialogue with science (see also Tromsø Declaration 2009; Kiruna Declaration 2013). The Arctic Council deals with the potential of IK in understanding and managing changes in the Arctic. The Arctic Council emphasises the need for holistic understanding of the Arctic environment, and collaboration between Indigenous peoples and scholars (co-creating knowledge), as well as when considering local perspectives. (IK Exchange Session 2022; Casi et al. 2021: 182)

Today, Indigenous knowledge is usually hybrid. Deborah A. Kapchan and Pauline Turner Strong (1999: 239–241) connect the metaphor of hybridity to ambivalence and anxiety, as well as in the short-term historical perspective of recent decades to theoretical notions of syncretism, bricolage, and creolisation. Regarding the northern peoples, the key problem with IK is the change of worldview. Religious diversity increases in Arctic sites (Pelkmans 2009) but also in cyberspace. People more easily borrow elements from various religious traditions, take interest in different religious groups and obtain hybrid religious identities (comp. Hefner 1993; Baumann 1999; Hefner et al. 2013).

The life of the Indigenous peoples of the North is characterised by (post-)colonial ambivalence and tension between cultural differences and the perception of history (Krupnik and Vakhtin 1997; Leete 2019). Dominant political and social groups suppress traditions of native peoples. Hybridity may also empower innovations on an unbalanced cultural landscape. (Cf. Bhabha 1994; Young 1995; Ashcroft et al. 2007; Mizutani 2009)

Mikhail Bakhtin deals with hybridity as a dialectical model of cultural dialogue. On the one hand, hybridity is natural, unconscious, and integrates various phenomena. On the other hand, it may appear intentional, hostile, and challenging of cultural differences (Bakhtin 1981). Hybridity influences understanding and conceptualisation of reality (Blank 2013) and makes vague the borderlines between nature and society (Latour 1993). The last notion is especially relevant for comprehending the animistic worldview of Indigenous peoples (Descola 2013).

Hybridity of Indigenous knowledge is caused by conditions of everyday subsistence and the need to adapt to changes of the surrounding environment, including scholarly discourse (Briggs 2005; Callaghan et al. 2020). Today, the hybridisation of IK is influenced by development of practices of virtual space. The success story of the internet and the emerging technologies of new media changes people's world perception. Virtual cultural practices are understudied when compared to the immediate experience

and transmission of knowledge (Blank 2013), especially among Indigenous groups. At the same time, the number of Indigenous ethno-bloggers grows, and IK is debated intensely on the web. Social media and web-based communication transforms cultural groups and delocalises communities (Blank 2013; Dudeck 2022). This is significant also for understanding Indigenous knowledge and social processes.

Collaboration between Indigenous people and scholars in co-creating knowledge facilitates innovative cognitive meaning and value for both (cf. Doering et al. 2022). Indigenous partners have become participants in scholarly projects and contribute to scientific endeavour through their local perspective, knowledge of the past and observations of their changing environment. IK (or TEK) enables multifaceted understanding of ecosystem complexity and climate change. (Casi et al. 2021: 182, 189)

Although discussions of the IK (or TEK, or LEK) have a global reach and belong to a UN, UNESCO, World Bank or Arctic Council agenda, its primary scene is local, and expressions particular. Indigenous comprehension is part of a general complex of sustainability issues that is constantly adjusted and connected to local circumstances, long term observation of environment, and relationship between human and other-than-human beings (ibid.: 182–184). I decided to concentrate on few examples from real life of the Komi hunters, to demonstrate the complexity IK may involve even on the level of distinct examples.

The Komi people are not the most stylish example of the Finno-Ugric Indigenous peoples of the north. Most live outside of the Arctic or, if considered in a flexible way, in a broad transition zone of Arctic and sub-Arctic environments. In Russia, they are not officially recognised among the Indigenous peoples of the north (although according to international standards, they may qualify). Because of huge territory, inhabited by the Komi, they do not have a shared dominant subsistence system. In different parts of the Komi habitat, they are reindeer herders, hunters, fishermen or peasants. Living in a remote region of the Russian North, in the past they have not experienced strong control over their worldview by the ROC, and today the ROC's role in people's private lives is not so big (although in the public social scene, the Church is more prominent than ever). However, when discussing hybrid qualities of the local cultural scene, they appear as perfect candidates.

DIFFERENCE AS A SOURCE FOR HYBRID KNOWLEDGE

The Komi are a very diverse ethnic group when it comes to traditional subsistence technologies and, according to various estimations, also in respect of their religious style. Therefore, I cannot present them as an unvarying group characterised by one sort of Indigenous knowledge. I decided to demonstrate how hybridity is echoed in Komi hunting animism, but I admit that this reflects only a fraction of the whole Komi culture.

Sometimes I think how the Komi hunters understand my attempts to comprehend their world perception. Occasionally it appears that our cognitive modes are completely different. But at some point, everything seems to be somehow connected and scholarly and Indigenous understandings appear rather similar.

While visiting my field site some years ago, I presented to my Komi friend a journal article about the Komi hunters' practice and world perception (see Leete and Lipin

2015). A year later I returned, and my friend started to discuss my contribution: “In your study everything is correct, but we don’t think that way. We talk about these things more casually, just as among other things, as if it was made up.” (FM 2016: M 51)

I started to contemplate this culture-specific expert evaluation of my scholarly work and was hit by ambivalent feelings. I had attempted to present a few facts about Komi hunting but also to discuss a more general attitude of hunters towards the forest, wild animals and humans. But my friend did not recognise any principal coherence between my scientific discussion and the mode of thinking and talking adopted by the Komi hunters. I realised that this discrepancy was not due to the different vocabulary we used, nor the abstract theoretical argument that was also included in the article. Rather, he found my story too systematic and concentrated. Apart from that, I suppose that my Komi friend did not like that I was writing about hunting behaviour too openly.

This experience led me to the problem of reaching a harmony between scholarly discourse and the narrative expectations of the hunters. If they suppose me to write research without talking about anything precisely, I would struggle with the principle of scientific integrity and honesty. The hunters expect one to understand without getting exact instructions about the order of things. The hunters I know expect their hunting dogs to understand their job without being coached (Leete 2011: 166–168),¹ and the same applies to the ethnographer.

Logical connections need to remain implicit in the Komi hunters’ opinion. Perhaps it is possible to avoid detail but remain accurate in managing ethnographic data, discussing the evidence, and making an argument. The Komi hunters still tolerate my academic endeavour. This is a fact despite the criticism I need to suffer from them. They wonder about several methods I use to document their lives. For example, the hunters cannot understand why I take notes all the time: “In the morning, you should open at least one eye before starting to write” (FM 2003). They cannot also fully comprehend my obsession of recording chat, taking photos and filming (“wasting a tape” FM 1996). At the same time, they are not much worried about me: “If you really need it for something, just go on” (FM 2001).

Apparently, my scholarly analysis is cognitively somewhat detached from the ethnographic field. There is a discrepancy between an apparent and intentional randomness of the Komi cultural reality and systematic functionality of academic knowledge production. However, these two modes of cognition can be connected. One way to do this is by building a metaphoric bridge of contemplative irony between us.

In this connection, I recall an episode from my field experience. One autumn hunting season,² one of my Komi friends took me on a hunting trip. In an early morning, we stepped out of his hunting cabin and noticed two ducks swimming next to each other on a lake nearby. We had only a small calibre rifle³ with us. I made a shot and hit water between these ducks. The hunter commented on my effort using a sardonic stance: “I see – you attempted to get both of them at once!” (FM 2003) I suspect that the Komi hunters feel similarly about my whole scholarly effort.

Although there has been much irony and joking at my expense from the Komi hunters of my acquaintance, I have detected that scholarly knowledge and the written word are generally also used by them. The hunters read hunting journals, encyclopaedic descriptions of wild game behaviour as well as ethnographic works about hunting traditions. Even if they do not apply this knowledge in their practice in full, they still use it in their narratives, especially, in conversations with the researcher.

Sometimes it is very much apparent that the gap between scholarly and Indigenous knowledge is not so big. In the following, I will analyse just three cases from my field experience that indicate a possibility of putting different knowledge systems into a dialogue in the Komi hunters' minds. These examples concern punishments for breaking a customary law, the appearance of a sterlet fish in the Komi area, and catching a hazel grouse.

BREAKING A FOREST LAW

My Komi friends consider hunting customs a significant part of their subsistence pattern. I recall here a discussion of punishments applied after violation of unwritten 'forest law'. They have touched upon this many times, but the topic has gained a special meaning for me because one hunter, who soon became my best Komi friend, raised the issue immediately during our first meeting. At that time, I could not propose the theme by myself as my knowledge of hunting practice was very limited. So he decided to introduce the topic to me at once:

In earlier times, punishments for theft were very severe. A thief could be killed, if... I don't know, but as it has been said, usually the thief was bound to a pole. If they caught a thief on the spot, they pushed a pole through his sleeves, and he was let free in the forest. It could happen if they already knew who the thief was. People usually knew each other in a village. The trust was already gone. (FM 1996: M 31)

At that moment, I was listening to the hunter and wondering: was he really saying something people still know and sometimes, perhaps, even practice? This ethnographic account sounded too sublime, as if today people remember this sophisticated punishment from the past. Just in case, I remained sceptical and decided to work a bit with the literature.

Apparently, the Komi ethnographer Nikolay Konakov (1983: 170, 173) describes a very similar practice in his monograph about the (mainly Komi) hunters and fishermen of the Russian North. This example of customary punishment was documented in the same region (Ezhva River) where I started my career as a researcher of Komi ethnography. My suspicions concerning the origin of this information about an old-time customary hunting law became graver when I started to compare my other field notes with Konakov's monograph.

The same hunter also claimed that if somebody arrived at the place where hunters had just caught a bear or an elk but before they started butchering the catch, the newcomer also had the right to a share. He also noted that if one caught another hunter's animal (for example, an animal that had been tracked by another hunter), it was returned. If a hunter shot a wounded animal, it belonged to the hunter who hit it first. Finally, my friend announced:

If somebody ran away during a hunt, thus abandoning his fellows, he was expelled from the hunting team or even from the village altogether. Nowadays there is no such thing anymore, no shared integrity. In fact, there is a little bit. One follows the ethics, another one doesn't. (FM 1996: M 31)

All this is also available in Konakov's monograph. He writes about a hunt and a wounded animal (Konakov 1983: 172), or how a coward was excluded from a hunting team (*ibid.*: 177) and was forced to leave the neighbourhood (*ibid.*: 173), as well as rules on sharing a catch even with those who did not participate in the hunt but showed up in time (*ibid.*: 174). Evidently, very similar information is provided by Konakov. But among these notes the information about punishment with a pole is the most specific, reflecting the hybrid mode of knowledge production among Komi hunters. Obviously, the Komi hunter was retelling stories from Konakov's book as part of the hunters' lived or remembered heritage. In a certain sense, he was right. Konakov obtained his information from ethnographic enquiries and earlier research by other authors. And as this scholarly evidence was about the Komi, the hunter's approach was justified. At that time, the hunter simply did not refer to the source of his knowledge. As the monograph by Konakov was available to the hunters, I suspected that my friend employed it in interview situations.

During the following years we had more conversations on hunting law and sometimes the hunter did not even hide the fact that some of his knowledge originated from ethnographic accounts. For example, while telling me next time about potential punishments for hunting misbehaviour, he listed a few (tying the guilty party between tree branches by his hair, burning him together with his hunting cabin or feeding him with a poisoned fish pie). This time he referred to works by Aleksey Sidorov (1997 [1928]) and Klavdiy Popov (1874) as his sources. But he also claimed that burning a hunting cabin was still in use as a punishment. (FM 1997: M 32) The work by Sidorov was used also by Konakov (1983: 170, 173) when he provided an overview of similar punishments. But Popov (1874: 49) writes only about the honesty of the Komi hunters and touches upon neither violations of hunting customs nor consequent punishment. It appears that my friend's memory failed at this point.

Although the hunter started our scientific cooperation by quoting classical Komi ethnographies (or referring to older ones after reading Konakov's monograph), he and his colleagues apply the same principles of animistic codex today, it's just that the methods may appear modernised. For example, a hunting gun serves as a more usual tool for facilitating order in the forest (Lipin and Leete 2000: 81–82). Apparently, this is still a rather cruel world.

As my Komi friend was recognisably familiar with the books by Konakov and Sidorov (whose monograph was republished in 1997), this Komi hunter's knowledge about punishments for violating the customary law demonstrates a relatively obvious case of hybridity. Not every piece of information that may have a hybrid character can be detected so clearly. We cannot simply consider every similarity between sources as proof of connection.

TAUNTING A STERLET

In serious cases of misbehaviour, brutality characterises the mode of problem solving among the Komi hunters. As indicated above, hunters considered it legitimate to kill a thief or to put one in a mortal danger. Sometimes game and fish also receive harsh treatment, although this is not a typical behaviour pattern for the hunters. But there are certain reasons for this occasional cruelty towards the catch.

A more obscure case appeared regarding a notion about sterlet fish that arguably appeared recently in Ezhva River. Once my Komi friend discussed the effects of climate change on the local environment. He argued that the process is detectable by meaningful changes in local fauna, presenting, among other proofs, the following example:

Lately, new species have started to spread in the Komi region. For example, sterlet appeared in the Upper Ezhva River after the Catherine Canal⁴ was built. But during recent years, it started to spread to the north, downstream through the Ezhva River. (FM 2013: M 48)

My friend expressed this quite casually, as if it is natural for the hunters to remember events that happened in the mid-19th century, when the Catherine Canal was completed. Perhaps it is a bit surprising that he did not recall the shock that the sterlets caused to the Komi hunters back then. I suppose that Konakov's monograph served also as the source of this piece of ethnographic memory and that his description is more vigorous.

The Komi fishermen considered it important to treat fish with sympathy to avoid panic among them. Terrified fish could destroy nets while struggling violently. Freshly caught fish could not be offended, insulted, thrown away, given to dogs, or given to children to play with. (Konakov 1983: 191) However, only familiar fish deserved dignity. When the sterlets started to move through the Catherine Canal to the Ezhva River and fishermen caught them, unfamiliarity and the strange look of the fish caused a peculiar reaction by the Komi. They violated all rules of proper treatment of catch. The fishermen tried to insult the sterlet as severely as possible by spitting and urinating into the fishes' mouths. After that they cursed the fish, put a spell on them and threw them back into the water. Sterlet were treated as an impure creature in Komi animist understanding. (Konakov 1983: 191; see also Sidorov 1997 [1928]: 227–228) Popov (1874: 78) notes that the Komi blamed sterlets for spreading fevers and causing the extinction of indigenous fish species.

The fishermen's practice of punishing sterlet was robust and highly unusual in an overall pattern of the Komi ritual behaviour. Sidorov (1926: 29; 1997 [1928]: 225–229) emphasises that honouring fish and game was a characteristic feature of the Komi animist world perception. Until the early 20th century, Komi well-being depended significantly on the inhabitants of forests and rivers. Therefore, every one of the hunters' and fishermen's actions was somehow equated to a religious rite. Konakov (1983: 190–191) agrees with Sidorov when discussing the overall behavioural pattern of the Komi hunters and fishermen. My ethnographic data indicates that proper treatment of catch is still a very important factor in the Komi hunters' practices.

A somewhat similar cruelty to this historical attitude of the Komi towards sterlet was sometimes practiced among the Nenets and the northernmost Komi reindeer herders against killed wolves. Hunters looked directly at the wound that caused the wolf's death (usual ritual practice was to avoid looking at the wound and to pretend that an animal was not actually dead) and spat onto that injured part of the body. (Sidorov 1997 [1928]: 227; Konakov 1983: 191) Apparently, the most dangerous or alien animals or fish were considered unclean and were treated differently from other wildlife.

Although mistreatment of sterlets is the intriguing part of the story when considering the Komi fishermen's world perception, hybridity of knowledge becomes evident

in the estimation of time and the area in which the sterlets appeared in the Komi territory. My Komi friend argued that sterlets had previously remained in a small area on the upper course of the Ezhva River, which is in accord with Konakov's and Sidorov's laconic notes. If we take an earlier description by Popov, the situation in the mid-19th century appears different. According to Popov (1874: 78), until 1845 there were no sterlets in the Komi rivers, although by 1850 the fish was already widely sold at fairs and to merchants. This means that not all sterlets were eventually taunted but that the Komi learned to catch it on purpose. Estimates of the area where sterlet spread during the 19th century vary significantly but it seems probable that the fish did not only stay close to the canal. For 150 years it could have changed its area, and maybe the contemporary Komi hunters are also right when observing the recent reappearance of the fish in their home region.

My friend used the changed behavioural pattern of sterlet as an indicator of climate change. I suppose that the choice of sterlet as an example is somehow related to an overall ambiguity that is connected to that fish in the Komi hunters' perception. At the time of the interview, this notion seemed a casual one but implicitly based on some books the hunter had read (at least, Konakov's monograph). To delve into the historical background and peculiarities of the treatment of sterlets, I needed to go through literary data.

However, the example of the sterlet was still not the most vivid case of obscurity in Komi hunters' hybrid knowledge.

CATCHING TWO BIRDS AT ONCE

Another tricky example of my friend's stories is related to an argument about catching two hazel grouse in one snare. My Komi friend appears very fond of this case. Over the years of our collaboration, he has told it to me several times and has always been rather excited about this incident.

The Komi hunter has described repeatedly how one of his neighbours used to lie extensively about his hunting achievements and working skills, and therefore the other hunters decided to teach him a lesson. The father of the boaster secretly visited his son's hunting path and put two hazel grouse into the same snare. Later, the hunter returned from the forest and told everybody the miracle of catching two birds at once. Other hunters responded that this is an impossibility, as two hazel grouse cannot stick their heads into a snare simultaneously. They accused him of the usual boasting and the victim ended up in tears claiming that this was the very first time he was really telling the truth. (FM 2005)

This is the most common rule among the Komi hunters: that one must avoid saying exactly what one caught in the forest, but also that the actual catch must be diminished in a hunting story. My field partners remind me of this during every fieldwork trip, but this is also stressed in ethnographic literature (see Konakov 1983: 192–193; Leete and Lipin 2015). Therefore, it makes sense to play such a trick on a fellow who has also told me that all his hunting stories are just "a few lies" (FM 2014: M 55). Apparently, the hunter had not given up his habit of testing the limits of truth. For the hunters, the line between proper and inappropriate lies is flexible.

As my friend had always been very convincing when telling the story, I had no doubts about it. But in 2005, when visiting the hunting cabin of a brother of the victim of this narrative, I started to list copies of the journal *Hunting and Hunting Economy* (*Okhota i Okhotnich'ye Khozyaystvo*) that he had stored there. In one journal's readers' letters section, I discovered a description of a very similar case. According to that story, the correspondent of a journal claimed that he heard a story that a hunter caught two willow ptarmigan in one snare simultaneously. Apparently, it could be possible that my Komi friends learned the plot from a hunting journal they were reading. But I assume this was a coincidence that the story appeared twice to me. At least, my friend was very surprised that a similar plot could be found in a popular journal and proposed that "perhaps, there are other clever guys around, as well" (FM 2005: M 40).

This story indicates that, in principle, the hunters can learn about anything from very diverse sources. But this case also has potentially wider parallels and metaphoric connotations. These notes do not reveal the truth about the case but demonstrate the complexity of potential cognitive cultural background for this small incident.

The possibility that birds attempt to run towards each other near the trap is reported by Konakov (1983: 103–104), who writes about one variant of setting up a decoy for willow ptarmigan. These decoys were made of a small snowball with a black twig stuck into it. Male willow ptarmigan consider these snowballs competitors and rush in to fight, but end up in a snare. As the Komi hunters consider willow ptarmigan mentally like hazel grouse (i.e. having a rather modest intellectual capability), this indicates the possibility of an opinion that visual contact between two birds may provoke movement against each other despite a snare between them. Consequently, this story may have a touch of indirect reality.

This small case of the hazel grouse joke appears quite complex, although the narrator claims this is very much accurate and the story reflects just a casual joke, rather characteristic to the Komi hunters. When interpreting it, several related cultural circumstances obscure the picture. One can see that even a short note may appear complicated to comprehend and the ethnographer can often find him- or herself in cognitive confusion. This is a significant condition as the hunters make jokes not only on account of each other but also to harass scholars who appear much easier targets than their culturally competent colleagues (see Leete and Lipin 2015). But the lesson to learn here is that various sources (practical experience, the oral heritage of the elders, scholarly papers, popular journals) may serve as the basis for the Indigenous knowledge of those who are not active internet users.

DISCUSSION

By presenting three micro case studies, I demonstrated that the Indigenous knowledge of the Komi hunters can be nurtured by rather different sources. Although the hunters' competence is predominantly acquired through oral heritage and practical experience, written sources of various kinds also have a significant role in their knowledge building. The current study indicates that even small details have a potential to reveal the hybrid nature of the hunters' comprehension.

On the level of hunters' notes, it appears complicated to confirm unequivocally the possible origins or backgrounds of specific knowledge. There are obvious parallels and explicit connections between oral and written sources. The Komi hunters are always willing to improve their skills and comprehension, thus hunting journals and scholarly works appear useful for them. However, they are selective in acknowledging the available information. It must be in cognitive accord with their previous understanding ('the order of things', as the hunters themselves claim), or not detached from this too evidently.

I expected that the ideas of urban animism or new spirituality, extensively spread through different media and literature, would influence hunters' world perception. However, the group of hunters I have focussed on appears rather immune to these discourses. The hunters are aware of spiritual movements and literature (local bookshops provide a multitude of books on these topics, and newspapers occasionally touch upon the ideas connected to new spirituality) and contemplate related topics (for example, that trees may provide strength or that one is supposed to consider energy ley lines in the earth). After discussing these topics on their own initiative, the hunters still announced that they "have not heard about this" (FM 2003; 2006), supposedly keeping in mind that their own experience, the elders, or other hunters were not the sources of these ideas.

The group of hunters I have studied over the decades have not become internet users. Therefore, the virtual information environment does not have direct effect on the content or style of their knowledge. This circumstance somehow limits the potential for growth of hybridity of the hunters' world perception. At the same time, it also enables more precise mapping of the knowledge production inside the network of hunters.

The mode and degree of our collaboration in the process of knowledge production varies in different cases. The Komi hunters' perception of scholarly practice is somewhat hesitant. Although they use scholarly publications to test or improving their own knowledge and skills, they have indicated ambiguous and even critical attitudes towards my research. Perhaps, being so close to the research process for them obscures the authority of scientific knowledge. Sometimes we have produced articles for scholarly journals together. In this process, we have never reached complete mutual understanding but managed to maintain relative respect for each other's approach to connected issues. I have a feeling that sometimes we co-create or facilitate just the researcher's comprehension, although, in some cases, also knowledge that has a bit more of a general cognitive potential.

The selected examples are fragments of long flowing conversations. My Komi friends have recounted a multitude of things and I have rarely intervened. This would interrupt the course of a story, directed it elsewhere or cut it off. These sessions of narration have been loaded with such small but intriguing pieces of Indigenous knowledge, as presented in the current study, and it would be complicated to react to everything immediately and ask for additional explanations. Only later analysis and comparison with written sources enables adequate exploration of these stories. Delayed comprehension of this kind brings imminent uncertainty about the conclusions. The existence of some sort of connection between the Komi hunters' knowledge and written sources is obvious, but it is complicated to establish how thoughtfully or efficiently this happens. Obscurity is caused by the inclination of the hunters to present information, found in

books and journals, as derived from their own experience or the teachings of the elders.

The knowledge and world perception of the Komi hunters becomes increasingly mixed over time. The hybridity of Indigenous knowledge is opportunistic (or pragmatic and flexible, see Briggs 2005), it enables flexibility of traditional subsistence technologies (which has already been supported by adopting chain saws, multi-shot rifles, off-road vehicles, and snowmobiles, see, for example, Niglas 2011) and helps Indigenous world perception to adapt to the changing world (for example, flexible interpretation of customary procedures). The animistic worldview is based on cosmology and myths (today this connection is often a hidden one) and regularly assessed as a conservative domain of Indigenous life (see Siikala 2002). But being a hybrid world perception, animism inclines towards adaptation (see, for example, Vallikivi 2017; Toulouze and Vallikivi 2021). Hybridity enables the apparent harmony of traditional knowledge, takes cultural memory back in time and produces obscure plots. Small narrative fragments enable detailed analysis of Indigenous knowledge but also reflect the mode of functioning of this comprehension.

NOTES

1 In principle, the Komi have a variety of methods for choosing and instructing a hunting dog (see Konakov 1983: 134–135). But my field partners hold the opinion that a good dog does not require any guidance, it simply needs to “start working”, if taken to a forest.

2 The Komi autumn hunting season starts on August 15 and ends on November 15. Hunters initially stay in their hunting grounds and catch forest birds. In October, the forest ‘opens’ and hunters can move to other people’s hunting grounds and hunt for hares, minks, martens and foxes. (Belitser 1958: 69–70, 74–75; Konakov 1983: 92–94, 121–124)

3 Usually, one is supposed to shoot waterbirds using a shotgun. During this hunting trip, catching ducks was not our purpose, therefore we were not properly prepared for this episode.

4 The Northern Catherine Canal was initiated during the rule of Russian Empress Catherine II and was completed by the mid-19th century. It connects the Volga and the North-Dvina River basins. The economic effect of the canal has been modest, but it still exists.

SOURCES

FM = Fieldwork materials of the author (informants’ gender and age added, when necessary).

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