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## The Phenomenon of Fishing in the Context of Human–Northern Nature Interaction: Network, Vitality, Communication

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### ABSTRACT

The article analyzes the fishing phenomenon in the context of interaction between people and Northern nature. An attempt is made to move away from a purely social aspect of considering the phenomenon and come to a broader, namely, network-related context of its understanding. The theoretical and methodological approach (theoretical framework) of the research team is based on: (a) the actor-network theory of French sociologist Bruno Latour and his conceptual studies on the history of understanding of “nature” that serve, directly or indirectly, as the basis for the modern Western ecological discourse; (b) Vladimir V. Bibikhin’s phenomenological reception of the Aristotelian understanding of living nature as a kind of perfect automaton, i.e., self-moving order of living matter change; (c) Yan V. Chesnov’s conceptual understanding of the phenomenon of “vitality” as part of the development of Nikolay A. Nosov’s virtual paradigm. At the empirical level, the research used the method of

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in-depth and expert interviews. A total of 27 semi-structured interviews were conducted in the spring and fall of 2022 in the Murmansk region. All the respondents were directly or indirectly connected with fishing practice: fishermen of the Murmansk region, including those who systematically violate fishing rules for the Northern Fishery Basin, employees of the territorial department of *Rosrybolovstvo* [Russian Federal Fisheries Agency], employees of *Poliarnyi nauchno-issledovatel'skii institut morskogo rybnogo khoziaistva i okeanografii (PINRO)* [Russian Federal Research Institute of Fisheries and Oceanography] named after N. M. Knipovich, representatives of local administration in the Tersky, Kola, and Kandalaksha districts of the Murmansk region, representatives of the tourist branch, etc. The interviews became the empirical basis of the research. This paper considers the popularity of informal fishing practices in the Murmansk region as an expression of existential and mental craving in response to the stimulating appeal, or even “challenge”, of nature. Accordingly, the researchers link the inherent desire of fishermen to catch fish for food, refreshment, and sale not so much with the sociocultural context, as with the natural (vital) desire to fulfill oneself as a natural being. The work understands the natural not as being in opposition to the social order, but as underlying and permeating that order.

#### KEYWORDS

northern nature, informal fishing in the Murmansk region, actor-network theory, existential grounds of fishing, natural grounds of fishing, vitality

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## Introduction

The history of modern fisheries can be traced back to the three most ancient forms of life activity of the natural species *Homo sapiens*: hunting, gathering, and fishing. The earliest forms of human activity rely entirely on nature and depend on it, unlike other, in the evolutionary sense newer, forms of life activity, where humans tend to rely more and more on those sociocultural “preferences” and “constructs” that come from them.

In terms of the classification of economic-cultural types proposed by M. G. Levin and N. N. Cheboksarov (Cheboksarov & Cheboksarova, 1971), fishing is associated with the first (most ancient) group: hunting, gathering, and fishing. Quite notable, according to the indirect data of a recent archaeological study, we can assume the emergence

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of fishing in archanthropes, one of the most ancient human species. The authors of the abovementioned book describe the archaeological remains associated with the site of the archanthropes Geshar Bnot Ya'akov in Israel; thus, the interpretation of the archaeological evidence allows us to talk about fire cooking fish and its eating 780,000 years ago, i.e., long before the appearance of modern humans (neanthropes). The authors use only indirect evidence associated with an increase in crystal structures on the teeth of carps' fossil, which were exposed to relatively low burning temperatures (+500°C and below) (Zohar et al., 2022). This is obviously indirect single data that seriously lengthens the time of the supposed beginning of fish consumption, and also involves such a complex and debated archaeological issue as the time when controlled fire was first used as a means of cooking. Archaeological evidence for the antiquity of fishing is found in the Late Paleolithic, which is related to the activities of modern humans (neanthropes). As the most ancient evidence of fishing practices, we can cite the discovery of sinkers that were made about 29,000 years ago in South Korea (Cast from the past, 2023). On the basis of the archaeological data, it is reasonable to say that fishing was one of the main human occupations for the carriers of the Upper Paleolithic, Mesolithic, and Neolithic archaeological cultures (Cheboksarov & Cheboksarova, 1971, pp. 184–193).

As M. Merleau-Ponty aptly claims in his preparatory notes to one of his courses, “nature is distinct from man, it is not instituted by him, it is the opposite of custom, of discourse,” “nature is primary, that is, uninstructed, uninstituted” (as cited in Viveiros de Castro, 2014, pp. 62–63). But then “reading” the actions inherent in fishing in the perspective of understanding it as a social practice including the cultural and legal component does not fully reveal their meaning. According to the authors, informal fishing is based on the specific human–nature relationship. Humans are forced to reckon with this relationship as well as to identify themselves in line with it, as it is primary and irreducible condition.

The form of interaction (communication) between “human being” and “nature” as a communicative perspective of considering informal fishing practice determines the relevance and theoretical novelty of the article. At the empirical level, our research is limited to the specifics of communication between people and Northern nature in the context of fishing practices of Murmansk region residents.

The very topic of informal extraction of biological resources, probably due to the complexity and specificity of the field, does not often attract researchers' attention. Meanwhile, methodological guidelines of researchers in the majority of cases suggest consideration of the issues in the socio-economic and socio-legal field, thus causing a certain change in the phenomenon. In the language game of the researchers themselves, for this reason, the concepts of illegal mining, criminal economic activity, illegal bioresources market are used (Ermolin et al., 2022). The specificity of our theoretical “optics” lies in exploring these practices within the context of human–nature communication first and foremost, and not exclusively in the context of human-to-human relations. In the Russian Arctic, fishing practices have previously been considered primarily in the context of traditional fishing and the impact that environmental change has had on these practices (Konnov et al., 2022).

The modern Western ecological and near-ecological academic discourse goes beyond the strictly environmentalist approach, which is methodologically close to the

main tenets of our study. In this discourse, these are the theories of B. Latour (1987, 1993) that we consider the most essential and fundamental. Also, those of particular interest for our study are the project of “dark ecology” and the concept of hyper-objects by T. Morton (2013, 2018), object-oriented ontology (Harman, 2016), ontological multi-naturalism (Viveiros de Castro, 2014), the project of self-ecology (Kohn, 2013), the concept of assemblage (DeLanda, 2006), and the critique of the classical distinction between nature and culture (Descola, 2013).

In a narrow sense (only the area of the Murmansk region), the closest to our research at the regional level are the studies of Bulgarian social anthropologist Yu. Konstantinov (2005, 2015), who has been engaged in field research in the northeastern and central parts of the Kola Peninsula since the mid-1990s, noting some peculiarities of poaching practices (mainly related to venison harvesting). The life peculiarities of indigenous people of the Kola North in modern conditions and survival practices in remote settlements of the region (on the example of the village of Krasnoschelye) related to informal fishing were analyzed on the basis of V. R. Tsylev’s own field research (Tsylev, 2013, 2014). It is noteworthy that we don’t know of any specific sociological studies of informal fishing in the region prior to the work of the author’s team. It is also important that the field research was conducted in the framework of the presented theoretical “optics.” Thus, in the study itself we can distinguish two levels: theoretical/methodological and empirical (interviews).

### **Ontological Understanding of Nature as an Opportunity to Understand the Existential and Psychological Foundations of Fishing Practices**

The theoretical drift towards the practices of linking the natural and the social, relying on the understanding of human nature as a natural automaton<sup>1</sup> that acts on its own, allows us to deploy a deeper understanding of the phenomenon under study. Despite significant and, in perspective, any changes of technical and technological nature, the first forms of human activity (hunting, gathering, fishing) were connected with the natural, i.e., non-constructed basis of life, which allowed and still allows us to avoid emerging social and cultural identifications, changing any private interests and cases of human connection with nature.

A key point in understanding the human being’s relation to nature is the notion of response: humans always find themselves responding to nature’s capture (embracing) of them, they always respond to nature’s capture (embracing) with their capture (embracing). The situation when humans always find themselves responding is “unfixable.”<sup>2</sup>

<sup>1</sup> The multidimensional understanding of the Aristotelian automaton in comparison with the New European understanding of it is shown by V. V. Bibikhin in his course “Les (hyle),” read by him at the Moscow State University in 1997–1998, which was published in St. Petersburg in 2011 (Bibikhin, 2011; Sergeev, 2021, pp. 54–59, 94–101, 163–164; Sergeev, 2022, pp. 106–121).

<sup>2</sup> The idea of human being’s relationship with nature as a human response to the capture of nature was also elaborated by Bibikhin in the above-mentioned course “Forest (hyle)” (Bibikhin, 2011). Bibikhin’s approach finds its basis in the work of M. Heidegger, in particular, in his understanding of the human being’s relation to Being, where a person is a being who always responds to the preceding capture of their being by their own reciprocal capture.

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The human being's ontological position is predetermined by nature that is interpreted not only as a set of natural factors, with each of which interaction is possible and entirely defined by the optics of subject-object relations where one perceives oneself as a subject setting rules, criteria, and measure, a certain factor, considered within this optics an analyzed, controlled, calculated, predictable, and projected object. On the contrary, a phenomenon that is more meaningful and irreducible to an object form is nature itself, which is perceived as a force in whose response and in relation to which a human being's power, manifested among other things in their strength of character and their strength of personality, is also capable of being revealed.

It is this aspect of a person's direct and unconditioned juxtaposition with nature and their certain confrontation with nature, which is ultimately predetermined by a person's indispensability to respond to nature's challenge that is significant for the oldest forms of human activity, including the action of fishing. Everyone who enters and engages in such a direct relationship with nature, whether one desires it or not, is necessarily in the position of responding to nature, whatever form one takes. It is the openness of the one who responds to the challenge of nature that is a significant factor, conscious or unconscious, in the formation of the core of their natural selfhood. The need to discover and find oneself, in the process of responding directly to the challenges of nature, "drives" people to the road, urges them to go "to the river," "to the lake," and "to the seashore".<sup>3</sup>

We can probably speak of a periodically manifested existential need that a person has to "test" their strength in the face of nature, when it is extremely important for them to understand what they are worth, as well as who they are, finding themselves in situations of an apparent weakening of the sociocultural and civilizational foundations of their life. The desire to be alone with nature turns into a meeting with oneself; with oneself as one is regardless of one's perceptions and social and cultural identifications. A person's ideas of themselves turn out to be nothing more than projections of sociocultural expectations, covering up their individual-personal framework rather than exposing and revealing it.

The theoretical "optics" that allows us to consider a human being in the context of their interaction with nature and to talk about the "test" of a human being in exposing them to the challenges of nature can be considered not only in the individual-personal dimension. We are also talking about the test of the natural species *Homo sapiens* in its relationship with other natural species and with nature as a whole. By the way, not every species survives such a "test": in the course of evolution the number of natural species has noticeably decreased.<sup>4</sup> It is indicative that outside such a "test," when any

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<sup>3</sup> Of course, in the history and practice of human life it is possible to distinguish more radical in its intensity and intensity attempts to respond to the challenges of nature. It is especially manifested in the specific conditions of existence of "native" tribes of Indians in the Amazon (Kohn, 2013). However, periodic "shake-ups" of man facing the action of the natural automaton also take place in more "civilized" societies. The specificity of informal fishing practices is that it is not a variable, but a constant: fishing has been a reality throughout the history of human existence and retains its significance even today. At least, it is a constant for a number of modern regions of the Russian Federation, including the Murmansk region.

<sup>4</sup> Thus, Bibikhin (2011) focuses on the fact that "the million registered species of living beings on Earth is only 10 or at most 30 percent of all creatures on Earth" (p. 316). He further notes that there were about one billion natural species on Earth, and now there are only one million (pp. 353, 369–370).

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natural species is forced to penetrate into its essence at the extremity of its being and at the edge of its existence, it loses its definiteness with all the ensuing consequences up to non-existence.

It is necessary to draw attention to the existential and psychological foundations of informal fishing practices as an irreplaceable factor in the long-term existence of the natural human species. This in no way suggests that other ways of understanding this phenomenon, related to technological, economic, and legal components, are unnecessary and insignificant. However, if the latter factors demonstrate their substantial variability throughout history and turn into many different manifestations of one phenomenon, the phenomenon of informal fishing practices, then the phenomenon itself turns out to be an irreducible singular factor. The human response to nature, in the form of the oldest ways of life, which are still practiced today, is not so much a “historical,” “social,” or “cultural” construction, but an ontological given that requires attention and understanding.

### **Understanding Fishing Practices as a Manifestation of the Human Vitality**

As such a human response to the challenge (appeal) of nature, we can consider the development of space by representatives of local communities, for which the possibility of catching fish is seen as a “natural” occupation. Here it is possible to speak about fishery as a kind of vital place development. The imposed legal restrictions are considered as restrictions of natural process and restrictions of the acting natural automaton, whereas the possibility to catch fish points to the vitality of the local inhabitant, their “suitability” and aptitude, according to the concepts of V. V. Bibikhin. In relation to fishing, a mismatch between formal (legal) and informal (moral) rights in the minds of local communities has been observed by various researchers at the empirical level. In particular, it is possible to refer to research of Emma Wilson who studied fishing on Sakhalin in 1990s (Wilson, 2002, pp. 149–150). We assume that the direct communication of a person with nature does not coincide with the indirect one. Direct communication of humans with nature is expressed in the practice of fishing and the associated system of traditional beliefs, while the indirect one appears in the normative-legal regulation of fishing.

Within the framework of Ya. V. Chesnov’s development of N. A. Nosov’s virtual paradigm, this “direct” “natural” aspect of informal catch can be called vital (from Latin *vita*—life), when vitality itself is understood as a virtual (from Latin *virtualis*—possible) stimulus state, which is described by manifestations like “I can” or “I have an opportunity” (Chesnov, 2007). Accordingly, restrictions of fishing are explicitly or implicitly understood by fishermen themselves as that which limits the self-affirming vital beginning of the person through restriction of realization of the possibilities to catch fish. The very significance of catching fish for food, treats, or sale may or may not be comparable to the costs, risks, and efforts invested by the fisherman. There is an interesting comparison of salmon fishing, which is considered by the fishermen of the Murmansk region the most valuable fish, with the irresistible craving for the ring of omnipotence from J. R. R. Tolkien’s novels, mentioned in one of the interviews we took:

Interviewer (I): Is it like a gold rush?

Respondent (R): Yes, something like this. Salmon is meat, it's a beautiful fish, it's currency, it's just the kind of value that if you see it, it's like a gold rush. Like in *The Hobbit*.

I: The ring?

R: Yes, he sees, my dear. On the Ura river, when we were there, we were unloading fish there, or we could just clean the trap. And a glass bottle swam in. And we picked it up and threw it in the boat. Some guy comes running in, and says, "Give me the fish. Can you give me a fish tail? What kind of fish? Well, *fish*<sup>5</sup> [emphasis added], you got the fish". (2022, Murmansk, Interview 1, a man)

According to V. V. Bibikhin's conceptual understanding of the specificity of the human being as a special kind of living, fishing technique can be understood in a broad sense, including a set of devices for catching, transport, catching skills, and many other things that reflect this specificity. Here we can recall Bibikhin's philosophical interpretation of K. Lorentz's experiments, when a box moved by an orangutan and used as a way to get a banana is compared with modern technology (Bibikhin, 2011, pp. 401–404). The technical human being's impact on nature can be considered as a manifestation of the specificity of human vitality, i.e., vitality, naturalness. An example from interview respondents describing situations with illegal salmon fishing during the Soviet times, when it was forbidden for private individuals to catch salmon and the punishment was confiscation of property, is illustrative:

I: Was there such poaching in the Soviet Union?

R: That didn't happen, of course. First of all, the guards were in other numbers. It was difficult to do it on the river, with a spinning rod. But in Soviet times you could always catch a fish with a spinning rod in 15–20 minutes.

I: Soviet newspapers covered the topic about the local population. That the fish inspectors themselves fished. This have appeared in the newspapers.

R: Everything happened. But back then there was confiscation of property regardless of the fish caught. You were caught with a fish, there was confiscation of property.

I: Yes, the risks were incomparable.

R: And you know how many people I know here who were deprived. There were no privatized apartments back then. They lost their cars, they took out their carpets. One stool was left in the house.

I: In Soviet times?

R: Yes. That was happening because of the law.

I: And why did not they avoid the risks? What pushed a person?

<sup>5</sup> Here the emphasis conveys the emotional and semantic accent made by the respondent when he was telling this story, showing the emotional state of the local resident asking him for the allegedly caught salmon. Hereinafter, the interviews are quoted with preservation of the specifics of the respondents' live oral speech, including sometimes with violation of the norms of literary language.

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R: Somebody allegedly *took* [emphasis added] a fish for themselves.<sup>6</sup> Different concepts. Someone there *to have* [emphasis added] this barrel. And they traded a little bit too. But there was no such thing under the Soviet Union. (2022, Tersky district, Murmansk region, Interview 3, a man)

What was significant for the person was that he “had” this fish and that he could “take” it. It is important that the respondent fishermen most often used the verbs “to take” and “to grab” to describe the very action of fishing, especially in those cases when the catch volume significant for the respondent or valuable fish was mentioned. It seems that this form of response to the challenge, the challenge of nature should be characteristic of the creature, which has a hand as a special specific organ. Returning to Bibikhin’s previously mentioned interpretation of K. Lorenz’s experiments when comparing the specificity of man as a living being with the specificity of birds as living beings, we can refer to the following words: “A human, on the contrary, will touch a box and set everything in motion with their hand, which a bird does not have” (Bibikhin, 2011, p. 403, trans. by the authors). It is worth saying that the human being taken as a natural species cannot but move the conditional “box” in order to get a conditional “banana,” simply because they can do it, responding with their action to a virtual incentive motive. In Bibikhin’s language, we can say that a human being cannot but respond to the challenge of nature’s perfect automaton by creating their own automata in a broad sense: by creating boats, nets, motors, machines, hooks, fishing rods, refrigerating and smoking devices, etc. This, of course, does not cancel out the fact that a single individual of the species *Homo sapiens* can be deaf to nature’s appeal precisely in the form of fishing. The actualization or de-actualization of the practice of informal fishing, of course, depends on specific social conditions, but it is based on a specific human way of reacting to the challenges of nature.

At present, when force is often mentioned in terms of an external comparison between one thing and another, and when force is mainly understood as a potential rather than an actual quantity, we can speak of “force” only in the situation of its manifestation. Force reveals itself precisely in testing and encountering, while any potential discourse about force always deceives us in some way and conceals something. What is important and significant is the very phenomenon of testing something for strength, when a kind of force is revealed, which turns into energy, passion, the ultimate emotion, a thought impulse, or both. The understanding of force becomes a *topos* in terms of which “something” is defined, and, as B. Latour aptly notes, an object is then “attributed” to the point of such force (Latour, 1993). He further clarifies that everything distinguished by a human being, distinguished from the rest, is not only connected with the human being as a subject, but also opposes them. If everything were limited to connection, it would be impossible to distinguish “something,” and only a certain opposition allows one to notice “something.” In other words, “something” is noticed in resistance.

All of the above is applicable to a person as well, who periodically experiences an inner need to encounter another living species, different from themselves, which

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<sup>6</sup> The emphasis shows the semantic points that are important for our analysis.



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creates resistance to the human being as such. In terms of such a confrontation, he encounters the strength of resistance, when such an encounter with the strength of the individual living and the strength of the natural species to which it belongs can only give and does give strength to a person. People notice only that which is strong, and only those forces that are comparable to them in their resistance. This (ontological and existential) need to encounter the opposing force of the living just happened to be enshrined in the first modes of human activity, including fishing. In the modern social environment of an ordinary person, the number of such encounters is minimal due to the “verification” of the modern dimension of life and its “correction” by culture. And if somewhere else there is a force coming from resistance to the sociocultural, it occurs in situations of direct human contact with nature.

The human being has long focused on the socio-technical and cultural dimensions of their life, separating themselves from nature, while assuming that the natural region of their existence is primarily identified with the necessary, and therefore dependent and unfree, relation of the human being to their nature. There is now a rethinking of this state of affairs, and there is a necessity to pay attention to the belonging of each living individual to a particular natural species and even to the natural sociality that manifests itself in different ways. It is becoming increasingly clear that each individual’s situation is significantly affected by one’s understanding or misunderstanding of one’s connection to the natural definiteness of *Homo sapiens*, which is accompanied by the interaction of such a species with other natural species and nature in general. Today, the pendulum that defines the contemporary human condition has swung towards nature, with a rediscovery of nature’s “participation” in human life.

### **Human–Nature Interaction and the Network Principle**

The modern appeal to the traditional ways of life, including fishing, and the growing trend towards this kind of appeal are related to the asymmetry of the natural and human in the “composition” of today’s human life activity. Experiencing this asymmetry, a person seeks to rectify it. As Latour notes, from the perspective of directed time, “the asymmetry between nature and culture then turns out to be an asymmetry between the past and the future,” when “the past was represented by mixing of things and people,” and the future by something that “will no longer mix them” (Latour, 1993, p. 71). Remarkable is that by the very act of becoming part of nature, the human being not only joins themselves to the traditional past, but also withdraws themselves from the established asymmetry of past and future, as their present now has an open character.

A person “finds” and “discovers” in themselves the natural in a new way, whereas only recently, since the early Modern period, they firmly identified their essence mainly with the “social” and “cultural” principles. One’s experience of naturalness is not a degradation into the “new barbarism” but an understanding of the difficulty of the human being’s ontological position and their contradictory character associated with the retention of their two principles, both “natural” and “social and cultural,” as the key components of their essence. The human situation is conditioned by the connection and contradiction of these two coordinates, when a person is always the product of

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both, being a “bridge” between them. In fact, this is captured by Latour in the following words: “Nature and society are no longer explanatory terms, but rather something that requires a conjoined explanation” (Latour, 1993, p. 81).

The tendency of the Northern fishermen to establish specific communications with the natural environment in a number of the interviews we conducted is noteworthy. In particular, it is possible to quote the following fragment:

R: And I don't just throw out *the waste* [emphasis added], I have it stored away and then *it goes to nature*. I knew *Misha* [a bear] *who was this place owner and who lived next door to me* [emphasis added]. I *used to bring the waste* [emphasis added], and then he gobbled it up. He walked by, he passed by, he rolled it up, he threw it down, and that was it. He *was busy and important* [emphasis added].

I: This is the interaction with bears.

R: Yes. And there's no *scandal* [emphasis added]. So, Misha has changed. (2022, Murmansk, Interview 4, a man)

It is noteworthy that the fisherman interviewed correlates their repeated presence in a certain place with the task of integrating themselves into a certain natural order. The fisherman represents this aspect both through a reference to nature in general (“the waste goes to nature”) and through the specification of this nature in the bear figure as a neighbor and territory owner, who becomes something of an accomplice to the ongoing process of fishing. The bear in this case appears to be “involved” and there is no “scandal” with it. The behavior of the respondent is fundamentally different from the simple tourist desire to feed the bear, without thinking about the consequences, and from following the recommendations for tourists and travelers not to feed the bear, in order not to provoke the formation of a reflexive chain “human being–food”. The bear is perceived not as a wild animal, which is on the opposite side to a human, but rather as an accomplice or co-actor in the ongoing process of informal catching of fish.

Giving a theoretical and methodological interpretation of such a model of communication, it is necessary to say that the key point of the new understanding of the human–nature relation is the reference to the concept of network. This reference is possible at different levels, for example, it is possible to focus on the network principle of human body organization: neural networks, networks of blood vessels, networks of skin, facial networks. Moreover, the relationship of a human and people to things is defined not only by the domination of some over others, but on the contrary, it reveals a diversity of very different relationships between them. In the field of sociological thought, perhaps, this point is best reflected in the framework of the actor-network theory of B. Latour. In our case, the phenomenon of fishing itself can be represented in the form of network constructions, when inside each of such networks a person is not its main coordinator, but only an element of the network, along with its other elements. The way of preservation and development of each such element, included in the network, is the maintenance of activity of the network itself, when it is important not that a person receives certain material, property and financial resources, but their participation in the network and in its development.

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The main thing in networks is the action of linking all the nodes of the network. In terms of fishing-related network, the person is not the subject, but an element of the network, along with its other elements, one of which is, for example, the time of “appearance” and “disappearance” of fish and tying it to the calendar. Other network elements are the legal regulations of fishing. The third nodes of the fishing network are fishing gear and vehicles, etc. Even the figure of the fisherman as such turns out to be only one of the network nodes and depends on other network nodes just as the result of fishing turns out to be a derivative of a multitude of network sections and the generation of various effects of such a network.

In order to become elements of the network, the various phenomena included in the network must become connected to each other. The network makes it possible to equate one thing with another and to translate one into another. As a result, the qualitative status of everything that can be regarded solely as “natural”, “social” or “cultural” is now determined only by their ability or inability to become part of a network. It is also important that the original connotation of an emphasis on the singular and disposable nature of anything is replaced by the connotation of connecting and relating one to another within the network and the understanding that within the network one becomes an extension of another.

Within the boundaries of hierarchical (vertical), but not network (horizontal) understanding, considered by J. Deleuze and F. Guattari (1987) on the basis of the opposition of tree-like/rhizomatic nature, the natural appears as a transcendent principle in contrast to the sociocultural principle arising from the human being.<sup>7</sup> However, in terms of the network the “natural” is compared and opposed to the “sociocultural,” while the network itself turns out to be a transcendent principle (in relation to the human being) since it is the network that can “retrain” and change the status of everything that gets into it and becomes network content. In this respect, any phenomenon viewed outside the network as a “natural,” “social,” or “cultural” code, once inside the network, is recoded so much that even “non-human” entities are already perceived as selves who behave and act somehow, while individual “human” qualities, by contrast, can be perceived as impersonal constructs.

The transcendent nature of the network in relation to both the “natural” and the “sociocultural” aspects of human life is the only possible way of explaining the actual situation with the Modern European understanding of nature. Therefore, it is possible and necessary to talk about the nature of all things: the nature of the network itself, the nature of culture, the nature of society, and even the nature of nature itself. In view of that understanding, the “natural” itself turns out to be an irreducible transcendence inherent in everything and everyone, where any existing is predetermined by the fact that it arises, lives, and disappears. Nature is the inner form of all that exists, turning

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<sup>7</sup> The image of a “tree,” identified by Deleuze and Guattari as a hierarchical order stemming from a single beginning, is contrasted with the image of a “rhizome,” which has many beginnings. And if in “tree-like” constructions everything is determined by the place of an element within the general hierarchical structure, in the “rhizome” all elements of the network are equal to each other and therefore interchangeable. The significance of any element in rhizomatic, i.e., network constructions, is determined by its state, i.e., by itself as part of the rhizomatic network. As Deleuze and Guattari point out, the image of a “rhizome” is actually identical to the movement of a “line,” which has neither beginning nor end (Deleuze & Guattari, 1987).

out to be a transcendence revealing itself in the transcendental experience “above” the existing, which cannot be as something present in the world, but whose presence one encounters as the boundary of something. This is the primary ancient Greek understanding of nature, expressed in the word *φύσις* [physis], radically diverging from the Modern European concept of *natura* (“human nature”) (Akhutin, 1988). This understanding of nature is reducible neither to “natural” and “sociocultural” objects, nor to any subjects.

Fishing, gathering, and hunting turned out to be the first forms, inside which not only the first practical skills of life were formed, but also the first forms of contemplative, i.e., theoretical attitude, on the basis of which the initial ways of human mental and reflexive involvement into human life, its connection with other forms of living and understanding life in general were formed. Even later, especially from the early Modern period, the naturalness of nature gives way to a multitude of different positions proceeding both from the primacy of “nature” as “essence” and “being” and from “the human being,” “society,” “culture,” and “discourse.” On the basis of each such position many scenarios of “understanding” the world are being formed, the common feature of which is a fundamentally partial understanding. Latour calls such scenarios “myths” and assumes that there are hundreds of them. In fact, we are talking about a multitude of “replacements, displacements, translations” that become “reference points” that allow differentiation of “mediators” and stabilization of “entities” (Latour, 1993). As Latour himself notes, “naturalization, socialization, discursivization, divinization, ontologization—all these ‘-izations’ are equally impossible,” and “none of them forms a common basis on which collectives, thus rendered comparable, might repose” (Latour, 1993, p. 128). The unconditionality of nature turned out to be blurred by the multitude of conditional ways of individual and collective attitude to nature, and each of these, moreover, is influenced by private interests.

### **Representations of “Order” in the “Fishermen–Northern Nature” Interaction and Unspoken Rules of Informal Catch**

Nature is the form of every life, including human life, whereas the natural species is the formal beginning of life. Therefore, along with the fact that every life is revealed in a set of different contents, the essence of life cannot be revealed in a substantial way and must reveal itself formally. In this connection, the importance of those modes of our life activity that would enable a person to encounter the presence of the principles of life, i.e., the transcendent character of life and its boundary, which is what happens in direct and immediate interaction with the life of other natural species, increases dramatically. The phenomenon of life is such a large form, in which all beginnings and ends, introduced into life already by the human being, are “hidden” (Sergeev, 2022, pp. 88–89). Taking this into account it requires solving the problems of philosophical, cultural, and social anthropology. Thus, the phenomenon of fishing is considered by social anthropologists mainly as a practice dependent on such categories as “individualism, commitment to the community, globalization, and class” (McCormack & Forde, 2020), i.e., predominantly in the traditional social anthropological context,

rather than in the context of its understanding as a form of communication between people and nature.

As an example of understanding informal fishing in terms of building the order of human communication with other living species, the cases of building certain unspoken rules of informal fishing recorded in the interviews are interesting. These unspoken rules are connected, at least in words, with a problem of resources conservation and even with a claim to a kind of self-organizing ecological oversight. In particular, the discourse of informal fishermen uses the concepts “to fish,” “to empty,” and “to make fishless” a pond, and these, at least in the interviews conducted by our research group, are perceived negatively. It is appropriate to quote here a fragment of the interview where the respondent represents his experience and talks about his perception of the fishermen prevailing mood in one of the Murmansk region districts.

R: Many people do not allow themselves *to empty* [emphasis added] lakes, but there are such people who just come and empty lakes. They just trawl out all the fish that are there, including fry, and the lake *is empty of fish* [emphasis added] for several years, up to a dozen years. It remains uninhabited, remains fishless. That’s what *I don’t understand* [emphasis added], and many people don’t understand. *Most people have an understanding*. ... And in favor of nets all seasoned fishermen say that our fathers, our grandfathers always caught fish with nets, and there was always fish. ... But to block the whole lake flows and fish it out in such a barbaric way, I’ve never heard of it. This is condemned. I know it’s done that way. *Everybody wants to catch and punish people who do it* [emphasis added]. Even the locals, even the seasoned poachers who do not accept any other way of catching fish.<sup>8</sup>

I: There is a peculiar understanding.

R: Of course, yes. We are robbing nature. Of course, *but we rob carefully*. *That’s why there is a generation left over, that’s why we can come back next time*. *People understand it, almost all of them* [emphasis added]. There are some law-breakers, and I wish we could catch these citizens and tell them about consciousness. It is a collective dream of every fisherman of Pechenga district ... (2022, Pechenga district, Murmansk region, Interview 1, a man)

In addition to the reference to the real or imaginary order of catching, which supposedly existed for a long time (“our fathers, our grandfathers always caught fish with nets, and always had fish”) and allowed us to preserve fish, we also see an indication of the desire to punish those who “empty” a pond completely. Accordingly, representations of the practice of informal fishing for food, refreshment, and sale show its perception not only as an aspect of the informal economy,<sup>9</sup> but also in the context of general interaction between humans and nature. By analogy with the informal economy, here we can talk about informal ecology. Certainly, it is very difficult to estimate a degree of efficiency of

<sup>8</sup> We are talking about fishermen who, as a matter of principle, only fish with nets, but are negatively disposed against those who “empty of fish” or “empty” a body of water.

<sup>9</sup> The concept of informal economy was introduced and developed primarily by K. Hart (2006).

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such informal self-limitations, especially in a situation when there is no clearly visible criterion within the practice, that is a catch of a small water body. In particular, according to A. A. Lukin's research, the number of Arctic charr (*Salvelinus alpinus* L.) in Lake Imandra, the largest lake in the Murmansk region, continued to decline in 2000s after ecological conditions improved due to the reduction of technogenic impact on the lake because of uncontrolled fishing (Lukin, 2013).

In terms of this informal ecological attitude towards the resource, nature, and their communication with nature, we can note the respondents' negative perception of fishermen who can be ironically called "alcoholic" poachers. We are talking about cases when a group of friends that go fishing spreads quite a large number of nets several kilometers long, but then the nets may not be checked for several days due to the fact that the fishermen are permanently drunk at this time. In this sense both the fishermen, who fish in the pond and the fishermen, who spread nets and forget about them being drunk, are perceived by other fishermen (who themselves violate the normative regulations) as obvious violators of a certain order of communication of a human being as a representative of one species living with nature. The existence of order is associated with the existence of fish, while no order means no fish. In particular, it is possible to refer to the interview of one of the former poachers:

I: How did I catch fish before? Pretty easy. You couldn't make a fortune on it, but if you did everything wisely, it was possible to earn at least some money. And now there's no fish left. *A certain order used to be in the river* [emphasis added].

R: In the Kola?

I: In any river. All the rivers that one may find along the Murmansk coast, there were villages, collective farm. You don't have to go far ... (2022, Murmansk, Interview 9, a man)

This connection "order means existence of fish" in the thinking and language games of fishermen is often intertwined with a sense of nostalgia for the past, when there was fish in ponds, with anxiety for the present situation and for the future, in which there is no order and as a consequence no fish. The fishermen's "tale" manifested in the intensities of their naming, the choice of words and semantic certainty of sentences used by the participants of fishing becomes a response to the challenge, the challenge of nature, a response to what was revealed to a person in the natural "show." Referring to the interview quoted above, we can cite the following fragment of it:

My heart aches for the Kola most of all. It's my childhood river. In fact, there aren't any fish left at all. Instead of sitting here with you, I'd have been on the river. Now there are no salmon any more, the autumn herd on the Kola was completely killed off. Autumn herd used to be bigger than spring one. You spread a net, wait for half an hour, 40 minutes, and catch fish. The net was removed and they left. I know no one would come here, no one would be here. There was an order. Although they used to catch, and some then were put in jail, or got suspended sentences. Everything was done within reasonable limits, everything was ok, and everybody was satisfied. (2022, Murmansk, Interview 9, a man)

It is noteworthy that in addition to the fishermen themselves (poachers?), the elements of such order here are lure, and places, and, even the control and supervisory authorities. Formal regulatory rules may be perceived by fishermen as limiting or distorting the order that the human–nature relationship should be. In particular, a common pattern is the request for increased scope and for at least partial authorization of the net way of catching. References to real or fictitious but better conditions for fishermen in other regions, and certain questions about the catching opportunities for certain ethnic groups in the local population are also popular. In particular, the fishermen of the Kandalaksha district of the Murmansk region appeal to the possibilities of legally setting nets with the residents of some districts of the Republic of Karelia, and the fishermen of the Tersky district appeal to the possibilities of the residents of some districts of the Arkhangelsk region.

Another interesting aspect of this topic is the correlation of opportunities for non-indigenous fishermen with permits for the latter. Such opportunities are often regarded as unfair concerning other local inhabitants. It is not a question of banning such preferences, but rather a sense of injustice, which can be expressed in the question, “Why can’t we (I)?” If within a purely sociocultural consideration of the problem, on which the state policy and legal regulations are based, the privileged allocation of certain groups of the local population regarding fishing opportunities (“indigenous small peoples of the North,” “indigenous people”) has grounds, then within the perception of Murmansk fishermen of themselves as local residents engaged in “natural” occupation (fishing) these grounds are not obvious. They are unobvious against the background of absence of any privileges for those Northern fishermen who do not belong to the number of “indigenous and numerically small,” but live in the same area, sometimes in several generations. Regarding the Murmansk region, this can be seen in language games when comparing opportunities open to the Sami and closed to local residents of other nationalities (Komi, Nenets, Russians, etc.). These opportunities allowed to others are exaggerated in the context of the lack of permission for those who do not belong to this category:

I: They began to allow local Sami to fish ... approximately three tons to five tons.

R: Three to five tons per community or artel?

I: *No, per person*<sup>10</sup>[emphasis added]. They spread the nets without a problem. Of course, everyone else is offended. They get up three tons each, and they sell it.

R: Officially?

I: Yes. But *you can’t sell, buy, and catch even 10 kg of fish ...* [emphasis added] (2022, Murmansk, Interview 2, a man)

Another case is often cooperation, when Murmansk fishermen use the moment of communication with the familiar Sami with their permit to use this license as a kind of cover:

<sup>10</sup> The norms are exaggerated. Perhaps, the actual catch under these permits is represented, which is perceived as legally allowed.

I: And what about net catch?

R: We spread nets, yes. I even have a friend, he's an ethnic Lapp, he received a permit. Yes, there is some kind of quota, it was introduced about five years ago, I think. But it takes him half a winter to collect the documents, all that stuff. It's all limited there, it's clear that we try to abide the law. But we didn't get caught either. He got caught. He says that the fishing inspectorate doesn't bother him with all those Sami papers. The only thing they could do is a harmless rebuke. (2022, Murmansk, Interview 3, a man)

In a number of interviews, the problem of aversion to the regulatory order is revealed in terms of contrasting the figure of the fisherman, whose actions are strictly limited, with the unlimited possibilities of the state and/or capital.

Our interpretation of this language game of the Northern fishermen, which follows from our theoretical position, is that in this case we are not simply dealing with a variant of the discourse of social justice. In this respect, the situation with the discourse on the possibility of catching fish in inland waters is quite different from, for example, discussions about the nationalization of the oil and gas or other fossil resource industries. Modern high-tech mining involves organization, industrial exploration, supply chains and infrastructure, etc., i.e., those processes in which the various resources of both the state and big capital have been incorporated to some extent. To a certain extent, the possibility of discussions about the legal form of production organization and about income distribution patterns is thus justified. Fishing on inland waters is a "natural" occupation available to the common person that can also have economic significance for specific individuals, families, and local communities. For this reason, informal catching does not seem to be something wrong in the eyes of fishermen themselves, and sometimes it even acquires features of a peculiar restoration of the natural order within the communicative human–nature network.

## Conclusion

In the form of fishing, the human being experiences nature in a state of differentiation: both as "their own" and as "foreign"; as something they can have and use, and as something with which they have to reckon. Fishing becomes a phenomenon that, when encountered, gives a person the opportunity to experience a direct identification with the natural automaton operating within them, thus penetrating their own natural norm.

Fishing is a form of direct interaction between humans and nature, when one confronts oneself as a natural automaton and the natural automaton of the species to which one belongs, when their strength, aptitude, and suitability are determined in opposition to, and comparison with the perfect automaton of nature. Discovering the natural automaton acting on its own, a person "rediscovers" and in a certain way corrects their ontology related, among other things, to the creation of their automata. In the example of interaction between Murmansk fishermen and Northern nature, we can see how the natural automaton of a person and the natural automaton of the



Homo sapiens species respond to the perfect automaton of nature. Such a response is expressed in the form of existing informal fishing practices on inland water bodies of the Murmansk region, and is revealed in the peculiar language games of Northern fishermen. The peculiarity of their discourse is associated with the emphasis on communicative moments of the interaction between humans and nature, with a partial opposition of informal economic and, partly, informal ecological order to formal regulation, and with a claim to a kind of natural justice of the open possibility to fish.

The natural understanding of fishing allows us to consider it as a network, which, like any network, is supported by actions aimed at the establishment of connections of all nodes of the network. Thus, the participant of fishing is considered as an element of a network, along with its other elements. Any element of the network becomes network content, which is recoded and may not be perceived as it was before entering the network. In this sense, fishermen themselves, fish protection officers, vehicles, fishing gears, ponds, landscapes, supply chains, etc. act as nodes of this network linking nature and the human individual as a natural being. The notions about the normal functioning of this network are expressed in the language games of Murmansk fishermen in the image of a certain natural order, which is different from the legal regulations. Fishing is a practice of the vital development of a place, which is evident from the study of informal fishing practices in the Murmansk region. Restrictions on fishing could therefore be perceived, from the perspective of the direct participants, as limitations on such a vital human beginning. In some cases, it legitimizes their violation in the eyes of fishermen, when it is the opportunities to catch only that way, or only in that place, or only at that time, which do not coincide with the legal regulations that encourage the fisherman to violate.

The unspoken rules disclosed in the language games of Murmansk fishermen indicate a certain specific ethics (Sergeev et al., 2022; Voronov et al., 2022), and also about self-limitation and self-organization in fish catch volume in the water body. Accordingly, it is rather a question not of total denial of formal regulations, but of their recoding, violations as necessary, which is thought as natural, and also of their use for their own purposes.

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