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Article abstract

Once avoided on both sides of the Bering Strait, wild mushrooms are now considered to be delicious edibles in Chukotka. An important food source, mushroom-gathering is also a recreational activity that cultivates particular relationships between people and the land. In the past, prior to the influences of the mushroom-loving Russian cuisine, the Yupiget of Chukotka regarded mushrooms as “devil ears,” while the Chukchi people largely viewed them as reindeer food, unfit for human consumption. This article examines the transformation in Yupik and Chukchi ideas about mushrooms in the context of a broader ethnohistorical overview. Using the narratives shared by Yupik, Chukchi, and non-indigenous residents of Chukotka, it highlights the role of cultural identity in shaping landscape perceptions, demonstrating how during and after the Soviet period members of each group were finding their own distinct ways of relating to the ecological universe, transformed by new political processes and vast social changes.

An ethnomycological approach to land use values in Chukotka

Sveta Yamin-Pasternak*

Résumé: Une approche ethnomycologique des valeurs du territoire tchouktche

Alors qu'on les évitait autrefois de chaque côté du détroit de Béring, les champignons sont tenus maintenant pour mangeables et délicieux en Tchoukotka. Source de nourriture importante, la collecte des champignons est aussi une activité de loisirs qui renouvelle les relations particulières que les gens entretiennent avec le territoire. Par le passé, avant l'influence de la cuisine russe friande de champignons, les Yupiget de Tchoukotka considéraient ces derniers comme des «oreilles de diable» alors que les Tchoukches s'accordaient à les voir comme de la nourriture pour renne, impropre à la consommation humaine. Cet article examine la transformation des conceptions yupik et tchouktche des champignons dans le cadre d'un contexte ethnohistorique plus large. À l'aide de récits que nous ont confiés des résidents yupik, tchouktches et non-autochtones de Tchoukotka, il met l'accent sur le rôle de l'identité culturelle dans la formation de la perception du paysage. Il démontre comment, durant et après la période soviétique, des membres de chacun de ces trois groupes trouvaient leur façon propre et distincte de se connecter à leur univers écologique, un univers transformé par des processus politiques nouveaux et de vastes changements sociaux.

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Once avoided on both sides of the Bering Strait, wild mushrooms are now considered to be delicious edibles in Chukotka. An important food source, mushroom-gathering is also a recreational activity that cultivates particular relationships between people and the land. In the past, prior to the influences of the mushroom-loving Russian cuisine, the Yupiget of Chukotka regarded mushrooms as "devil ears," while the Chukchi people largely viewed them as reindeer food, unfit for human consumption. This article examines the transformation in Yupik and Chukchi ideas about mushrooms in the context of a broader ethnohistorical overview. Using the narratives shared by Yupik, Chukchi, and non-indigenous residents of Chukotka, it highlights the role of cultural identity in shaping landscape perceptions, demonstrating how during and after the Soviet period members of each group were finding their own distinct ways of relating to the ecological universe, transformed by new political processes and vast social changes.

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Introduction

Beginning middle of July, nowadays, in any part of the Chukchi Peninsula one can hardly enter a household that will not have some sort of locally harvested mushrooms. If the sumptuous aroma of a buttery sauté does not yet reach the doorway, perhaps the mushrooms are still fresh from the tundra, sitting in buckets or soaking in tubs. A mix of yellow *Lacterius*, red-cap *Russula*, and fleshy orange *Leccinum*—favored by most—may be laying spread out on cardboard, waiting to be sorted and cleaned, then hung on strings by the woodstove or pickled in jars and transferred to the household cache, likely joining other foodstuff saved to last over the long winter.

Out on the vast open spaces of Chukotka tundra, mushroom hunters can be spotted from far away: in contrast to various greens and berries, mushrooms typically fruit further apart from one another, demanding more leg work on behalf of the fervent harvesters. Standing tall above the claret surface, hiding amidst the rocks, or merging with the hastily turning kaleidoscope of the passing summer, each specimen had its own individual character. Sitting down to process the day's load—a scrupulous, time consuming effort—an observant harvester may take note of the special traits, linking a certain mushroom to its fruiting spot, again reorienting oneself on the recently visited landscape. Other members of his or her family may share what they experienced in that location, perhaps plan a future outing or recall a harvest from prior years, or simply admire the place for its magnificent vistas. Superior quality pieces are selected for pickling, as pickled mushrooms are typically served on special occasions (Kerttula 2000: 109). Part of the harvest may be sautéed immediately for the day's meal. The remainder of the mushrooms, designated for everyday use, is set aside for drying (Figure 1).

Over the winter, portion by portion this supply will be rehydrated and cooked in soups, stews, pies, dumplings, and other hearty recipes. Preparing their winter reserves, people often recite the upcoming birthdays and holidays on which particular mushroom dishes will be served, contemplating their personal networks and community calendars. Therefore, the set of activities associated with the processing of harvested mushrooms helps ensure food security while fostering continuities between the social and the ecological cycles, physical surroundings and spiritual attachments, as well as between culinary practices, eating situations, and individual tastes.

Considering the ubiquitous nature of the mushroom harvest in today's Chukotka, it is hard to imagine that no more than four decades earlier this activity and all the knowledge and work it entails were all but absent in the region. Just across the Bering Strait and throughout the Alaskan Arctic, mushrooms hardly enter the subsistence milieus of the contemporary Siberian Yupik and Inupiaq people. In the Alaskan communities of Nome and Kotzebue, for example, mushroom collecting arouses enthusiasm among only a few residents, most of whom are immigrants from Chukotka. Having made Alaska their permanent home, these individuals are good at comparing cultures and environments of the two sides of the Bering Strait. Noting that a number of the same mushroom varieties are found in both places, they say that what differs are

people's attitudes: in Chukotka several varieties are widely consumed and highly desired, while in Alaska virtually all mushrooms are avoided and largely considered inedible.

The first appearance of culinary mushroom in Chukotka coincides with the advent of Cold War politics, which sealed the two sides of the Bering Strait from their ongoing contacts while working to intensify the diffusion of colonial influences. Mushrooms have for centuries played an important part in Slavic cuisines (*e.g.*, Caldwell 2004; Chamberlain 1983; Wasson and Wasson 1957) and, on the whole, Chukotka Native peoples began collecting mushrooms in the 1950s and 1960s, initially at the request of the border guard soldiers, then at the instruction of school teachers, and later in the company of the various Russian, Ukrainian, or Byelorussian acquaintances who during the 1970s and 1980s—the peak of Soviet development in the North—were arriving to the region in great numbers.

This article explores the course, the contexts, and several consequences of the transition in the use of wild mushrooms among the Chukchi and Yupik peoples of Chukotka. I also consider certain aspects of this subject in relation to the incomer populations, paying particular attention to the adaptive role of mushroom collecting in their settling process. Ethnographic data presented in this article is derived from the semi-structured interviews and observations I recorded in 2001 and 2004 while conducting fieldwork for my dissertation research (Yamin-Pasternak 2007) in the Bering Strait area, and the semi-structured interviews I recorded with retired migrant workers who had formerly worked in Chukotka and have since returned to their homelands in Ukraine. Since my primary goal was to achieve a better understanding of ethnomycology (the study of human beliefs and practices associated with fungi) among the peoples of Chukotka, the majority of interviews were carried out on the Russian side of the Bering Strait, while data from Alaska and Ukraine provided important comparative information. Between the settlements of Enmelen, Nunligran, Sireniki, Novoe Chaplino, Provideniya, Lavrenitiya, and Uelen, I interviewed a total of 89 Chukotka residents whose age ranged from 19 to 73. Out of that total, 67 persons identified themselves as either Yupik or Chukchi or, in some cases, as Chukotka Native people of mixed ancestry.

Because the subject of mushroom use has not been extensively explored in ethnographic literature on Chukotka and the Arctic, the present work, first and foremost, is a step toward quenching the ethnomycology gap that exists in northern scholarship. At the same time, similar to many other food and commodity studies (*e.g.*, Attwood 1992; Mazumdar 1998; Mintz 1986; Ortiz 1947; Scheper-Hughes 1992), this inquiry does not merely converge on a single substance, but builds on its social history to unveil broader processes, which in this case are dietary change and human perception of landscape. Following the overview of the ethnomycological ideas found among the Yupiget and Chukchi prior to the Russian influence, I try to show that, rather than being a small innovation, mushroom consumption was part of a vast transformation in food and landscape values taking place during the Soviet period. While supporting the idea that significant changes in dietary habits arise out of major

interruptions of daily routines (Messer 1997; Mintz 1996, 1986), I argue that for the people of Chukotka, mushrooms consumption and the entire set of tasks and practices it entails, were not only a result but also a means of coping with the myriad transformations taking place in the context of rapid social change. Finally, by engaging in the process of reconstructing the course of transition in mushroom use, I was able to capture the scope of several cross-cultural encounters, whose content offers a unique perspective onto the period's settings, enriching our feel for the social fabric of everyday life in the Soviet North.

Views of the Yupik and Chukchi prior to Russian influence

Although in the past mushroom-picking was equally absent from both Yupik and Chukchi subsistence milieus, each had their own reasons for carrying on the avoidance. Still, the views held by both groups were substantiated by cosmological orders and empirical observations that are notably allied with their traditional occupations and production modes. Today, when conversing in Russian with a Yupik person knowledgeable about the prohibitions of the former times, he or she will likely say that mushrooms, according to the Yupik beliefs, are *chertovy ushi*, which translates as 'devil ears.' Devils (*cherti*), in this case, are the many malevolent spirits inhabiting the tundra. These powerful harmful entities can hypnotise tundra travellers, divert them from taking the right path, and cause them to wander around for days in circles (Kerttula 2000: 141).

Sireniki Yupiget have two terms for mushroom: *tuughneghaam sigutanga,* and *tuughneghaam ayaviigha* respectively translated locally by 'devil's ear' and devil's cane'[1]. *Tuughneghaam* can also stand for 'shaman's helping spirit' (Fortescue et al. 1994: 346), thereby turning the whole cluster into 'shaman's helping spirit's ear' rather than 'devil's ear.' Perhaps what the language memory reflects here is that, at one time, mushrooms were associated with different kinds of spirits, good and bad, rather than with exclusively malignant entities. Although conceivable, this more antique connotation does not seem to echo in the contemporary ideas: it has either been transformed long ago for reasons that are now unknown, or has been lost fairly recently, with the increasing use of the Russian translation. An evidence of the latter is the fact that none of the bilingual speakers I interviewed has translated *tuughneghaam sigutanga* and *tuughneghaam ayaviigha* as 'shaman's helping spirit's ear' (or even just 'spirit's ear') or 'spirit's cane,' respectively. Although the Russian-speaking Yupik talk about *dúkhi* (Russian for 'spirits') extensively (as the customs of paying respect to and

1 The original words were written down by Yupik interviewees in the Yupik adaptation of the cyrillic alphabet. Professor Michael Krauss at the Alaska Native Language Center, University of Alaska Fairbanks, helped me with the Latin spelling of these words as well as with their interpretation. He also pointed out that *tuutaghuak*—a Naukan word for 'mushroom'—is composed of a suffix *-ghuak*, which means 'something that looks like something else' and *tuutag*, which stands for 'chin bead' or 'labret'—a facial decoration that in the past used to be popular among the Alaska Inupiat. Unfortunately, thus far I had only been able to interview two Naukan speakers and do not have sufficient material to speak to the Naukan stance on mushrooms that existed prior to Russian influence. Therefore the analysis offered here is largely grounded in the views of the Chaplino and Sireniki Yupik.

feeding the spirits are practised widely), mushrooms are only referred to as properties of *cherti* (Russian for 'devils' or 'demons'). The Chaplino Yupik term for 'mushroom' is *sigutmeketaq*, which is a cluster of *sigut* ('ear') and a suffix that implies aversion[2].

The recollections I was able to record suggest that among all the Siberian Yupik groups, mushrooms drew the emotion of repugnance and fear of contamination. Touching mushrooms with bare fingers was prohibited: on the occasion of accidental skin contact, the person had to immediately blow at the exposed surface. This practice was grounded in the belief that mushrooms are capable of causing skin to become rancid and subsequently infecting the rest of the body (Figure 2).

The apprehension about the mushrooms' corrosive faculties fits well within the wider Yupik beliefs about the tundra. In her ethnographic portrait of Sireniki, Kerttula (2000: 141) points out that for the coast-dwelling Yupiget, traditionally oriented toward the sea, "the tundra was a dangerous place filled with quicksand and evil spirits." Among the perils believed to inhabit this treacherous landscape are the hypnotising *cherti* ('devils, evil sprits') and flesh-eating *cherviaki* ('worms') eager to infest the bodies of incautious travellers. Consistently, in the Yupik worldview the tundra appears as a malevolently-magical space, where physical bodies are subjected to some kind of deterioration by callous energies. The ecological link of fungi with the posthumous processes handily corresponds with this notion. Thus it is possible that the view of mushrooms as devil ears encompasses a number of Yupik beliefs about the tundra, merging ecological observation with knowledge of cosmic geography and metaphysical elements.

Similarly to the Yupiget, prior to the Russian influence, the Chukchi people largely abstained from consuming mushrooms, at least in the culinary sense. However, compared to the Yupiget, whose outlook was explicitly restrictive, the Chukchi stance seems neither proscribing nor fearful. The commonplace view, remarkably similar among the tundra and the coastal Chukchi, is that mushrooms are "reindeer food" that, until recently, were simply gastronomically uninteresting for people (Diachkova 2001: 267). Although in the present day mushrooms are a regular part of procurement and diet for the Chukchi people on the whole, they continue to be a nuisance for the reindeer herders. Controlling the herd during fruiting time becomes, they say, nearly impossible: having caught the whiff of a mushroom-rich country, animals begin dispersing into every direction, galloping through the tundra in a gluttonous compulsion, often to the point of getting stomach sickness (Kerttula 2000: 109; Vitebsky 2005: 138-139). Appropriately, reindeer herders often refer to mushrooms as "reindeer drugs."

Chukchi ethnomycological nomenclature typically includes two to four items, with the shortest list consisting always of *poŋpoŋ* and *wapaq*: the former is a generic term for 'mushroom' and the latter stands for *Amanita muscaria* or fly-agaric. Some people

2 The interpretation of *-meketaq* as a suffix that implies aversion was provided by a Yupik elder in Novoe Chaplino.

Figure 1. Stringing mushrooms in preparation for drying. Photo by Sveta Yamin-Pasternak.

Figure 2. A Sireniki elder explaining to the author the practice of blowing air at one's hand in order to avoid contamination that mushrooms were believed to cause. Photo by Igor Zagrebin.

divide the *poŋpoŋ* order into *lygepoŋpoŋ* ('real mushroom') and *qorapoŋpoŋ* ('reindeer mushroom'). *Lygepoŋpoŋ* refers exclusively to 'puffballs,' which in the past were occasionally prepared over a campfire, roasted on skewers. The scope of this practice never amounted to either the scale or the significance attributed to mushroom-picking in contemporary times. Nevertheless, puffball is the only mushroom that found some culinary use among the Chukchi prior to the Russian influence, thereby earning its distinctive title.

A provocative aspect of the Chukchi ethnomycological terminology comes from Gordon Wasson's (1968) delineation of word cognates in Paleosiberian languages, which Lévi-Strauss (1976: 231) calls "[an] ingenious speculations on a verbal form of the *poŋ* type." Wasson had found that while in some Siberian languages the words with the root *poŋ* (or similar to *poŋ*) refer to mushrooms, in others they mean "loss of consciousness," "drum," and "inebriation." Given that both the drum and the fly-agaric make the integral tools for achieving and maintaining the shamanic state of consciousness in a number of Siberian cultures, Wasson may well be right in suggesting that these connections are not accidental. At the same time, it is important to note that in the Chukchi case, the fly-agaric is tagged not by a *poŋ* derivative, but by a name of its own: *wapaq*. In contrast with other mushrooms, the term is homonymous with the name of a wolf-catching contrivance (Bogoras 1904-09: 141), and with the supposedly poisonous herbs stored in mice hideouts. The latter are called *elgu-wapaq*, literally 'white agaric.' Discussing the spiritual beliefs of the Chukchi, Bogoras explains the anthropomorphic, personified status of the *Amantia muscaria* mushrooms in their metaphysical world:

> [...] the intoxicating mushrooms of the species fly-agaric are a 'separate tribe' (*yanra-varat*). They are very strong, and when growing up they lift upon their soft heads the heavy trunks of trees, and split them in two. A mushroom of this species grows through the heart of stone and breaks it into minute fragments. Mushrooms appear to intoxicated men in strange forms somewhat related to their real shapes. One, for example, will be a man with one hand and one foot; another will have a shapeless body. These are not spirits, but the mushrooms themselves [...] (Bogoras 1904-09: 282).

Bogoras' ethnographic insight on the "mushroom tribe" is drawn from the southern regions of Chukotka. Yet, his vivid description shows a phenomenal semblance with the petroglyph images created ca. 1460 BP (Dikov 1999 [1971]) on the cliffs of the Pegtymel' River valley not far from the coast of the Eastern-Siberian Sea (Figure 3). When reflecting on the close similarity of Bogoras' description of the "mushroom tribe" and the visual treasures of the Pegtymel' cliffs, we should not forget the vast physical space separating the two sources and consider the implications this distance suggests. Most prominently, it allows us to ponder how widespread and long-standing the "mushroom tribe" may have been, its apparitions stretching over 500 km and nearly 1,500 years. The fact that the natural distribution of *Amanita muscaria* only scarcely extends into Chukotka's Arctic (Geml et al. 2006) could, on the one hand, indicate that the diffusion of ideas, migration of people, and trade of goods have been in place for quite some time. Bridging the southern Bering and Arctic shores, these exchanges long

preceded any Russian or American presence in the region or the known formal trade venues like the Aniui Fair (Bogoras 1904-1909; Ray 1975; Wrangel 1844). If the shapes depicted atop the figures on the Pegtymel' cliffs are in fact fly-agarics, their emergence in rock art situated so far from the fungi's physical source may point to the exceptional social and spiritual significance once ascribed to these mushrooms.

To a contemporary observer acquainted with comparable ethnographic and historical materials on Chukotka, the Pegtymel' complex is more likely to appear as a multi-vocal visual conglomerate that expresses a number of ecological and cosmological associations, rather than a set of ideas that can be clearly defined. The mushroom images appearing in far more recent material culture—the 20th century ivory works— can also be interpreted in a similar way. Having examined the collection at the Uelen Carving Studio Museum (the main art and handicraft school of the Chukchi Peninsula since the 1930s), I found that mushrooms appear exclusively in one type of work: the engravings of the Chukchi tale called "Kele and the Maidens." The story's central character is the malevolent Kele who tries to capture a group of young women but instead gets deceived and comes to his death at the end. Several artists of the Uelen Carving Studio Museum produced their own rendition of that story (*e.g.*, Efimova and Klitina 1981; Mitlyanskaya 1976: 76-77; Mitlyanskaya and Karakhan 1987: 185; Serov 1988: 242). A common element in all these compositions is the abundance of mushrooms in Kele's surroundings. Missing in the beginning of the picturesque essay, they amass profusely toward the peak of the plot, when, suffering from over-hydration, the rapacious Kele maladroitly wobbles about. In his final step, each of Kele's feet lands directly atop the mushroom. Presumably, its slippery surface causes Kele to loose his balance and fall down (Figure 4).

Today we are not in the position to speak directly with the authors of these works, which were created in the 1930s and 1940s. To the living artists in Uelen, including the descendants of the early masters, the presence and the decisive role of mushrooms in Kele's ordeal do not appear as extraordinary elements: mushrooms are simply part of the landscape, creatively employed to resolve the plot. While such an interpretation may well be right, it is imperative to note that nowhere in the verbal or visual realisations of the story are mushrooms presented as food, which, as I stress in the introduction, is their primary association in contemporary Chukotka.

Mushrooms in cross-cultural encounters of the Soviet period

According to local accounts, some time around the 1950s, certain Native residents began collecting mushrooms at the instruction, or upon request of the Russian border guards. The elders who provided this information recalled that at that time the Native people did not yet pick mushrooms for personal use, but only in order to barter for flour, tobacco, and other commodities that could be obtained from soldiers. Thus it is no accident that, chronologically, the first memories of mushroom picking come from Sireniki and Novoe Chaplino, which are among the villages standing in close proximity to the patrolling stations established in the early years of the Soviet-American border

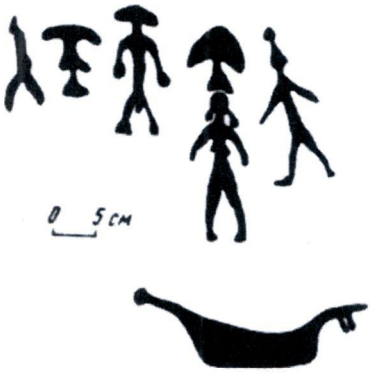

Figure 3. An illustration from the Pegtymel' composition labelled as "Stone IX" (from Dikov 1999 [1971]: 150).

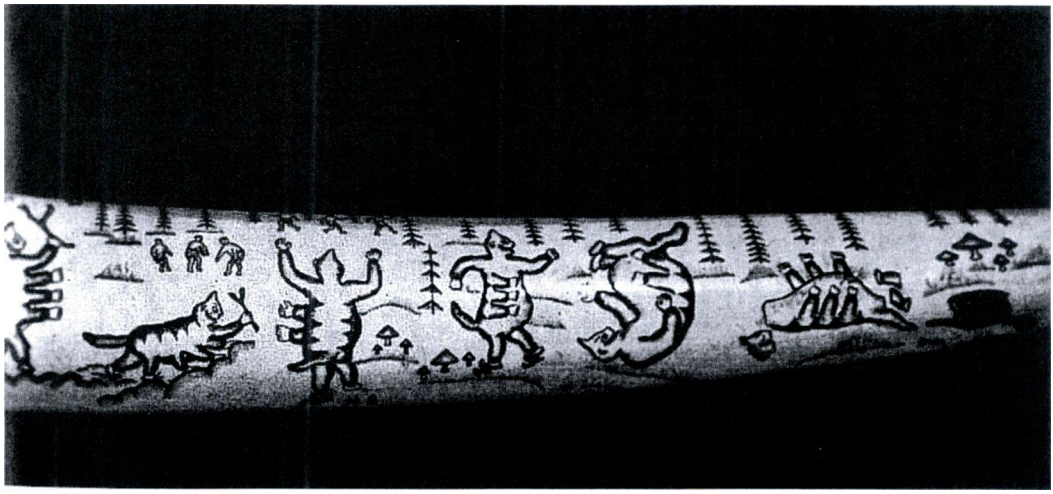

Figure 4. "The Story of Kele," a walrus tusk engraving by Kmeimit (from Mitlyanskaya 1976).

regime. From 1960s onward, mushroom gathering increasingly becomes an activity prescribed in the summer camps hosted by village schools.

On the whole, these early encounters did not provoke an immediate Native interest in harvesting mushrooms for personal use. We do, however, find notable contrast in the reactions of Yupik and Chukchi parents, where the response of each group is clearly rooted in their original ideas about mushrooms. Chukchi adults typically showed the kind of perplexed indifference apparent in the response of a woman whose little daughter was the first in the family to receive formal schooling: the news of Russian school teachers collecting mushrooms for food did not arouse in her an outrage or trepidation, but a mere puzzlement. "Why do they pick those mushrooms? What are they, reindeer?" (recorded in Nunligran, 2004) was what she made of this unusual, for people, behaviour. In Yupik families, on the other hand, the new experiments were received with far more apprehension. For example Rima, who grew up in Sireniki, describes a more heated scenario unfolding upon her coming home from a day camp excursion, bringing a share of the fresh mushroom harvest part of which was already prepared and served at the school lunch:

> Rima: My mother was very worried and my grandmother scolded, "why did you eat those *tunigram sigutshak* ('devil ears')?" They did not sleep that night and after I went to bed they woke me up several times through the night to make sure that I was acting normal.
>
> Sveta: Why were they so worried?
>
> Rima: Because these were *tunigram sigutshak*, you could not eat them, just do this [blow at fingers] if you touch them by accident.
>
> Sveta: Did you then tell your teachers what happened?
>
> Rima: Yes, and other kids too, the same thing in their houses. So they told us from now on to just turn all of the mushrooms we collect over to the school. And that is what we did, we just brought them to the school and the cooks used them for our meals. They dried them and everything there too (recorded in Enmelen, 2004).

The circumstances surrounding Rima's story stem from the social context common to the majority of the Chukotka Natives born in the 1950s. Though she spoke Yupik as her first language, her values and ecological knowledge had clearly been influenced by the formal schooling and summer camp interactions and were undoubtedly more Russified than those of her parents and grandparents. Still, the ability to communicate in Yupik and in Russian granted her versatility in both worlds: at home and at school, she was able to access what was and what was not appropriate and did her best to please the authorities in each context. In contrast, Sasha's narrative divulges a firm language barrier and a much more abrupt generational divide:

> Sasha: I grew up picking mushrooms. I picked them throughout my youth. But my grandmother's reaction was always negative.
>
> Sveta: What would your grandmother say?

Sasha: I don't exactly know. She did not speak Russian. I did not speak Yupik (recorded in Novoe Chaplino, 2004).

Grounded in culturally-specific perceptions, the stories told by Yupiget and Chukchi nevertheless exhibit a trait that is common to both groups, bearing a greater association with the age of an informant rather than his or her ethnic identity. Namely, it is the temporal gap between the time when a novice is first exposed to either picking or consumption and the time when he or she becomes a mushroom aficionado and an active harvester. For example, the following experiences were shared by the members of the cohort that first encountered mycophagy (mushroom eating) in 1950s and 1960s:

> I spent all the winters here in the village, but for the summers I joined my parents in the tundra in the reindeer herding brigade. One summer our yarangas (dwellings) were situated close to a geologist field camp, maybe within 10-13 km [...]. They invited us to visit and we used to walk over there. They cooked mushrooms there in large quantities—that I remember very clearly [...]. That was when I first saw mushrooms being eaten. Then when I was around 16 or 17, I also tried them here in the village, someone treated me. But for myself I did not start picking until my 20s. That was in the late 1970s and by that time everyone else was already picking. Now I have a six bucket [annual] quota—that's my goal—half for drying, half for marinating [...]. And of course we eat plenty of fresh mushrooms all through the summer (recorded in Enmelen, 2004).

> The border guard, an officer, came to us once and brought some mushrooms to show my mother, to tell her which kinds he wanted her to pick. After that she would go collecting and then brought [the mushrooms] to the border station to trade for flour, sugar, and whatever else. But she did not eat them and we did not eat them. It is only when we became adults, already when I had children, I started picking them. Now we eat them a lot, cooking them in all kinds of ways: frying, marinating [...]. My daughters pick and my grandchildren. And they are so tasty! They really tricked us, our grandparents. I don't know why, but they did [chuckles] (recorded in Sireniki, 2004).

As these narratives show, the initial commercial ventures with the military did not extend into personal use, the skills acquired in school and summer camp did not resurface until adulthood, and the first chance to sample the flavour, the aroma, and the texture of cooked mushrooms did not arouse an urge for more. Nevertheless, the individuals who first learned about mushroom consumption in their youth did take it up later in life, came to regard it as an essential part of the procurement cycle, and, in several instances, even became known and respected in their communities as *gribniki* ('mushroom experts'). By contrast, the pickers, whose first harvesting or consumption experience occured in the 1970s, rather than the 1950s and 1960s, turned into regular users relatively quickly, such as in Nina's case:

> In 9th grade, I was travelling by *vezdekhod* (track vehicle) to the reindeer herding brigade and there were some Russians sharing the ride with us. They picked some mushrooms and they were frying them, and for me, I remember, this sight provoked some kind of aversion, it was so unpleasant. People from here, I mean Native peoples, did not like mushrooms. Reindeer, they like mushrooms, oh, yes, they do! But that time [the Russians] said, "Nina, please have some, at least have a taste." And to my surprise they turned out quite palatable,

> even tasty. After that I pretty much started picking. By that time it was actually becoming widespread, but somehow I did not get into it until later. Now I use them a lot in cooking [...] (recorded in Nunligran, 2004).

I believe that the reason for such varying time lapse between the initial exposure to and active engagement in mushroom-picking characteristic of different age-cohorts lies not in mycophagy itself, but in the fact that it accompanied a wider transition in food preferences, tastes, culinary practices and the overall pattern of eating. In a classic work on the anthropology of food, Farb and Armelagos (1980:190) state that "cuisine is basically as conservative as religion, language or any other aspect of culture." Analogously, Mintz (1996, 1986) observes that while periodic additions to the diet can be rather inconsequential for the overall pattern, significant changes in eating practices usually result from a major shift in the entire scope of everyday routines. Following this premise, Ellen Messer (1997:102) proposes that "to change food preferences and dietary structures there probably need to be not only the right ecological and political conditions but also some major social rupture that creates an opening for a new food or nutrition pattern and a reason for abandoning the old."

The myriad of social Soviet-era changes in Chukotka (*e.g.*, Dikov 1974; Gray 2005; Kerttula 2000; Krupnik and Vakhtin 1997; Thompson 2005) have undoubtedly amounted to the kind of rupture that could and did cause a significant dietary transition. Daily routines dictated by the schedules of work and schooling, altered production and distribution of local food, and a growing range of imported commodities sold in villages stores, have each played a role in transforming the meal times, structure, and composition. Also, the integration of the etiquette and aesthetics propagated among the Native people since the times of the pioneering Soviet "culture bases" has intensified with the rapidly changing living conditions. Relocating from yarangas into houses had furnished the material pedestal for acting out the Russian-centric embodied norms instilled, with variable success, by the different agents of the Soviet power. Then came the new eating postures, dishware, and utensils—the whole complex of "table manners" that, with the elevation of mealtimes from the floor to the table, has acquired a more fitting context and created a hospitable atmosphere for the invasion and absorption of the new cuisine. The transformed spaces and pace of everyday life called for modifications in culinary practices that both accommodated and took advantage of the new living arrangements.

The Russification of taste did not play out evenly in different social environments and age-cohorts, as well as among individual persons. Yet, for many Chukotka Native people the social and ideological changes of the rupture years have also transformed the sensual realm, thereby placing the mushrooms amid the many items that, unappealing in the past, suddenly seemed "quite palatable, even tasty," as Nina, whom I quoted earlier, discovered upon her first appraisal. Simultaneously, the growing popularity and the vast availability of mushrooms have facilitated the context and the means for mycophagy to gain a regular spot on the Chukotka Native menu. As people continued to exchange samples and recipes, its culinary application was acquiring a wider scope.

Understanding the implications of the ethnomycological transition

As I try to convey in the introductory section, both the discourse and the practice associated with mushrooms in contemporary Chukotka are overwhelmingly common for all population segments. The Yupik, Chukchi, and Russian people, by and large, welcome the fruiting season with similar enthusiasm and hold the same reverence for the expertise of the erudite *gribniki* in their communities. The ways in which knowledge and skill, spatial awareness, and social networks connect via mushroom procurement, are also manifested cross-culturally. Yet, as we move from the questions of procurement and cuisine onto the notion of landscape as a cultural space, a set of ideas "by which social agencies constitute the physical world" (Humphrey 1995: 136), the sentiments evocative of the historically distinct pasts begin to resurface and the social identity of each group comes back into play.

The devils went deaf

"Nowadays when someone returns from the tundra and our people see their buckets are full [of mushrooms], they say "look at that: now all the devils must have gone deaf in the tundra [...]" (recorded in Nome, 2001). Over the course of my fieldwork, I heard about devil deafness—an outcome of ear amputations now fervently performed year after year on the Chukotka tundra—from a number of Yupik persons. The notion, I suggest, indicates that the ethnomycological shift is encapsulated within a larger transformation in the Yupik worldview, particularly with regard to the metaphysical landscape, which over the course of the Soviet era was being perpetually, and often quite forcefully, secularised.

As Krupnik and Vakhtin (1997) show in their trans-generational study, a number of elements stemming from the older set of Yupik spiritual values continue to be relevant, yet the period of exposure to ideology grounded in atheism has also had its effects. In this context, the idea of the tundra devils going deaf presents a perfect metaphorical amalgam, as it brings to light the human-caused handicaps of the devils while inherently recognising that these malicious beings do exist. It also conveniently captures the Soviet-driven secularisation process and translates it into emic terms: by picking mushrooms people make *cherti* ('devils') powerless, unable to eavesdrop on human affairs and, by extension, to conspire on harmful actions. Mushroom-gathering, therefore, works to dissolve the aura of magical danger and inhospitableness that Yupik people ascribe to the tundra.

Precisely how mushroom-picking has affected the Yupik perception of the tundra as a magically-perilous place (Kerttula 2000: 121, 141) is not explained through the verbatim of people's stories. Yet, the joy and enthusiasm inspired by the harvesting seasons, the sheer scale of procurement, and the vivaciousness that accompanies the exchanges pertaining to hearing-loss among the tundra devils, all point to the fact that some of those anxieties have been lifted. Albeit a sea-oriented people, mindful of the spirit world, the contemporary Yupik, like most others inhabiting the pan-Soviet space,

did not escape the part of the ideological indoctrination that treats the secular universe as the only reality. Undoubtedly, some of the Yupik metaphysical landscape has, in one way or another, been secularised. The transformed status of mushrooms from devil ears to human food serves simultaneously as a product and an instrument of this kind of sporadic secularisation.

People compete with the reindeer

The Chukchi people never had an explicit prohibition against mushrooms, but, seeing them largely as reindeer food, placed mushrooms outside the dietary sphere. Thus the transition from one to the other is more a matter of socio-ecological classification than of reconfiguring a cosmological stance. Still, reading into the individual narratives we find that Chukchi people's land-use values and perspectives on their own identity did not remain unaffected by the mushroom's new status. The course of modification in the overall Chukchi perspective is actually two–fold, changing from early categorisation of mushrooms as reindeer food to that of the food that only reindeer and Russian newcomers can enjoy, and finally to a hearty and delicious edible admired by the Chukchi people themselves. Although initially both maritime and tundra Chukchi thought that mushrooms are only for reindeer, nowadays virtually all Chukchi people, with the exception of reindeer herders, consider them a regular part of the human diet as well.

When it comes to the perspectives of reindeer herders we do find some observable differences. Of all my informants, reindeer herders appear to be the least enthusiastic about mushrooms, particularly during the fruiting season. Mainly it is due to the nuisance that mushrooms create out on the tundra, hyper-stimulating the animals and causing havoc within the herds. In contrast, a number of village-based Chukchi now see themselves as competing with reindeer for the mutually-cherished resources. For example, one of the questions I posed to the village residents whose family members work at the herder camps was whether they pick mushrooms while visiting their relatives in the tundra. Virtually all the responses proclaimed it a futile effort, charging that reindeer's gluttonous binging shows no mercy toward other stakeholders. In a similar vein, one Enmelen resident shared a story of a herd getting away from the brigade one summer. The animals showed up near the village, bringing about some unfortunate consequences:

> They just shaved-off the tundra, all there was: there was nothing left after them, not a single mushroom. And here, in the village, people got upset. And that is understandable: in the tundra they [reindeer] can eat all they want—tundra is vast, but here, on these slopes around the village, and those ravines, and all the way to the river is where *we* pick! Those are *our* mushrooms [chuckles]! (recorded in Enmelen, 2004)

While the herders' views were generally consistent with one another, I did encounter one noteworthy exception: a Russian man who was an aficionado of both, the mushrooms and the reindeer. Prior to his current job in the village, Ivan spent a number of years working in a reindeer brigade, actually migrating with the reindeer.

Partially, Ivan agreed with his Chukchi colleagues, reporting that he observed the same kind of frenzied behaviour in the animals when passing through mushroom patches. Where his view differed is on the alleged scythe-like tendencies of the reindeer, who at every opportunity mow the tundra into a smooth, mushroom-free surface. On the contrary, he showed no esteem for his competitors' harvesting skills: "They run after the smell, but they don't see well," he assessed, "so it may look like they are swallowing everything, when in fact so many good mushrooms they leave behind, silly animals" (recorded in Nunligran, 2004).

As far as he knew, Ivan was the only Russian herder on the Peninsula and the only one who picked mushrooms together with his reindeer, or as he says "picked up after them [what the animals missed]." He viewed the elation possessing the animals as an analogue of the excitement that humans get upon discovering a mushroom-rich area. While resting, Ivan cooked over the fire the mushrooms he collected, usually finding no other takers for them among his fellow herders. A remarkable personality, Ivan asked to join the reindeer brigade to experience an occupation, a lifestyle, and a landscape that for him were "totally extraordinary." But once he entered this novel setting, mushrooms, he says, were the feature that actually emerged as familiar.

And mushrooms grow taller than trees

Although Ivan's comparison was of the reindeer and humans, his remarks echo several others' reflections on seeing, or being able to see, mushrooms on the tundra (versus not seeing them at all). Both Yupik and Chukchi informants have commented that they could not spot any mushrooms when they went out to look for them in the forest, during the time they either travelled or attended school on the mainland. Hiding in the shadows of trees, mushrooms did not reveal themselves as readily as they do on the tundra, where they supposedly protrude above all else.

Having lived for some years in the Alaskan taiga I could very well picture a rusty mosaic of the forest floor, covered with fallen leaves and shrub vegetation, and darkened by branches of spruce and birch. Not surprisingly, to me the predicament made perfect sense. However, alongside this view came the vantage point of the Chukotka settlers, who claimed that it is in the tundra, not in the forest, where mushrooms are most difficult to seek out, particularly when one is new to the environment. The shape and colours of mushroom caps camouflage easily, they say, within the fall mosaic of tundra slopes (Figures 5 and 6). The suggestion that a common landscape feature can be hiding in plain view until an inexperienced observer develops the necessary vision skills, has profoundly captured my interest. As I listened closely to the settlers' recollections of learning how to find or, more precisely, *to see* mushrooms on the tundra, I began to recognise these stories as those of settlers coming into a place, reorienting their vantage point from the outsider gaze to, as Ingold (2000: 202) puts it, looking *around* in the landscape of their dwelling. The story of a retired Chukotka teacher, who now lives in her native Ukraine, illuminates this point particularly well:

Figure 5. Packing a tall bucket inside his rucksack Andrei is optimistic about finding *Leccinum* mushrooms, which he suspects are abound along this slope. The mushrooms, however, do not reveal themselves easily, as shown in Figure 6. Photo by Sveta Yamin-Pasternak.

Figure 6. The *Leccinum* variety known in Chukotka as *gornyi grib*, literary 'mountain mushroom,' is highly prized, but finding it can be tricky. The challenge is trying to discern the orange-brown caps among the patches of *Arctous erythricarpa*, whose leaves turn merlot-red right around the mushrooms fruiting season, and even then the deceptive target may turn out to be a rock. Photo by Sveta Yamin-Pasternak.

> I had thought that this land would be completely barren, what else can one expect from permafrost? Imagine my joy when I saw that in Chukotka people harvest mushrooms and berries in quantities we could only dream about on the mainland. I remember I wrote to my sister that not only do mushrooms grow here, they rise above all the rest. "Chukotka," I wrote, "is a magical place where mushrooms are taller than trees" (recorded in Studenok, Ukraine, 2004).

Marx went away, but the mushroom stayed behind

Readers of the post-Soviet studies literature are likely to recognise the similarity between the titles of this concluding section and those of the book by Caroline Humphrey (1998) *Marx Went Away—but Karl Stayed Behind*, which explores the post-Soviet incarnation of Russia's collective farming. In this compelling account of social adaptation in the years following the collapse of the Soviet Union, Humphrey shows that forms of collectivised agricultural production are driven predominantly by economic and political necessities rather than nostalgia or ideological convictions. Collectivisation is not a preferred way of organising, but for many people it remains the best or the only option. In Chukotka, and likely in many Native communities of the Russian North, mushrooms have found their way into the spheres of procurement and consumption together with other transitions that came along with collectivisation and Soviet transformation at-large. However, compared to many policy driven changes, mushroom picking appears to be long-lived. Having outlasted the institutionalised atheism, the tastes and nutritional preferences it was able to bring about, as well as the knowledge, skills, and the social and spiritual attachments, are likely to remain for the long haul. Many Native people today perceive these matters as inherently local. And the vast majority of those who are aware of its peculiar history in Chukotka, regard mycophilia as one of the positive changes they took from the Russians.

Along with the acquired enjoyment of picking and eating wild mushrooms came a set of activities necessary for their processing and preservation, as well as new domains of ecological knowledge and culinary skill. Together with the utilitarian means preferences developed for gathering certain types in certain places and with or without certain company, for consuming mushrooms in combination with some foods and not with others, and for serving particular recipes on particular occasions. Some individuals became known as experts and aficionados, famous for the quantities and qualities of their grand reserves. Others, with less luck or knowledge, or maybe fewer opportunities to pick, have come to rely on those more fortunate, thus forming new networks of distribution and exchange, and perhaps modifying the existing ones. All of these innovations have permeated the cycle of procurement, the ways of seeing and making use of the land, and the patterns and preferences of cooking and eating. The particularities of each have become regarded as traditions for individuals, households, and various social groups.

Throughout the Soviet and post-Soviet periods, the cultural diversity of Chukotka has remained perpetually rich, with the Yupik, Chukchi, and non-Native dwellers

continuing to explicitly and implicitly manifest their distinct social identities. Yet, amidst the wide-ranging perceptions of differences, there is bound to be some venues where mutual understanding is achieved. The pleasures of harvesting and eating wild mushrooms, as I have tried to show, manage to transcend the social divides, creating, literally and figuratively, a lived and hospitable common ground.

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References

ATTWOOD, Donald W.
1992 *Raising Cane: The Political Economy of Sugar in Western India*, Boulder, Colorado, Westview Press.

BOGORAS, Waldemar
1904-09 *The Chukchee*, Leiden, E.J. Brill Ltd.; New York, G.E. Stechert.

CALDWELL, Melissa L.
2004 *Not by Bread Alone: Social Support in the New Russia*, Berkeley, University of California Press.

CHAMBERLAIN, Lesley
1983 *The Food and Cooking of Russia*, Harmondsworth, Penguin.

DIACHKOVA, Galina S.
1997 Traditions and Innovations in the Food of Reindeer Breeding Chukchi in the XXth Century, in S.A. Arutiunov and T.A. Voronina (eds.), *Traditsionnaia pishcha kak vyrazhenie etnicheskogo samosoznaniia* ('Traditional Food as an Expression of Ethnic Identity'), Moscow, Nauka: 262-270.

DIKOV, Nikolai Nikolaevich
1974 *Ocherki istorii Chukotki s drevneishikh vremen do nashikh dnei* ('Essays of the History of Chukotka from The Most Ancient Times Up to the Present Days'), Novosibirsk, Nauka, Sibirskoe Otdelenie.

1999[1977]*Mysteries in the Rocks of Ancient Chukotka: Petroglyphs of Pegtymel,* Anchorage, Alaska, U.S. Dept. of the Interior, National Park Service, Shared Beringian Heritage Program.

EFIMOVA, A.K. and E.N. KLITINA
1981 *Chukotskoe i Èskimosskoe iskusstvo* ('Chukchi and Eskimo Art'), Leningrad, Khudozhnik RSFSR.

FARB, Peter and ARMELAGOS George J.
1980 *Consuming Passions: the Anthropology of Eating*, Boston, Houghton Mifflin.

FORTESCUE, Michael D., Steven A., JACOBSON and Lawrence D. KAPLAN
1994 *Comparative Eskimo Dictionary with Aleut Cognates*, Fairbanks, Alaska Native Language Center, Research Paper, 9.

GEML, J., G.A. LAURSEN, K. O'NEIL, H.C. NUSBAUM and D.L. TAYLOR
2006 Beringian Origins and Cryptic Speciation Events in the Fly Agaric (Amanita muscaria), *Molecular Ecology,* 15(1): 225-239.

GRAY, Patty
2005 *The Predicament of Chukotka Indigenous Movement: Post-Soviet Activism in the Far North*, Cambridge, Cambridge University Press.

HUMPHREY, Caroline
1992 Chiefly and Shamanist Lanscapes in Mongolia, in E. Hirsch and O.H. Michael (eds), *The Anthropology of Landscape: Pespectives and Place and Space*, Oxford, Claredon Press.

1998 *Marx Went Away—but Karl Stayed Behind*, Ann Arbor, University of Michigan Press.

INGOLD, Tim
2000 *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*, London, New York, Routledge

KERTTULA, Anna M.
1996 *Antler on the Sea: the Yupik and Chukchi of the Russian Far East*, Ithaca, New York, Cornell University Press.

KRUPNIK, Igor and Nikolai VAKHTIN
1995 Indigenous Knowledge in Modern Culture: Siberian Yupik Ecological Legacy in Transition, *Arctic Anthropology,* 34(1): 236-252.

LÉVI-STRAUSS, Claude
1976 *Structural Anthropology, Volume 2*, New York, Basic Books, Inc.

MAZUMDAR, Sucheta
1998 *Sugar and Society in China: Peasants, Technology, and the World Market,* Cambridge, Massachusetts, Harvard University Asia Center.

MESSER, Ellen
1997 Three Centuries of Changing European Taste for the Potato, in Helen MacBeth (ed.), *Food Preferences and Taste: Continuity and Change*, Providence, Berghahn Books.

MINTZ, Sidney W.
1986 *Sweetness and Power: the Place of Sugar in Modern History*, New York, Viking.

1996 *Tasting Food, Tasting Freedom: Excursions into Eating, Culture, and the Past*, Boston, Beacon Press.

MITLYANSKAYA, Tamara B.
1976 *Khudozhniki Chukotki* ('Artists of Chukotka'), Moscow, Izobrazitel'noe Iskusstvo.

MITLYANSKAYA, Tamara B., and I. L. KARAKHAN
1987 *Novaia zhizn' drevnikh legend Chukotki* ('The New Life of Chukotka's Ancient Legends'), Magadan, Magadanskoe Knizhnoe Izdatel'stvo.

ORTIZ, Fernando
1947 *Cuban Counterpoint*, New York, A.A. Knopf.

RAY, Dorothy Jean
1975 *The Eskimos of Bering Strait, 1650-1898*, Seattle, University of Washington Press.

SCHEPER-HUGHES, Nancy
1992 *Death without Weeping: the Violence of Everyday Life in Brazil*, Berkeley, University of California Press.

SEROV, Sergei I.
1988 Guardians and Spirit-Masters of Siberia, in W.W. Fitzhugh and A. Crowel (eds), *Crossroads of Continents*, Washington, Smithsonian Institution Press.

THOMPSON, Niobe
2005 *The Nativeness of Settlers: Construction of Belonging in Soviet and Contemporary Chukotka,* PhD Dissertation, Cambridge, University of Cambridge.

VITEBSKY, Piers
2005 *The Reindeer People: Living with Animals and Spirits in Siberia*, Boston, Houghton Miffin Company.

WASSON, R. Gordon
1968 *Soma: Divine Mushroom of Immortality*, New York, Harcourt Brace Jovanovich.

WASSON, Valentina Pavlovna and R. Gordon WASSON
1957 *Mushrooms, Russia, and History*, New York, Pantheon Books.

WRANGEL, Ferdinand Petrovich
1844 *Narrative of an Expedition to the Polar Sea In the Years 1820, 1821, 1822 & 1823*, London, J. Madden and Co.

YAMIN-PASTERNAK, Sveta
2007 *How the Devils Went Deaf: Ethnomycology, Cuisine, and Perception of Landscape in the Russian North,* PhD Dissertation, Fairbanks, University of Alaska Fairbanks.