After the demise of the Soviet Union, the Yamal-Nenets reindeer pastoralists have become well known as one of the world’s most resilient, mobile and economically successful nomads (Forbes et al. 2009; Golovnev & Osherenko 1999; Stammler 2002). They herd the largest number of domestic reindeer worldwide and lead a fully nomadic lifestyle. They migrate up to 1,200 km a year, living in camps consisting of several chums (tepee-shaped reindeer skin-covered tents), with the entire extended family being involved in moving the nomadic household (Stammler 2005) (Fig. 1). In this article we look at some of the complexities surrounding perceptions interpretations to do with local perceptions of pandemics, climate change and disease.

In March-April 2020, our team of two fieldworkers just about escaped the Covid-19 pandemic lockdown on our way to join a camp of Yamal-Nenets reindeer nomads in West Siberia as they prepared for their 400 km spring migration. Our original objectives were to find out about the nomads’ views and observations of their changing ecosystem, as well as notions of well-being held among young families in a region that offers a choice between reindeer nomadism or working in the extractive industries (Fig. 2). Due to recent changes in migration routes and infrastructure development, in spring, Yamal-Nenets reindeer nomads are in range of mobile phone services and were thus able to actively follow news about Covid-19 through telephone conversations with relatives and satellite TV (Fig. 3). During our fieldwork, this led to extensive discussions about global and local natural disasters in general.

An accumulation of disasters

In the last 15 years, sudden temperature changes have caused numerous rain-on-snow events that have made
pastures on the Yamal Peninsula inaccessible for reindeer grazing (Fig. 4). The most dramatic of such events in 2013/14 led to mass starvation and the death of more than 60,000 reindeer (Forbes et al. 2016), with some herders losing 80-100 per cent of their herds. By contrast, earlier and later events had roughly resulted in 25 per cent of the reindeer herds dying, according to herders’ own calculations (Fig. 5). In addition, an outbreak of anthrax in Yamal, which led to the death of several thousand reindeer and several humans, was reported worldwide as a straightforward consequence of a warming climate. However, scientific assessments have offered more nuanced explanations (Hueffer et al. 2020; Krupnik 2018; Laptrander & Stammler 2017; Yasyukevich 2018). This last decade, the increased frequency of such natural disasters has also coincided with the expansion of the oil and gas industry and related infrastructure into pastures on the Yamal Peninsula and encroachment on migration routes (Kumpula et al. 2012) (see back cover).

These developments can no longer be explained solely in terms of climate change (Golovnev 2017). Expanding on the ‘convergence model’ (Hueffer et al. 2020), we argue that the increased frequency of several natural changes, in combination with industrial development and policy decisions, has led to a wave of sedentarization among the nomads. Many now possess insufficient numbers of draft reindeer to enable their camps to migrate. During fieldwork in 2019 and 2020, some former nomads lived with us in the camp, trying to help out and work in the tundra to restore their decimated herds, so that they would be able to start nomadizing again, as their ancestors did (Fig. 6). In the following, we describe the Nenets reasoning as to why these natural events had such a disastrous effect on their lives.

We observed a rise in conspiracy theories among the nomads to explain such effects, which we relate to a loss of communication with the spirits they would customarily have accessed through consulting a tadibe (shaman). Part of the nomadic household is a sacred sledge (khekke khan), like a portable altar, containing syadei, spiritual figures that Nenets consult for guidance in difficult times. Most elders remember times when it was usual for a tadibe to offer a spiritual interpretation of events in the tundra and advise on actions to take to mitigate the consequences. Now, however, there are hardly any tadibe left, and even though young nomads worship the spirits, without a tadibe they do not know how the spirits talk back to people. In short, the declining number of shamans has led to a loss of reciprocity in the Nenets’ communication with their spirits.

Panchenko (2016: 158) has emphasized that the purpose of examining conspiracy theories is not to evaluate the validity of particular claims to truth. We take Panchenko’s argument further, showing that not only do ‘conspiracy theories . . . duplicate the functions of religious ideas and narratives’ (2016: 160), but that here, they compensate for a loss of spiritual dialogue. The three herders which we describe below all share the same view on recent natural disasters. One of these herders managed to limit the damage to his herd, another lost almost everything but continues to be a nomad, while a third lost virtually every natural disaster. One of these herders managed to limit the damage to his herd, another lost almost everything but continues to be a nomad, while a third lost virtually everything, forcing him to settle in the village.

Three examples of coping with disasters

Tokcha Khudi is a private herder who was comparatively successful in saving his herd from complete loss during the 2013/14 icing events. Because he was able to reverse the usual north-south migration of the herd in the autumn and abruptly drive his herd back to open land not covered by ice-crusts (Fig. 7), he saved more than 1,000 of his 3,000+ animals. As a result, his herd mixed with several

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1. During fieldwork in both autumn and spring, Stammler witnessed three big icing-over of pasture events, in 2006, 2013/14 and 2019.

2. For instance, https://www.washingtongpost.com/news/morning-mix/wp/2016/07/28/anthrax-sickens-13-in-western-siberia-and-a-shawed-out-reindeer-corpse-may-be-to-blame/ (accessed 10 April 2020).

3. Official numbers do not exist on this, as nomads consider disaster-related sedentarization as an embarrassing defeat. Moreover, official nomads qualify for monthly regional government support, which sedentary people do not get.

4. Golovnev (2017: 46-47) gives a detailed description of the official anthrax outbreak response in 2016, and of past Nenets traditional responses.

5. Yura, Ivanova’s fieldnotes, 25 March 2020.

6. Order 402 of the Russian Ministry of Agriculture, 22 Oct 2014, Article 21.

7. Such news is not usually reported in state media, but is circulated via social networks. This case was documented on https://fishki.net/photo/2949641-politsiya-zamala-netav-tadibe-iz-za-vstrechi-olenovedova-i-rybakov-v-tundre.html (accessed 08 April 2020).
other private herds about halfway between the Portsy Yaka trading post and the big Yaro-to lakes (Fig. 7). While mixing herds during regular grazing is often considered to be the result of poor herding work, during this icing disaster, herders widely approved of the practice as an emergency response.

The 2016 anthrax outbreak was just 75 km northwards along Tokcha’s route, at his calving grounds (Fig. 7). Tokcha knew this land exceptionally well, as his ancestral landmarks along his clan’s cemetery were in the same area, as were his winter pastures up until 2010, when he began changing his migration to the forest zone with more lichen-rich pastures. Like other rich herders, Tokcha thinks that those who become ‘lazy’, stay too long with their reindeer on the same pastures and do not move away from bad areas swiftly, and partially responsible for their losses, and also for the degradation of pastures (see also Laptander 2015). This points to Tokcha’s confidence in his own ability to manage natural disasters. His experience appears to have given him the feeling that his strategy was right.

On the other hand, a neighbouring herder, Vitaly Laptander, recounts how he had 4,000 reindeer before the icing events in 2013/14 and 2016. He was already too far south when the icing hit and could not turn back north to escape the iced area as Tokcha had done. In the following summer, his camp was in the centre of the anthrax outbreak area. He remembers how the biological defence forces of the Russian army came, and how nomads had to burn their household belongings.4 However, the armed forces allowed them to keep the wooden parts of the chum, as well as their sledges. ‘Just’ the dead reindeer – officially 2,572 (Yasyukevich 2018) – and their belongings had to be burnt (Figs 8 & 9). Nonetheless, as of 2020, Vitaly was still a nomad. Since 2016, his migration area has not been that hard hit, and he had not been limited in extent, allowing his herd to recover.

By contrast, Yura had to give up nomadic migration. His herd ended up being decimated, dropping from 900 to about 200 reindeer. He now lives temporarily with Tokcha’s daughter’s family, making sledges to sell to other herders (Fig. 6). He remembers: ‘we were crying. I still can’t calm down my wife. I want my 18-year-old son to become a herder. But I don’t know how. Instead, he is fishing now.’ Unlike some of his fellow herders, he did not get state support after the disaster, as this was reserved for herders who had less than 150 animals left. Herders who were working with herds owned by the municipal herding enterprise got a snowmobile as immediate support to assist in the search for appropriate pastures and to move camps when reindeer were too weak to pull sledges. But none of our three herders qualified for that support.

The limits of coping with natural disasters

Herders emphasize that such natural disasters are well known, and traditional responses to them are passed down through the generations (Golovnev 2017: 46). Elders remember that icing events used to happen only once, or at most twice, in a herder’s lifetime (see also Golovnev 2017: 41). However, the exceptionality of these events since 2006 lies chiefly in their increased frequency (2006, 2009, 2013/14, 2016, 2018), their cumulative effects and their coincidence with industrial expansion and changes in legislation. The years 2013/14 were especially bad, when immediately after the freezing, snowfall buried valuable lichen on winter pastures deeper than the length of a reindeer’s leg (Fig. 10). The state only compensated a few herders for their losses in 2013/14 and in the 2016 anthrax outbreak. Given that it takes 5-10 years to recover from a decimated herd – depending on the condition and the extent of the loss – it is the relentless repetition of such disasters, rather than one single event, that has dealt such a lethal blow to the nomadic lifestyle.

Traditionally, fishing was a crucial means to survive reindeer loss, as herders could restore their herd through exchanging fish for live reindeer. This pattern was recorded in ethnographies of the early 20th century (e.g. Evladov 1992) as well as in recent fieldwork. Yura’s son’s attempt to fish for reindeer follows that tradition. However, fishing for whitefish is now prohibited, even for indigenous peoples.6 Yura explains how recently, one tundra dweller was caught by the authorities and fined 1.2 million roubles (£13,500). As an ex-nomad without work, he would only be able to pay that fine through more illegal fishing – a vicious circle. The fishing ban has exacerbated the consequences of natural disasters for Nenets nomads significantly, to the extent that it has sparked open opposition. In April 2019, the police forbade an assembly in the tundra, when nomads gathered to request permission to fish from the regional authorities. The organizer, Eiko Serotetto, was fined.7

Thus, the law restricts many of the customary ways that nomads would usually seek to restore their herds; meanwhile, the absence of shamans means they are also unable to access spiritual guidance to help work out potential solutions to these problems. Also, the usual nomadic response to emergencies – avoiding dangerous areas by withdrawal to the tundra – has become increasingly tricky. Here, herders would revert to a pattern that Godelier (1979: 151) has described as ‘abstaining from presence’, i.e. ‘negative cooperation’ (ibid.), whereby they would avoid pastures currently used by others, a practice the Nenets also adopt to prevent herd mixing. However, greater territorial regulation by the Russian state alongside industrial expansion has meant that the nomads can no longer employ this strategy: staying away from settlements or avoiding contaminated areas has become impossible. Effectively, man-made restrictions, such as laws, prevent the nomads from recovering from disasters in traditional ways. As a consequence, Nenets may perceive that powers more alien to them than natural or even supernatural forces are threatening the continuation of their nomadic lifestyle.
Fig 8. Reindeer being burnt on the migration route after the anthrax outbreak, summer 2016.

Fig 9. Reindeer herder handing in his clothes to the bio-defence forces to be burnt to stop anthrax, 2016.

Fig 10. Yura and his son inspect the snow depth, when, right after the icing of pastures in 2014, deep snow made the lichen grounds almost inaccessible to the herds that had survived.

Fig 11. In March 2020, taxi delivery services to the roadside were especially in demand, as herdsmen tried to avoid Covid-19 and come to town for their shopping before the spring migration.

Fig 12. Even petrol: here, 400 litres for Tokcha’s camp’s snowmobiles to be delivered by taxi to the roadside, March 2020.

Fig 13. Newly built houses in Yamal villages (here Panaevsk) ‘just in case’. In 2019, many herdsmen had to park their sledges in town instead of migrating, as their herds became too small after a decade of disasters, May 2019.
Reinterpreting causes: The rise of conspiracy theories and ‘evil forces’

*Veyavko po* (bad year, see also Golovnev 2017: 41) is a Nenets generic term for disasters, which includes their cumulative concatenation. Our discussions with herders in the tundra during the peak of the Covid-19 crisis convince us of their increasing concern over the severity of the cumulative effects of multiple disasters. In the past, there was usually enough time to recover between separate disaster events. Disaster responses would follow indigenous ways of knowing the land, the flexible movement of humans and animals, ‘abstaining from presence’ and cooperation (Stammler 2005 chapters 3, 5 and 9): these could all help to prevent the collapse of the nomadic lifestyle. Now, the consequences are so severe that nomads no longer believe that only environmental forces could have caused them. The news of Covid-19 as a new worldwide evil and the fear of it spreading to the tundra brought to prominence conspiracy theories surrounding this and other disasters. Nomads presented us with the evidence that had informed their responses to three recent *veyavko po*, none of which they see as purely natural phenomena:

1. The icing of the pastures in 2013 did not occur just because of rain. A poisonous liquid must have been poured over large areas of pasture, which would then have frozen over. The reindeer would lick this poisonous ice and die immediately. When the icing appeared in the autumn, many reindeer were well fed and strong. You would see among the carcasses such well-fed reindeer, so it was clear that their death was not because of starvation on iced pastures.

2. Likewise, what was referred to as the anthrax outbreak must have been poisoned by order from above. The elders have told of earlier outbreaks of *posa khabche* (death after swelling disease) when people died from eating meat from sick animals. This happened from different mega mines that were built. This time, many people ate that meat in the contaminated area, but they did not die. One grandmother, who was reported to have died from anthrax in the media, passed away from a stroke. Over the year that followed, you could observe how they pulled drill rigs to underground later. Herders were so sure that this was not anthrax, that some avoided the vaccination in subsequent years by hiding from the vets. ‘Some reindeer get weak from the vaccination and die. Why should we vaccinate if there was no anthrax anyway?’

3. Something that has paralyzed the planet so severely as the Covid-19 outbreak could be the work of a mysterious world government; such powerful informal rulers benefit from multiple deaths, economic downturn and immobility. The lockdown has been the worst part. ‘Look, we live our life free here. No one gives any orders. We are our own masters, we work hard, we move and we like it.’

The authors witnessed how widely the idea travelled across the tundra that the anthrax outbreak was fake and that the ice on snow had been poisoned: the nomads believed that they and their herds were being poisoned to reduce the number of reindeer and people as the area was needed for industrial expansion. Moreover, this was seen to provide the authorities with an opportunity to demonstrate the effectiveness of their disaster response, which included the provision of compensation packages for herders, the deployment of biological defence forces, the reorganization of Nenets’ land use and an upgrading of their village infrastructure. During a privately organized reindeer race in March 2020, conversations relating to the Covid-19 pandemic seamlessly continued this conspiracy line of argumentation. Herders’ opinions on the lockdown by order from above revealed how any restriction on movement is seen to attack the heart of Nenets nomadic life.

In response, the herders voluntarily applied traditional disaster management strategies to Covid-19: they ‘abstained from presence’ by avoiding going to settlements and ordered deliveries of food and petrol supplies to be sent to the roadside, where they could pick them up and transport them back to their camps (Figs 12 & 13). According to the herders, icing and anthrax were fabricated to reduce the number of people in the tundra, and this year, Covid-19 would have the same effect.

As one herder remarked: ‘did you notice how they have been building new houses in the villages all the time? In the Soviet Union, many nomads did not have any housing in town. Now they want to provide housing for everyone. Of course, we benefit from this. But they do this “just in case” if suddenly the nomads cannot migrate any longer and need a place to stay in town’ (Fig. 13).

We do not undertake to judge the truthfulness of such statements. Rather, we highlight how they influence actual behaviour. Unlike Panchenko (2016), we are hesitant to call this a theory, because the nomads do not see it as such – they see it as truth. We also consider this to be different from ‘conspiracy talk’, which refers to a variety of different people’s opinions on the underlying causes of certain events (Rabo 2014: 214). Instead, among the nomads we spoke to, we found one, consistent explanation that treated all recent disasters as a chain of interlinked events. This herding of different notions of what constitutes a disaster: a process or chain instead of an isolated event, as Lavrillier (2018) also observed among Evenki herders in Siberia.

Conclusion

Nenets used to turn to the spirits to explain earlier disastrous events. Now they agree that their loss of the shamans (*tadibe*) has led to spiritual uncertainty. Without *tadibe*, sacred sites are not being maintained, religious items in people’s sacred sledges (*khkehe khun*) and *chums* are not renewed and exchanged as they once were. In the past, the *tadibe* would be consulted to find out what people should do to prevent or respond to disasters. Now that path is closed, and the state cannot fill this vacuum, because state advice or guidelines are based on a sedentary logic, with villages in mind. The perception that houses are being built in villages for nomads ‘just in case’ is a clear sign of this and also relates to the conspiracy theory that evil forces want to reduce the number of people in the tundra. Thus, notions of conspiracy do not duplicate religious ideas here, as Panchenko (2016: 160) suggests, but they compensate for an absence of spiritual dialogue.

Notwithstanding the concatenation of disasters, the self-confidence of many Nenets is unbroken. There are still many successful herders in the tundra, and the nomadic lifestyle remains popular among the younger generation. Therefore, we argue, these nomads are convinced that they can shoulder climate-related disasters. However, when their capacity to practise ‘abstaining from presence’ becomes restricted, they start to believe that only a human conspiracy can deprive them of their land or reduce their herds. We suggest that this change in perception from the spirits to conspiracy may occur in other societies too, when people are deprived of access to the spirits who can guide them through disasters.●