Architectures of domestication: on emplacing human-animal relations in the North

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This article explores human-animal relationships in the North by calling for a fresh examination of the infrastructures and architectures which inscribe them. We draw attention to the self-limiting quality of Arctic architectures which are designed to emphasize mutual autonomy. This approach challenges models that would create a crisp, clear separation between domestication as constituting a form of domination or a type of mutualism. By describing several key infrastructures of domestication – of tethers, enclosures, and traps – we hope to draw attention to the silencing of these domestic inventories. Revisiting the metaphor of the *domus,* we focus on the lands where these relationships are elaborated, re-linking Arctic architectures to places of encounter. Drawing on in-depth fieldwork mainly from Northern North America and various sites in Northern Eurasia, we present an ethnographically informed account that stresses the nuanced way in which strategies of control are blended with those of care and comfort, creating unbounded homes that are good to live in.

This article explores human-animal relationships by examining the architectures inscribing them. Challenging stark dichotomies wherein domestication is seen as necessarily dominating, or at heart mutualistic, we propose an ethnographically informed account focusing on strategies of control, but also on those of care and comfort, which are delineated by evocative objects and structures. By paying attention to the material architectures of domestication – of tethers, enclosures, and traps – we highlight the silencing of domestic inventories. Rather than assuming that a single bridle dug from a Neolithic excavation, or a fenced enclosure in the taiga, 'stand for' the dreary domination of human over animal, we are asking readers to take a second look to imagine these artefacts as pointing to an architecture of relationships.

Our examples come almost exclusively from the North – Northern North America and Northern Eurasia – and this is for several reasons. Within the regions of the world where domestication has been interrogated, there has been a surprising overemphasis on places such as the Near East, China, or the temperate zones of the Americas as so-called 'centres of domestication'. The dominant narrative has been that domestication – as if it were a standard recipe – was achieved once in a particular place, and then spread to other parts of the world. This fairy tale of how physically distinct dogs, maize, or horses colonized the rest of the planet has been shown to be

over-exaggerated, but also to have an uncanny ability to stick in people's minds as a heuristic (Gamble 2007; Terrell *et al.* 2003). The Arctic, by contrast, has traditionally been a place where pre-fabricated domestic forms – even if they are imported – never seem to take hold. Arctic dogs are always thought to have been bred elsewhere, to have diffused to a particular place, and then to have lost their distinctiveness by interbreeding with wolves (Lee *et al.* 2015; Mannermaa, Ukkonen, Kristiina & Viranta 2014; Park 1987). Similarly, reindeer and caribou, signature species of northern climates, are often only seen as 'semi-domesticated' (Takakura 2010; 2015), or at best objects of management, at risk of introgression (Larson & Fuller 2014: 118; Røed *et al.* 2014; Vigne 2011). Northern domesticates are mostly seen to be hybrids and poor copies of better examples of pure types found elsewhere. There are many reasons for this enduring anomaly. One may be the fact that, in the words of Hiroki Takakura (2010), Northern people cultivate 'familiarity' with all animals, wild and tame, creating the impression that Northern domestic animals are less committed, and therefore less dominated/domesticated. We would like to suggest that this perceived lack of commitment is in fact a marker of a strongly resilient style of human-animal relationship, which respects the autonomy of the domestic form. Domesticity, therefore, cannot be read off of bones and bodies – within speciation – but must be read within the environments that both animals and people respect (Hey 2006; Mallet 2008). Northern environments, in turn, are delineated by their slight but significant architectures. We do not understand architectures of domestication in the classical sense as fixed and static buildings, designed and constructed by humans alone. Such definitions separate human agency from that of others. We rather see such architectures as inscribing the activities of both humans and animals in the places where they encounter each other.

The literature on domestication has enjoyed a significant revival, and that of the anthropology of domestication has been no exception (Lien 2015; Stammler & Takakura 2010; Stépanoff 2012; 2015; Willerslev, Vitebsky & Alekseyev 2015). The tone of the debate has been fundamentalist in the sense that many argue that a closer reading of human-animal interactions might help cure anthropology of its implicit evolutionary tendencies. There has been an oddly ironic quality to some of the studies. Much of the debate has been reinvigorated by the movement to identify an epoch of ecological domination known as the Anthropocene, where the dominance of sedentary and industrial forms of production is seen as both human-generated and yet strangely unavoidable (Cassidy 2012; Lövbrand *et al.* 2015; Moore 2016; Steffen, Grinevald, Crutzen & McNeill 2011). In Lesley Head's (2014) gentle critique of this literature, he notes that many studies deflate triumphalist narratives of progress only to retain their fatalistic unilinearism. Echoing this tendency are a recent set of post-humanist studies which argue that any relationship humans might have with animals is always dominating, and the truly liberating stance is to advocate a new set of fortress-like conservation refuges informed by philosophies of 'edenic science' or 'rewilding' (Knight 2000; Linnell, Kaczensky, Wotschikowsky, Lescureux & Boitani 2015; Robbins & Moore 2013; Tsing 2013; Wuerthner, Crist & Butler 2014). At the same time, in neighbouring laboratories, some scholars have reanalysed the genetic architecture of species commonly thought to be domestic and have come to promote complex models of mutualism and co-domestication. In these accounts, animals move between physically altered 'domestic' forms and 'wild' or feral forms without any necessary single point of origin (Larson & Fuller 2014; Vigne 2011; Zeder 2012). However, even this detailed literature often reintroduces the same directionality at a different level. A prominent

recent example is Melinda Zeder's (2015) sophisticated summary where she reserves the term 'domestication' to apply to instances where the control of reproduction and care of one organism over another increases the mutual 'fitness' of both the domesticator and the partner organism. Her definition is unique and inspiring as it tracks a mutually beneficial relationship. However, it leans on older ideologies by requiring a measurable 'documented' change in the physical and/or genetic form of the plant or animal (Zeder, Smith, Bradley & Emshwiller 2006). The ironic quality of this debate extends to studies that are overtly critical of human exceptionalism. Although some might argue for symmetry in describing agents and material assemblages (Olsen 2010; Witmore 2014), they often unintentionally reintroduce human exceptionalism by silencing 'the wrong type of nonhuman' – the agency of sentient animals being a case in point (Ingold 2012: 429-31; 2013: 14-17). These studies, whether they advocate a 'new materialism' (Bennett 2010; Witmore 2014), a 'new animism' (Costa & Fausto 2010; Descola 2013), or a form of 'ontological pluralism' (Holbraad & Willerslev 2007; Kohn 2015), tend to advocate, perhaps unintentionally, a flat universe where the highest vantage-point is that of the isolated academic expert. Within the literature on Arctic reindeer herding societies alone, there has been a vigorous debate advocating 'symbiotic domesticity' in the way that reindeer and humans attend to each other (Beach & Stammler 2006; Stammler 2010). This variant of mutualism has the strong advantage of suggesting that each community in the symbiosis retains its own identity and autonomy. However, as Charles Stépanoff and his colleagues have argued recently (Stépanoff, Marchina, Fossier & Bureau 2017), this totalizing biological metaphor collapses those interesting points of tension and discontinuity sitting in between domination and mutualism which ethnographic analysis can capture.

While aspects of all these debates are apt, we think that an important point has been missed by the focus on terminological and methodological puritanism. While it may be logically plausible to attribute equal agency to all things, this strict method describes a rather barren landscape where neither exceptional human interests, nor those of concerned animals (or things) break the entangled horizon. Without insisting that man is the measure of all things, it is possible to imagine a more ecological engagement with the world – where the land, things, animals, and human persons together call attention to meaningful situations. In this study, we use ethnography to focus on exactly this transitional ground – a space where more than one animal creates convivial places which are good to live in.[1]

Emplaced domestication as a co-specific *domus*

There have been several studies which have pointed to the importance of understanding landscapes that tie many different species together in relationships (Anderson 2014; Berkes 2008; Johnson & Hunn 2009; Terrell *et al.* 2003). We argue that this locus of relations could be usefully signified by the Latin root of the term 'domestication': *domus*. The term '*domus*' has been used in a wide variety of contexts, some of which are contradictory. Most recently, it has drawn the attention of advocates of Actor-Network Theory as a synonym for the assemblage where human-animal relationships are housed and performed (Lien 2015; Lien & Law 2016; Swanson forthcoming). It was cited prominently by Ian Hodder (1990; 1998) as a kind of compartmentalizing intuition that characterized the minds of humans during the European Neolithic. Hodder traced how prehistoric Europeans structured space within built structures only after creating symbolically separated domains of the home and the wild in their

minds. His symbolic *domus* was criticized for the way that it exempted humans (H.M. Leach 2003: 358) and for the way it surgically extracted houses from their broader civic settings (Davis 1992). Harsher criticisms come from literary theory, where the *domus* is associated with a 'bucolic' rural ideal that underwrites violent forms of nationalism (N. Leach 1998; Lyotard 1991). The puritanical positivism of these critiques incites us to close our eyes to one type of complex environment – an environment of people, tethers, forests, animals, and glaciers – and to refocus our attention, for example, on a less diverse entanglement where there are simply more human persons milling about. By contrast, an ecological approach might focus on how the attention of many different species, and the artefacts of that attention, come to work together in a particular setting – a co-specific *domus*. Here there would be no need for an urban scholar to poll the interests of thousands of denizens, or a New Materialist to speak on behalf of an assemblage of things. In the introduction to an influential volume on domestication, Rebecca Cassidy and Molly Mullin (2007: 14) called for ethnographic attention to the spaces where domestication takes place. For the examples to hand, these spaces would not be Hodder's trapezoidal, roofed enclosures but a steep-sided valley, or a simple rope barrier, which subtly but effectively circumscribe Northern settings. If one were to relax the dualisms of Hodder's initial intervention, his search for long-term symbolic continuities in specific co-constructed settings would serve us well as a metaphor to describe the places where Arctic humans and animals meet.

Admittedly, most European languages are lexically poor for terms which blend evocative notions of place with multispecies perception. By contrast, many circumpolar indigenous languages have terms which speak to the mutual recognition of place by multiple thinking entities. Gwich'in in Northwestern Canada speak of the landscape around them as 'country' – a gloss for a *domus* recognized by a multitude of beings (Wishart 2004: 81). In her classic ethnographic survey of the southern Yukon, Catherine McClellan (1975) adopted the creole English of the local people to describe hunting camps with the militaristic metaphor of 'headquarters'. It is well known that Inuit naming traditions mix personal identity and landscape with the suffix -*miuit* (Collignon & Müller-Wille 2006). Reindeer herding Nenets have a unique gloss on the word *ilebts'*, which can mean both wild reindeer, life, and the dwelling – a gloss that stresses an intersection of sustenance with residence (Tereshchenko 1964). Eastern Siberian Evenki name comfortable hunting and herding places as *bikit*, literally as 'a place of being', but metaphorically as the place where the interests of humans and animals intersect (Brandišauskas 2012).

The elision of being and place is sometimes better described through examples. Konstantin Klokov (2011) has developed Lev Gumilev's idea of the 'sustaining landscape' to describe how animal activity is wrapped together with the social and economic goals of human residents. In his detailed example of Nenets Arctic fox husbandry, he documents how Nenetses used their knowledge of how to find Arctic fox warrens with their understanding of the fox's periodic demographic explosions to encourage the animals to stay in the camp. In his account, early attempts by nomadic Nenetses to rear foxes were seen as elaborations on the knowledge required to encounter them in the places they frequent.

Domesticates, too, can become landscape architects. In Northern Canada, Vuntut Gwich'in who keep working dogs describe how the dogs themselves transform the landscape of the camp. The tethered dogs create deep circular imprints on the land.

Figure 1. Doggy architecture at a fish-camp at 8-miles on Porcupine River, Yukon. (Photo: P. Loovers.)

These open spaces are interpreted not as artefacts of confinement but as a creative action. It is thought that the dogs keep a clear space so that they are better able to smell, see, and understand the country around them.

Landscapes cultivated by animals may also include built-up, urbanized settings. Bente Sundsvold (2010; 2015), in her long-term study of North Norwegian practices of 'bird care' (*fuglepleie*), describes the way that people manage village environments to attract economically important eider ducks. The centuries-old eider down industry in Northern Norway is built around an ethic of mutual respect which placed demands on humans to modify their own behaviour, as well as to set aside built structures for the wildfowl. Properly appointed places attract the eiders such that in a particular season the human settlement itself doubles as a bird *domus*.

One of the most passive and elliptical relations, that of fishing, also requires an intimate knowledge of being and place, including submerged geographies. Fishing entails an experimental approach: being willing to move nets and to vary their depths. Gwich'in 'read' the surface of the water for clues as to what lies below, and therefore the places where fish 'feel right at home'. The river has its own architecture: its surface slows to show where the pools are, speeds up to show the riffles, boils up to show submerged obstacles, and turns back on itself in eddies. Sizeable eddies attract large numbers of fish to rest in the back-water, suggesting a good place for Gwich'in to set up fish camps – some of which remain stable over several years (Slobodin 1962: 58-9; Wishart 2014). The camp's architecture is complete when smoke houses and drying racks are set up, as well as the corresponding doggy architectures described earlier – all of which are placed in easy access of the river (Fig. 1).

Emplaced relations also involve sensitivity to aerial spaces. Falconers keep an eye on atmospheric conditions when they interrelate with their birds. As with many forms of Northern domestic practice, it is crucial that falcony birds maintain a certain degree of autonomy: that they learn to fly freely, without any material constraints, while still maintaining attention to the human hunting assistant on the ground. Working together with an airborne creature, therefore, necessitates becoming attuned to birds' way of being, always in relation to the ever-changing environmental conditions in which they are emplaced.

Various forms of pastoral architecture in Eastern Siberia are built on a similar principle of not dividing animals from people but of building relationships. Vladimir Davydov (2014*a*; 2014*b*) describes reindeer herding architecture as a 'social frame' which intensifies the relation between people and animals. In his account, herding structures are never complete but constantly adjusted to make them fit the weather and land conditions. Among Zabaikal Evenkis, he draws attention to the 'narrow places' (*uzkie mesta*) where rocky ridges serve as natural borders to bring people and animals together. He cautions, though, that taiga dwellers, be they people or animals, are not tethered to one narrow place. Instead, they employ a patchwork of places, some of which are naturally enclosed, while others might be enhanced by a fence or a smudge structure. Reindeer architecture, then, is a form of pragmatic attention to the environment that is never separate from it.

Tethers as social infrastructures

In one of the most powerful heuristic statements on the subject of human-animal relationships, Tim Ingold (1994) drew a distinction between trust and domination. Here he controversially inverted the Neolithic stereotype wherein the hunter was a savage consumer of animal flesh and the pastoralist a gentle cultivator of stock. In his mirror image, the pastoralist abrogates trust and denies the autonomy of his or her charges. In perhaps one of his more widely quoted examples, this inversion of care is illustrated by the tools of the pastoralist:

> The instruments of herding, quite unlike those of hunting, are of control rather than revelation: they include the whip, spur, harness and hobble, all of them designed either to restrict or to induce movement through the infliction of physical force, and sometimes acute pain (Ingold 1994: 16-17).

Ingold's inversion famously drew attention towards the subtle ways in which hunting peoples interact with the environment around them, but perhaps had the unintended consequence of turning the material attributes of pastoralism into univocal symbols of human mastery (see Knight 2012 and Oma 2010 for opposite arguments). How could hobbling or harnessing intend anything other than to restrict the horizons of a free-ranging beast?

In the hands of a clumsy herder, perhaps those of an apprentice anthropologist, a harness or lasso could indeed inflict a lot of stress on an animal. However, this need not necessarily be so. Much like the classically dialogic objects of the philosophical tradition – be they Heidegger's hammer or Merleau-Ponty's blindman's cane – objects wielded properly become an extension of at least one mind signalling intention as well as, sometimes, force. The lasso can extend the reach of a herder to touch and guide the attention of a companion animal, as much as it might restrict or halt an unruly one. For example, Terhi Vuojala-Magga (2010) gives a wonderful account of how a tether both restrains and enables humans and reindeer, teaching humans and reindeer how to walk together. Similarly a falcon's hood can be employed to induce a localized environment, perhaps confining, but also calm and secure. When they work well, these become unobtrusive and assumed – what Heidegger might describe as 'inconspicuous domination' (Braver 2014: 45). Rather than being best seen as devices that only deliver an ultimatum, hoods and tethers are 'boring' infrastructures which create relationships (Star 1999). They unobtrusively help two specific personages to focus their attention towards a singular project of thriving in a particular place. In a pluriverse of noisy

entities – of wind, overflying aircraft, or a creaking, fire-scarred forest – these social infrastructures help two creatures avoid distraction and concentrate on the task at hand.

Small-scale taiga reindeer husbandry is a good case in point (Beach 1981: Ingold 1980; Vasilevich & Levin 1951). Within a foraging camp, the key domestic animals (reindeer, dogs, horses) are habituated to the camp but not dominated – or at least not dominated in the way that their sense of initiative and compass of movement is restricted. Although in each camp, and in each region, there is a complex yearly round, a typical snapshot from a day in the life of the herdsmen is waking, drinking tea, and then setting forth into the forest to call out for the animals and to 'bring them back home'. Arriving at camp, which may or may not have a reindeer corral enclosure, the reindeer are given some time to rest or to forage. The herders might then walk slowly and calmly about the herd, collecting animals to harness. Some 'learned' well-habituated animals might allow a familiar human herder to approach and to lead that animal away. Others might have to be enticed or captured. However, even in the most extreme cases, amongst these intensively habituated herds, once a lasso is thrown and makes contact with the animal, the reindeer will often stop suddenly, not struggle, and wait patiently for the herder to approach. The lasso in these cases serves to communicate that a specific reindeer has been called out from reindeer society to participate in a particular task within the co-specific *domus* community.

There are, of course, exceptions to this harmonious picture. Within well-habituated herds, the lasso might fall by accident on a yearling calf – a young, naïve 'unlearned' animal – in which case the herder has the double dilemma of how to retrieve the animal, and the lasso, without breaking the leg of the young animal. Within a taiga, now fragmented by resource extraction industries and urban spaces, there are also herds where the reindeer are not so very well habituated to their human hosts, or where the herders are frequently absent. In these cases there might be more struggle in retrieving the animals with a lasso, or indeed one might have to use a rifle to harvest a completely wild member of the herd. In these industrializing settings, the tools of reindeer husbandry appear more like the textbook cases of domination since the relation between people and reindeer has become fraught. The tools are thus employed to rebuild it.

Evenki herders tend not to speak about 'breaking' a reindeer but rather about 'teaching' it. A learned reindeer is described as an animal who 'knows the rope' – knowing being a broad category closer to that of 'understanding' than to that of 'submitting to'. In a setting where human persons and reindeer persons understand each other well, the material artefact of the tether – be it lasso, head-harness, or neck-tether – can be used to indicate direction or to focus attention on a mutual task. The tether will allow the human person to indicate a sense of setting – a microecology – for standing or being together for some time in a circumscribed landscape. The relation is not strictly symmetrical – as few things are. If in the taiga, the humans are obliged to move their camp season by season in order to accompany the reindeer to places where they are more comfortable, in the open tundra the people struggle sometimes to keep up with the animals who move on to new foraging sites every few days. In this sense, the fate of the people is tethered to the well-being of the herd. This sort of collective tethered fate is relational and metaphorical. In the archaeological literature, it has been documented and described as 'herd following' for North American Inupiat and Dene people, who attend to so-called 'wild' caribou herds (Burch & Blehr 1991). In a more colourful restatement of the same, Charles Stépanoff (2015) builds on the often-cited

Figure 2. Human-reindeer-dog tethered triad. (Photo: V. Davydov.)

example of a 'reindeer revolution' to capture the moment when people are forced to read the instincts and 'desires' of the animals rather than to bend the animals to their own life-projects.

Tethers sometimes connect groups of domesticates. Within Evenki forest pastoralism, there is perhaps no better example of communicative tethering than the hunting triad of dog-reindeer-human (Fig. 2). In Eastern Siberia, reindeer are kept to hand for many forest-dwellers in order to facilitate the hunt for sable. In this hunting triad, a hunter will ride atop a reindeer in the early winter with a hunting dog tethered to the side of the reindeer saddle. The dog leads the triad, tracing the scent and trail of the sable. When a sable is detected, the human releases the dog, who follows the sable's twisted trail until he discovers the animal in a tree. The human/reindeer team catches up. The human shoots the sable, sharing the meat with the dog and saving the fur. The tethers which connect the triad first allow the dog to guide the man and the reindeer, and then allow the man to guide the reindeer. Similarly, in the reindeer's mind, the tether helps him to distinguish between two settings: one where he might flee from that very same dog during the daily round-up and one where he understands that he is being called upon to perform a specific task.

In Gwich'in country, the relation of animals to tethers is inverted. Dogs have generally come to be tied down in this region of the Canadian Arctic following a long history of colonial regulation by government authorities.[2] Yet Gwich'in who have taken up this governmental practice do not describe it as a form of domination but rather as an accommodation for 'keeping dogs near'. They experience it as a quality of care whereby people ensure that the dogs do not get into mischief or get preyed upon by wolves. Gwich'in dog mushers often state that the 'dogs work for them and they work for the dogs' (Loovers 2015). As a case in point, while training a young pup to harness, the pup is tethered to a more experienced dog so that 'he learns to run'. Here, too, the emphasis is placed on learning and knowing the task that lies ahead. Harnessing concerns an inter-dog pedagogy as much as an interspecies human-dog relation.

In the case of falconry, tethers, leashes, and the so-called 'lure' are essential for mediating and structuring human-bird collaboration. To interpret them simply as

instruments of domination would be to eclipse the 'tools of communication' (Schroer 2015) that enable human and bird to become attentive to each other. Birds learn to interpret the use of various forms of tethers according to the context in which they are employed, and their meaning changes with time and growing experience. In order to secure birds, falconers use so-called 'jesses' – thin leather straps made from soft but durable leather – and a short leash attached to the jesses. Young, inexperienced birds are tethered most of the time while they are slowly introduced into routines. When birds are not yet familiar with their surroundings, it is said to be safest to secure them with tethers rather than leaving them unconstrained in an enclosed space in which they might harm themselves (i.e. break feathers). The act of tethering, similar to the use of the hood, becomes a framing device communicating the intentions of the falconer. Thus the tethers also enrol the humans, who will learn to discipline their bodies to be able to establish a communicative bond. Falconers often point out that it is the comfort of the bird that must come first, and it is the falconer who needs to adjust his/her movements and postures to those of the birds in order to ensure that this is the case.

These examples show that the tools of domestication – and especially those in Northern settings – cannot function, or at least do not function best, when they are instruments of simply imposing the will of a human master. In the ethnographic present, as perhaps in the archaeological past, dominating forms of tethering and enclosure which might be necessary in fraught social settings should lead to more inconspicuous and habituated forms. Through circumscribing the movement of not only the animal but also the would-be dominator, they have the effect of defining a setting where the two work together. When used well, they often have an unobtrusive quality, which contributes perhaps to their invisibility in the literature. Without tethers, harnesses, and lassos, the environment would indeed dissipate action and attention such that neither animal nor human could prosper. These instruments therefore serve as social infrastructures which define the spaces where humans and animals collaborate.

Enclosures: structures of comfort and of control

Beside tethers, enclosures are the most archetypically evocative set of structures that conjure a sense of control and confinement. Often built of heavy materials, and often featuring bars, they look like prisons. In the anthropological literature, enclosures occupy a privileged position. They establish boundaries which divide the domestic from the wild (Hodder 1990) and are often thought to signal property and ownership (Ingold 1980; Khazanov & Schlee 2012). In many temperate settings, the structures would likely be the ones that could be used to govern breeding – a marker of husbandry.

Fences and corrals are used in various forms across the North, but although they bear a superficial resemblance to structures of control (bars, boundaries, property markers), in most cases, as with the tethers, their structuring aspects are fleeting. In line with the general properties of co-specific agency described above, animals are not confined so long as to impede them from being autonomous agents in the environment – a quality craved by humans, animals, and arguably the environment itself. They would require regular feeding and a different kind of care – a type of care that would impair their ability to self-provision eventually.

The qualities of binding, control, and ownership in most circumpolar contexts do not fit well with the pragmatic aspects of animal architecture. As we have seen above, the structures themselves are designed to emphasize and improve upon structuring qualities within the landscape and are often experienced as continuous with and not

Figure 3. A Nenets lasso serving as an enclosure. (Photo: K. Klokov.)

separate from the environment. Beyond this, human agents will go to great extents to make enclosures comfortable and attractive to individual animals.

A case in point are taiga reindeer corrals – typically a large circular structure built of parallel, horizontal wooden poles used for a defined short-term purpose (Charnoluskiĭ 1931; Turov 1990; Vasilevich 1961). A 'marshalling' corral is used by many large-scale taiga herders typically in thinly forested alpine or treeline regions in Evenki regions of Eastern Siberia. Roughly 40 to 60 metres in diameter, it forms a waypoint in the daily round of a herd of up to 100 animals. The reindeer will be enticed into the structure with the promise of salt, which they crave in the late spring and early summer. Later in the summer, they will be drawn in with the smell of smoke, promising relief from insects. The animals, once they enter, will be enclosed by shutting the gate. Inside, various operations might be carried out, from veterinary treatments, to training, to selecting animals for harness. They typically will not be kept for more than a few hours – enough time to let the heat fall and allow them to forage peacefully in the surrounding valleys in the cooler early evening. Although some specific 'wild' animals might have to be chased into the structure, the majority of the herd recognizes and appreciates the structure 'as home'.

Some reindeer herding enclosures stretch the meaning of the word 'architecture' to its limits. In tundra reindeer husbandry, where the landscape is entirely devoid of trees, brush, or indeed any upright structures, the most subtle structure can become a barrier. Iamal peninsula Nenetses, both those who have large, intensely migratory herds and those who keep local herds, have the luxury and flexibility of stringing enclosures together with a single rope (Fig. 3). Typically a set of sledges, or even a group of kinsmen, can string a lasso between them, creating a thin band which to the eye habituated to the open horizon appears as a structure. Despite their superior numbers and strong bodies, the reindeer will group together and respect the line of this temporary structure while the human stewards perform their tasks. Again, as in all cases, this tether-enclosure is

Figure 4. A human conical lodge enclosed by a corral. (Photo: V. Davydov.)

used for a limited time and the animals are soon free to go about their own business until they are brought home again.

It should be remarked that many herders marshal together their reindeer without the use of an enclosure at all – although this is possible only with smaller and more intensively habituated herds. Often smaller groups of reindeer are brought home to the security and comfort of salt and smoke, and happily spend their days in their embrace, without the use of any enclosure whatsoever. In Sayan reindeer husbandry, human urine is also used to attract and keep reindeer (Stépanoff 2012). The architectural aspects of these settings are confined to the design and placing of the smudge fires, troughs, or exposed-tree roots which serve as vessels for the salt, or to provide shade. In a very few settings in southern Siberia one can find the logical opposite to a reindeer enclosure. Some Evenki herders will build a fence around their conical lodges in order to protect the privacy of the humans from the prying of the animals, who have free range around the camp (Fig. 4).

In all of these examples, the word 'enclosure' itself is more of an ironic term than an accurate description. These are not 'spanning' types of architecture, but represent an emplaced setting of familiarity where animals and people in a sense seek each other's company – a physical setting for a co-specific *domus*.

The metaphor of building companionship is stronger in the ethnography of falconry. According to Sara Schroer's study of falconry practice,

> the notion of bringing the animal under human control, in the sense of subduing it, is misleading and does not capture the view of taming as a mutual process that is emphasised by practitioners . . . One falconer put it clearly when he said that 'If you want your bird to like you and to co-operate with you, you have to train her by skill and not by force' . . . Being a 'proper' falconer means to be skilled and to work with a certain ideal in mind, which is to establish, through the taming of a bird of prey, the basis for companionship (2015: 86).

Figure 5. Falcons before being flown, wearing leather hoods to prevent distraction. (Photo: S. Schroer.)

The falconry hood – perhaps what at first glance looks to be one of the more incarcerating tools of control – is a type of enclosure which helps to focus attention between species (Fig. 5). The hood, initially a scary, unfamiliar object, becomes a welcome shelter from distractions and alarming sights. It also becomes a framing device of activities: put on the falcon's head, it indicates the beginning of a journey to go hunting, and its removal signals the soon-to-be-anticipated time of free flight and hunting. In this sense, then, material artefacts, integrated into daily routines, structure the social interaction between human and animals, though with comfort and security rather than force or threat.

Traps as places of encounter

The trap, unlike perhaps any other structure, evokes stereotypes of and anxieties regarding human exceptionalism. Within anthropology, Pascal Boyer (1988), Alfred Gell (1996), and Pierre Lemonnier (1993) have raised it prominently as a site where human craftiness is congealed into a structure which outwits an animal. Within Gell's (1996: 22) programmatic statement, a trap, like a work of art, 'embodies intentionalities that are complex, demanding of attention' and 'reward' scrutiny. For Lemonnier (1993), the eel trap is an evocative and symbolically rich site where ritual worlds dualistically

coexist with material efficiency, representing what he describes as 'resonance'. What is striking about the ethnography of trap-making – like that perhaps of the domestication relationship itself – is how ingenuity and domination are tied up into a tidy heuristic package. The mechanism of the trap itself is represented as a fixed structural form predestined to deceive. It is further striking how thin ethnographically these three classic examples are, moving quickly from a description of place and form to a discussion of art and ritual without much discussion of the pragmatic problems of running a line of traps or how one must tinker with, adjust, or adapt these devices to suit particular conditions.

In the settings that concern us here, it is often very difficult to distinguish a trap from a tether, enclosure, or indeed the setting where it sits. The trap is best interpreted as part of a continuum of design within various Northern architectures of domestication. As Tim Ingold describes for Finnish Saami reindeer herders, there is little structurally to distinguish a *suopunki* reindeer lasso from a snare or from a trap: 'a lasso becomes a snare when set and a snare becomes a lasso when thrown' (1993: 110). In his account, the difference between them is the intention or level of skill of the herder. As discussed above, the enclosure for a reindeer would neither attract nor hold animals if it were not made enticing, comfortable, and be 'baited', as it were, with salt, urine, or smoke. Even the more intentional intersections of humans and animals by means of a rope or lasso require a knowledge of terrain and setting to make them effective. It may also be significant in many settings that these structures are not linguistically marked as being devices of deceit. There are many different indigenous words for each process. Across Siberia, the older Russian word *past'* for a wooden structure that lures and pins down an animal puts the gloss on the idea of enticement. The more classic term *lovushka* literally translates as 'catcher' rather than a device of deception.

As some commentators note, especially Gell (1996: 27), enticing enclosures structure time in a specific way. They are efficient and useful since the designer does not have to remain present. The layout or mechanism will operate while the human host is away caring for other matters. One way to characterize this is a form of altered temporality where the masterful hunter-designer is able to read and anticipate the movements of an animal ahead of time and to build a structure to contain it. In these cases, his or her artistry becomes objectified into a purely physical structure, which can be admired. Such an interpretation does tend to glorify human intuition. Another, more pluralistic interpretaton might be to read into the design of the enticing enclosure a type of understanding of the environment that makes an animal feel comfortable. A trap might then be understood as device of encounter – in this case more of a comfortable place than a clever 'nexus of intentionality'.

Gwich'in trappers, for example, not only tend to discuss the design of specific trapping installations but, moreover, discuss how successful trapping requires a sensitivity to the places where animals will likely want to be. Counterintuitively, this does not always mean being subtle and trying not to leave signs of human presence. Some animals are drawn to places where humans have made what seem to be obvious architectural alterations to the land. Placing a snare within a small purpose-built shelter is one example, where it is said that animals will go into it because they are curious, because they see it as a possible home, or perhaps to engage with what humans provide in their life-worlds. For example, wolverines will explore a deadfall set because they are said to recognize it as human-built and to be searching for what people leave behind, even following human tracks for this reason. In Eastern Siberia, bear traps are deliberately designed to look like a log cabin. In each of these examples, we would like

to point out, there is an element of deceit which plays upon the learned expectations of the animal, and would frustrate their desires. In this case it would be wrong to claim that traps encourage mutualism instead of domination. Rather, they are effective when they play upon the signs and expectations which lie between these two extremes.

Aquatic rodents, of all the animals trapped in the North, have the most easily recognized built homes. Muskrats build physical lodges or 'push-ups'. Beavers alter the flow of rivers to create ponds for their own sense of a good home. Trappers must work with what they know about the preferences of these animals in order to encounter them. Although it is possible to set traps for them along known routes to their food sources, it is more productive to trap them by knowing the architecture of their homes and setting traps in submerged places where they will pass from their lodges to the water and back. In this setting, the idea is to encounter the animals by working with their own sense of comfort rather than enticing them with bait or making them curious to investigate a built structure.

Trapping, perhaps more than any other method of capture, has been positioned as thoughtless, cruel, barbaric, and the cause of great suffering. In anti-fur discourses, the trapper has similarly also been maligned as lazy, greedy, backward, and simple-minded (Wenzel 1991). These imaginaries decontextualize the multiple engagements with the life-world of animals and they hide the profound philosophizing of the trapper imagining the homes of others. Trappers will speak often of how they lie awake at night wondering if their invitation has been successful, whether the beaver will feel at home, trying to see the set from the perspective of their prey, and finally anxious to go to check the sets to see if they worked. As one Gwich'in trapper declared, 'You never get tired of that'.

The trapping of birds of prey for falconry practice also helps to elucidate the ecological knowledge of multiple viewpoints that go into the design and positioning of a trap. Trapping wild raptors on their migration has historically been practised largely in Russia and Scandinavia, where professional trappers caught birds to sell them on to falconers or bird collectors. Unlike traps that are used to catch animals for fur or food, the challenge of the falconer's trap is to catch a bird without any damage. The trap, as Ingold has noted, can here be seen as 'a kind of story in reverse, embodying in its construction an account of the movement and behaviour of the target animal' (2003: x). The skill of 'pulling a bird from the sky' requires awareness of the interrelationships between different nonhuman beings as well as of continuously changing environmental factors (Bodio 1984). Falconry traps in addition also integrate other animals, both as decoys (e.g. pigeons, owls, and tamed hawks) and as 'sentinels', according to whose calls and gestures the trapper gets alerted to the approach of a bird of prey (e.g. the shrike) (Lascelles 1971). Rather than understanding these traps as an expression of human hierarchy, as for instance suggested by Gell, falconers describe trapping as based on luck. The design of the trap, then, rather than emerging from a pre-formulated plan, can be understood as an improvisational construction that can only ever 'work' if placed within the right spot of a particular place and if the agency and perception of multiple sentient beings are taken into account'.

Conclusion

Studies of domestication have relied on stark dichotomies of domination contrasted to strategies of care. This article has explored the spaces of encounter between people and animals, created by the use of evocative architectures, which allow a variety of

relationships to be inscribed. Focusing on examples from across the circumpolar Arctic, and on the lives of peoples living with dogs, reindeer, fish, and falcons, we draw attention to the self-limiting quality of Northern architectures. We suggested that the design of these infrastructures is unobtrusive, such that one must struggle sometimes to draw attention to them. We argue that ethnography can help put an end to a tradition of silencing of these domestic inventories in a region where human-animal relationships do not easily fall into stark dichotomies.

While it is easiest to argue that the ethnographic record for these places is thinner than in other regions, we suspect that these somewhat less controlling examples of tethers, enclosures, and traps also point to a similar complexity in other parts of the world. Our snapshot ethnographic survey of this region suggests that the architectures of domestication here, and perhaps elsewhere, are often better described by how they facilitate communication rather than separate humans and animals into separate realms. Therefore, we have called for a re-examination of the term '*domus*'. In Hodder's classic work, the intuitions of dividing space were thought to appear in the minds of European Neolithic cultivators before they literally carved out those spaces with walls and fences. On the basis of this study, one wonders now how walls, fences, and tethers in these early European settings might have acted as structures of communication, or how spatial intuitions hovered likewise in the minds of the animals, at the same time as they occurred in the minds of the people.

This comparative study also questions models of human exceptionalism within anthropology, as well as neighbouring disciplines. It is deeply ironic that groups of scholars have tried to recalibrate ontological reflection symmetrically, or materially, only to redraw the same divisions and assumptions that they have self-consciously tried to replace. There is something uncanny in the way that ethnographic story-telling, at least in European languages, is only held to be convincing if it validates the critical insight of the story-teller rather than the place and the circumstance of the action. Critical, politically informed narratives have their place. However, ethnographically informed narratives must sometimes reach beyond the heuristic projects of symmetry and equality to explain how many agents work together in evocative settings to create the conditions for a good life. The uncanny need to decentre the home by describing it as a place of domination, or the domestic relation as one of control, drives our attention outward with the possibility to discover ever-new, perhaps more politically suitable environments. However, it also impoverishes our vocabulary when we try to write about settings which herders, falconers, and mushers, and their companion animals, experience as homely. Here we have tried to demonstrate how animals and people come together and move away from each other in a type of communicative dance that acknowledges the other but also maintains the differing preferences of the various participants who share a landscape. By directing attention to the architectures of domestication, it is possible to obtain a clearer view of the sentience and attention of the humans and animals living together, and the infrastructures which animate their places of co-residence.

[1] In this article we are using a broad definition of North which includes the Northern European part of Eurasia. Our ethnographic examples in this article are informed by long-term fieldwork by each of the authors in the following areas: Gwich'in Settlement Area, Northwest Territories, Canada (Anderson: 1985-7, 1996-8; Loovers: 2005-8, 2011-14, 2016; Wishart: 1998-2003, 2014); Vuntut Gwich'in village of Old Crow, Yukon (Loovers: 2013-14), Evenki villages of Kholodnoi and Chapo-Ologo, Buriatiia and Zabaikal Krai, Russian Federation (Anderson: 1987, 2013-14); falconing communities in the United Kingdom and Germany (Schroer: 2008-11).

[2] Oral history accounts among Gwich'in record that in the past dogs would not always be tied down. During caribou hunts, they would follow hunters unleashed into the mountains. After a successful hunt, the dog would carry a significant portion of the hunted meat in a specially designed pack together with his human partner.

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Architectures de la domestication : localiser les relations entre humains et animaux dans le Nord

Résumé

L'article explore les relations entre humains et animaux dans le Nord en invitant à réexaminer les infrastructures et les architectures qui les circonscrivent. Les auteurs attirent l'attention sur la qualité auto-délimitée des architectures arctiques, conçues pour accentuer l'autonomie mutuelle. Cette approche remet en question les modèles qui voient une séparation clairement tranchée entre la domestication comme forme de domination ou comme type de mutualisme. En décrivant plusieurs infrastructures essentielles de la domestication (longes, enclos et pièges), les auteurs espèrent attirer l'attention sur ces équipements domestiques largement oubliés. Revisitant la métaphore de la *domus*, ils se concentrent sur les terres oú ces relations s'élaborent, rétablissant le lien entre les architectures arctiques et les lieux de rencontre. À partir d'un travail de terrain approfondi, réalisé principalement dans le nord de l'Amérique du Nord et sur différents sites dans le nord de l'Eurasie, leur compte-rendu ethnographique souligne les diverses manières dont les stratégies de contrôle se mêlent aux stratégies de soin et de confort, créant des foyers sans démarcations où il fait bon vivre.

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Comment

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Theories of domestication often take the form of stories: they propose scenarios which relate the transition of animals and plants through the successive stages of wildness, commensalism, tameness, semi-domestication, and, finally, full domestication. Anderson and his colleagues' approach is entirely different: they describe domestication not as a chronological process, but rather as a spatial relationship, structured not by stages but by architectures, infrastructures, and convivial places. Among herders, falconers, fishers, hunters, and mushers, they demonstrate the existence of an unexpected continuum of a sense of a multispecies *domus*. They convincingly show that even traps imply such a sense. Yet is it conceivable that animals, in turn, catch humans in some attractive traps? Do such things happen only in mythology? In my article in this issue, I proposed that the processes that gave rise to reindeer pastoralism cannot be explained by human motivations alone. In a way, domestic reindeer transformed Arctic landscapes in a pastoral niche where they trapped their herders. Anderson *et al.*'s investigation of home creation may find an interesting ecological extension through Niche Construction Theory (NCT), which explores how organisms transform their environment and become co-creators of their own evolution.

Although Anderson *et al.*'s article opens important new perspectives on the spatial aspects of domestication, we should perhaps not overlook the temporal dimension of domestication but rather endeavour to build multiple combinations of different spatiotemporal scales: the scale of daily life and the long-term scale of co-evolutions. Domestication is not a static relationship between species; it is an unpredictable and ongoing transformation of this relationship and of those species themselves. Failures and ruptures, strikingly common in the North but not so much mentioned in Anderson *et al.*'s sometimes slightly idealized account, are very significant. Siberian herders lose thousands of domestic reindeer every year, many of which become feral. Among Kazakh hunters whom I visited in Mongolia, it is common for the tame eagles used as birds of prey to fly away to the mountains and never come back to their master. The origin of these repeated failures is an essential temporal discontinuity in human-animal relationships. In the recent collective article cited by Anderson *et al.* (Stépanoff, Marchina, Fossier & Bureau 2017), we argued that North Asian herding systems often combine different modes of herding (a notion close to what Anderson *et al.* call 'settings') which rely either on human control or on animal autonomy. The sharp alternation between contrasted periods creates a particular kind of relationship which can be called 'intermittent coexistence'.

Is herding a relation of domination and coercion or one of trust, care, and co-operation? Well, the animal-master relationship generally alternates between the two. Being aware of the temporality of domestication, we should just avoid answering such timeless questions, which impose clear-cut moral categories. Perhaps one significant feature of domestication is precisely that relationships between humans and nonhumans

become intrinsically ambiguous, even more so than in hunting, as animals so often become alternately friends, children, slaves, bullies, food, and raw material, and also, as we now know thanks to Anderson *et al.*, co-dwellers of shared homes.

REFERENCE

Stépanoff, C., C. Marchina, C. Fossier & N. Bureau 2017. Animal autonomy and intermittent coexistences: North Asian modes of herding. *Current Anthropology* **58**, 57-81.