



# Dancing with wolves: Making legal territory in a more-than-human world



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## ABSTRACT

As human codings of animals are often simultaneously legal and spatial, it may be useful to bring together the animal geographies literature and scholarship on legal geography. Through a case study set in southwest Finland, we explore the emergent and fraught entanglements of wolves, humans and sheep, characterizing the attempts at the regulation of the wolf as entailing tense biopolitical calculations between the contradictory legal imperatives of biodiversity and biosecurity. Under the former, the wolf must be made to live; under the latter, it may need to die. These are worked out in and productive of two territorial configurations: the everyday spaces of encounter (real or imagined) between wolf and human, and the propertied territories of sheep farming. While human imperatives and anxieties are clearly central to these spatializations, we also seek to give the wolf its due, noting its important role in the making of legal territories. The coproduction of law and space, we conclude, offers important ethical lessons for humans in their relations to the wolf, as well as directing us to the need for more capacious thinking regarding territory.

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“Legal geography is a lively and creative line of scholarship. But it could be livelier....”

[Braverman et al. (2014, 12)]

## 1. Introduction: Dead foxes and the spaces of property

In 1805, Lodowick Post was pursuing a fox in Long Island, New York, with hounds. Jesse Pierson, aware that Post was in pursuit, intercepted the fox, killed it, and carried it away. Post sued Pierson. On appeal, the New York Supreme Court, relying on the doctrine of first possession, awarded title of the fox to Pierson. A dissenting judge, relying on Lockean labor theory, would have awarded the fox to Post.<sup>1</sup>

That the fox is available as an object to be possessed by either man depends on its legal coding according to Roman law as untamed nature (or *ferae naturae*), and as such, un-owned. This status, moreover, rested on a consequential spatial difference to domestic animals. Animals designated *ferae naturae* are those,

according to Pufendorf, that ‘take greater delight in enjoying their boundless liberty’ while domestic animals, for Blackstone, are to be held as private property because they will not stray from the owner (quoted in Blackman, 2011: 427). The propertied status of the fox is also inseparable from its spatial location. It was killed on a beach in Long Island, designated by the court as ‘unpossessed and waste land’.<sup>2</sup> Had it been killed on private land, it would have belonged to the landowner, whoever killed it.

How can we begin to think about the complex connections between property and space, and the way in which they express themselves in the relations between humans and nonhumans evident in this case, and the wider world? What role does law, including property, play in the mediation of human–nonhuman relations? How is property spatially mediated, and which agents play a role in the construction of law’s spaces? We attempt a preliminary examination of these questions through a case study of recent wolf–human interactions in southwestern Western Finland. We do so in an attempt to help bring together the largely disparate literatures in legal geography, and animal geographies (see also Braverman, *passim*, Griffin, 2011). And unlike the case above, we do so in an attempt to treat the animal not merely as an object in legal space, but also as an agent of its production.

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<sup>1</sup> Pierson v Post 3 Cai R 175 (NY 1805).

<sup>2</sup> Though see Berger (2006), where it is argued that the dispute in part has to do with the contested status of the land as commons.

## 2. More-than-human legal geographies

One crucial legal space is that of territory: a unit of bounded, meaningful space governed so as to organize and regulate access. There has been a resurgence of scholarly interest in territory in recent years, both through detailed genealogies (Elden, 2010, 2013) and creative re-theorizations (Painter, 2010). Yet, with a few exceptions (Brighenti, 2006), the tendency has been to relegate territory 'to questions about the workings of nation-states' (Delaney, 2005: 9). Territory, however, has a multifaceted and recursive relationship with law. Law helps constitute territory in particular ways: as law changes, so does territory (Blomley, 2007; Elden, 2013). Territory also serves as a legally consequential communicative marker, particularly through the meanings attached to the spatial boundary. As Sack (1983, 58) notes, the boundary 'may be the only symbolic form that combines direction in space and a statement about possession or exclusion'. Territory also serves as a powerfully encoded container, organizing and grounding legal identity in particular ways. Liberal-legal identities such as the citizen or sovereign, for example, are inseparable from sharply bounded, zero-sum territorial logics (Murphy, 2013). Territory, however, is no mere product of law, but serves as a crucial instrument in its realization (Sack, 1983).

As law is diverse, operating through varying logics, so territory takes different forms. Property law is one crucial site in which territory is made and put to work, although in complex and dynamic ways (Blomley, forthcoming). Property law seeks to regulate and distribute the complex relations of rights and duties that attach to it. Such relations are materialized in and enforced through a set of territorial relations that establish a particular 'economy of objects and places' (Brighenti, 2006: 75). Relations to others, for example, are partly communicated and enforced through a spatial distinction between an inside and an outside. But such relations are far from straightforward: property law structures territory in multiple ways. Trespass law, for example, governs the act of unlawful entry upon land in another's possession. Strikingly, trespass is actionable even though no actual damage is done: the mere act of boundary transgression is sufficient (Merrill and Smith, 2007). However, territory is not simply a space of exclusion: other domains of law, such as environmental law, may require that property's territory be laid partially open to oversight, access or inclusion (Singer, 2000).

The territory of property serves not only as a communicative marker, but also as a container that helps constitute particular legal identities. Within Western-liberal cultures, property – particularly private property – is frequently coded as a space of security and autonomy. Anglo-American common law culture, for example, frequently draws from the metaphor of the castle to characterize the space of the home. In Finland, from where we draw our case study, one hears the phrase '*Oma koti kullalla*': literally, one's home is as valuable as gold. The effect is to treat a propertied space as a defensive shield, protecting a valued interior from an external set of threats. While such metaphors do complex work, and draw from multiple sources, they draw a crucial connection between property, territory and identity (Nedelsky, 1990).

In discussing territory, the tendency is often to make a sharp distinction between animal (ethological) and human (social) territoriality. Similarly, property lawyers routinely define property as a relation between people in regards to a valued resource. The only players (at least, of significance) to the territories of property are humans, the makers of representations, engaged in a power relation that privileges a human namer and consumer (Freeman, 2011: 157). Nonhumans rarely figure, and then almost exclusively in anthropocentric terms. The fox in Pierson is present as a resource (an object of property, to be fought over), or as a problem

(the dissenting judge refers to the fox as a "wild and noxious beast", suggesting that the decision should have in view "the greatest possible encouragement to the destruction of [this] animal" (quoted in Blackman, 2011: 424)). As such, law is a crucial means by which the distinction between nature and culture is actively produced, maintained, and complicated (Delaney, 2003). Braverman (2008: 39) observes that law makes, maintains, and reflects the distinction between words and things, *nomos* and *physis*. Through legal acts of naming and numbering, things/animals are reduced into abstractions and manageable objects. Property is one such resource for the production of nature (Graham, 2011).

The coding of animals, as noted, often entails acts of spatial distinction. Animal geographers note a powerful set of assumption concerning the appropriate space of the animal:

'[Z]ones of human settlement ("the city") are envisaged as the province of pets or "companion animals" (such as cats and dogs), zones of agricultural activity ("the countryside") are envisaged as the province of livestock animals (such as sheep and cows), and zones of unoccupied lands beyond the margins of settlement and agriculture ("the wilderness") are envisaged as the province of wild animals (such as wolves and lions)'.  
[Philo and Wilbert, 2000 11]

As noted, legal codings also rely upon spatial categories, such as the connections between independent mobility and *ferae naturae*. Similarly, if territory is a device for the management of property relations, we can anticipate its work in relation to nature. Law constitutes territory, polices its borders, and frames its identities. Legal territory serves as a means for the containment of 'natural resources' (land, livestock), or the exclusion of that which may threaten those resources (e.g. pathogens and predators). As the regulation of nature is often a means for the policing of humans, so the governance of nature through territory may become a means by which human relations are organized and remade. The growing adoption of intensive farming in early seventeenth century England, for example, entailed a changing relationship to land and ecology. In turn, new forms of husbandry were pursued through attempts at the elimination of traditional forms of common property, predicated on very different spatial forms of use and access, and the installation of an individually territorialized logic of property and land (McRae, 1996). In part, this entailed the enrolment of plants, such as hawthorn, to create hedges designed to enforce new patterns of exclusive use (Blomley, 2008). Yet as Cragoe and McDonagh (2013) show for the eighteenth century, popular forms of hunting survived enclosure when mobilized in programs of 'vermin' control. Not only was the killing of animals legally coded as vermin (as opposed to 'game') sanctioned or even rewarded, but also border-crossing while in pursuit of certain animals was not regarded as trespass. The common law allowed those hunting 'ravenous beasts of prey', such as foxes, badgers, and wolves, access to the property of others, provided they did no damage.

It is tempting to stop there, and to simply note the role of legal spatialization in the production of the nature/culture divide. However, we wish to pursue the argument for an 'animal legal geography' further, beyond a view of human-animal relations as 'always pre-structured by normative human orderings/otherings (not the least being the most fundamental of all, that between human and non-human animal)' (Buller, 2014: 310). Most immediately, nature is not always so easily enrolled or corralled: 'Despite their subjugated legal position, animals are nevertheless active subjects embodying a form of agency in their ability to continue to challenge, disturb, and provoke humans' (Braverman, 2011: 1700). Plants, animal, winds and water behave in unpredictable ways, according to their own logics, complicating human

geographies, including those that ascribe fixed positions to different categories of animals (Fiege, 2005; Keul, 2013). Although law may seek to confine animals to the ‘proper place’, humans and non-humans may ‘subvert such modalities . . . defying, and creating new “laws in action” that push toward more nuanced human–animal relationality’ (Braverman, 2013: 108).

If we take the relationality at work in the production of property and territory seriously, perhaps we can push the argument further. Rather than thinking of legal territory as a purely human artifact, that seeks to govern animals, is it possible to think of it as an assemblage produced by multiple actants, only some of whom are human (Hobson, 2007: 257)? On this view, relations between humans and nonhumans (including property relations) may be generative of legal territory, rather than simply produced through it (Trabsky, 2013). Philippopoulos-Mihalopoulos (2012) offers a compelling interpretation of the spaces of nomadic pastoralism in Northern Italy in these terms, thinking of the sheep and shepherd not in distinction, but in combination, driven by shared hunger (for the grass, for meat): ‘Flock and shepherd become an assemblage with the space on which they stand and the space they summon’ (162).

### 3. Property and space at the human–nonhuman frontier – an example from Finland

In encouraging a more inclusive relationship between humans and the wild, it is sometimes tempting to encourage ‘a more risky approach to boundaries’ (Buller, 2014: 314). However, when those boundaries are between humans and large predators, such as cougars (Collard, 2012) or wolves (Buller, 2008), ‘risk’ takes on a somewhat different dimension. The reappearance of the gray wolf (*Canis lupus*) in western Finland is a case in point. The wolf was hunted to near extinction in Finland by the end of the 19th Century, and was completely extirpated from the more settled southern half of the country. While wolf numbers and wolf risk have always been higher in the eastern and northern parts of Finland due to migration from Russia (Kaartinen et al., 2009), the recent reappearance of wolves in the southwest has generated considerable controversy.<sup>3</sup> In 2005, the first cubs were born in two new wolf territories in southwestern Finland since the 19th Century.

Our study area is the Pyhäjärvi area, part of the Satakunta region in southwestern Finland, which includes the small municipalities of Köyliö (population c. 2700) and Pöytyä (population c. 8500) (see Fig. 1). The region is partly agricultural, with several large private estates and a multitude of small farms. A number of large protected and wilderness areas are also to be found within the region. The average human population density is 29 km<sup>2</sup>, although densities are lower in the north of the region (Laitinen and Lanne, 2012). This is relatively high compared to other parts of Finland, especially the East and North. In 2012, when most of the field data were gathered, there were two established wolf packs in the area (Fig. 1). Wolf populations have been increasing: as of 2014 three packs were established in the area: there are between 29–41 wolf packs in Finland as a whole.<sup>4</sup>

The research material is based on eight in-depth interviews and five focus group discussions with local residents, including parents, hunters, and livestock farmers and workers in Köyliö, Pöytyä and Mynämäki in 2012–2014. The interviews entailed thematic,

unstructured discussions concerning residents’ affective and practical response to the gray wolf, including spatial modifications on farm lands and domestic territories due to wolf attacks, and an examination of the wolf’s influence and harm to sheep grazing and to the farmer’s life world. Day-long participant observation at two sheep/livestock farms in Köyliö municipality was conducted in August 2012. During the visit, different pastures and their functions were explored and explained. Farmers documented past wolf attacks, and their responses. This research is part of a larger research project exploring people’s attitudes and emotions toward the wolf and current wolf policies in southwestern Finland.<sup>5</sup>

As we shall see, the wolf–human interface is a dynamic and difficult one for all parties – human, wolf, and sheep. The space of encounter – itself shifting and uncertain, given the mobility of the wolf (cf. Braverman, 2013) – is a charged and political one. Law is one crucial resource drawn upon in this mediation, the effect of which is to generate particular spatial arrangements and relationships. The relative status of the various actors is legally coded, and their relations legally governed. Property law (ownership of domestic animals, compensation policy, the property status of the wolf, etc.) is clearly at work, in dynamic and overlapping ways.

Most immediately, the legal logic that governs wolf–human interactions can be thought of through the lens of biopolitics, understood as a shift from the sovereign power simply to take life, to an intervention predicated on the regulation and manipulation of life itself (Foucault, 1990): ‘Instead of the sovereign right to “let live and make die”, biopower is rather the ability to “make live and make die”’ (Collard, 2012: 29). While scholars have thought of biopolitics in relation to the governance of humans, some have extended it to the analysis of human/animal relations (Buller, 2008; Collard, 2012). The re-appearance of the wolf has sharpened the tension between competing biopolitical imperatives of biodiversity and biosecurity (Buller, 2008). Under the former, the wolf must be made to live; under the latter, it may need to die. As we shall see, the tension between the wolf’s status as threatening and threatened (Buller, 2008), is territorialized in various ways in the spaces of southwestern Finland.

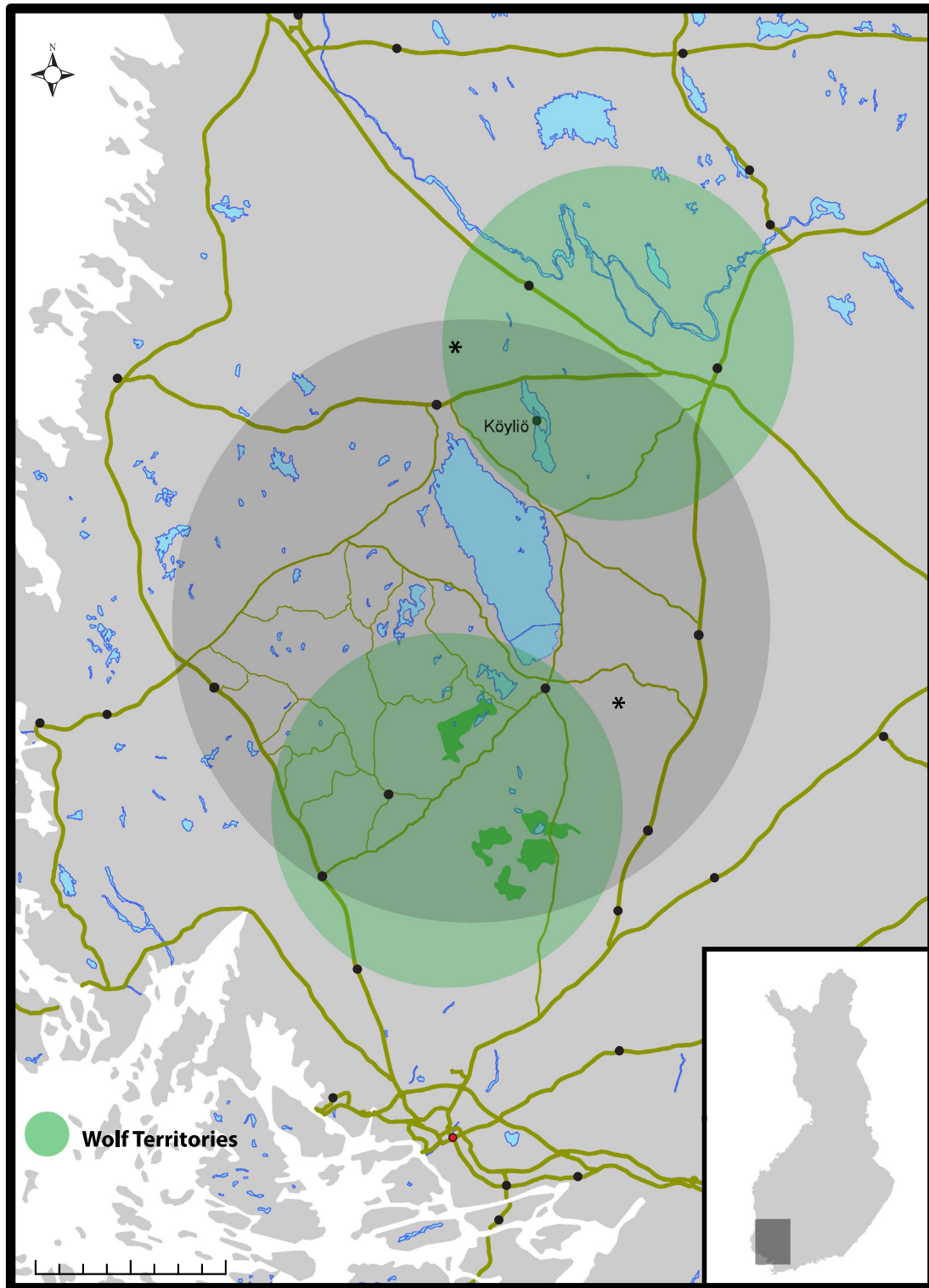
This rests, in turn, upon long histories of wolf–human relations. Given its real and presumed threat to humans, and the resources they regard as their property (notably livestock), the wolf has long been coded and appraised through law. Historically, the wolf was regarded as vermin, and thus targeted by hunters. Finland was part of the Kingdom of Sweden until 1809 and game was chiefly the property of the Crown. The wolf held a special position among predators. It was decreed a civic duty to hunt wolves, and every man was required under penalty of a fine to own a wolf net of at least four fathoms and to participate in general wolf hunts when called upon. By the 17th Century, bounties were instituted, and local authorities charged with the elimination of wolves in their region (Pohja-Mykrä et al., 2005). By the late nineteenth century, wolves were eliminated from large areas of southern Finland.

By the late twentieth century, however, a generalized shift in sensibilities occurred, and the wolf began to be recoded as a ‘protected’ animal, that was to be encouraged to live, rather than targeted to die. When Finland joined the European Union in 1995, the wolf became strictly protected under the EU’s Habitats Directive. Expressing a concern at the slow recovery in the wolf population, the EU Commission initiated infringement proceedings against Finland in 2001. In 2007, the European Court of Justice ruled that Finland had not honored the principle of wolf protection, requiring that the issuance of wolf hunting licenses be strictly based on Directive-based reasons (Hiedanpää et al., 2012).

<sup>3</sup> Wolves dispersed from other parts of Finland: they were not formally reintroduced. Buller (2008) notes a tension in the French Alps concerning the re-emergence of the wolf, with some hunters and farmers arguing for their covert re-introduction by militant ecologists, thus allowing them to portray the wolf as an invasive species rather than a creature naturally reoccupying its ecological niche.

<sup>4</sup> [http://www.rktl.fi/tiedotteet/suomen\\_susilaamojen\\_maara.html](http://www.rktl.fi/tiedotteet/suomen_susilaamojen_maara.html): last accessed December 13, 2014.

<sup>5</sup> Details on the project can be found at <http://fitpa-project.blogspot.fi/>.



**Fig. 1.** Field study area in southwestern Finland (Varsinais-Suomi and Satakunta Region).

In 2005, Finland issued a Wolf Management Plan (Ministry of Agriculture and Fisheries, 2005), following the directive of the Council of Europe for 'a series of measures ... to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favorable status and the long-term survival of typical species', such as the wolf. The Plan seeks to render the wolf

legible, tracing its movements, human interactions, and survivability. It is clear, however, that this is much more than a wolf Plan. By virtue of the wolf's entanglements with other actants, the Plan must simultaneously govern farmers, hunters, tourists, fences, dogs, and zoonotic diseases. It is also clearly biopolitical, juggling the 'strongly conflicting targets' (5) of wolf protection and safety.

Multiple forms of law are thus invoked, and mapped out across several overlapping spaces, ranging from EU-state relations, to the recommended fencing strategies of sheep farmers.

As the Plan notes, the re-emergence of the wolf has proven controversial, implicating humans and animals of value to humans, and owned as property, notably sheep. Sheep, of course, are differently coded as domestic animals, or “production animals” under Finland’s Animal Protection Decree (396/1996, 5§). As such, they are governed by farm animal welfare law, including EU law, which regulates animal farming practices. As noted below, however, wolves have begun to kill or injure sheep in Finland (between 2010 and 2013, 46 sheep were killed by wolves). Biopolitical calculations are required when biodiversity collides with biosecurity, and a ‘protected’ animal kills a ‘domestic’ animal. EU legislation and Finnish policies govern interactions with predatory animals, such as wolves.<sup>6</sup> Compensation is available to sheep farmers for wolf attacks that kill or harm sheep, based on market value.<sup>7</sup> A property transaction occurs, in other words, as the state – guardian of the wolf – compensates the farmer for a loss of property. In allocating a licence to kill the wolf, the state overrides EU directives in the name of biosecurity. The calculation that occurs here, however, does not always acknowledge the added workload and stress experienced by farmers who lose livestock. Many farmers in the study area expressed concern that the wolf was seen as more valuable than their domestic animals. Among rural people, according to Linnell (2013: 11), sheep loss can be perceived as indirect evidence for a lack of respect from the state (usually in favor of large carnivores) toward the farmer’s work and property.

The power to live and die rests with the Finnish Wildlife Agency. Because the wolf is designated as a game animal, decisions concerning the derogation from the strict protection are made by the Finnish Wildlife Agency under the terms of the Finnish Hunting Act (615/1993), Hunting Decree (1993/666) and EU Habitat Directive 92/43/ECC. The Ministry of Agriculture and Forestry has struggled to find a balance between biosecurity and biodiversity, granting an annual quota of wolves that can be killed by derogating from the strict protection.

Space is not only a setting for law, but also produced through legal categorizations. The biodiversity/biosecurity calculation, put another way, is spatially modulated, based on overlapping codings of space and animal (Owain, 2000). Thus, the status of wolf moves from Appendix IV of the EU Directive (strictly protected – i.e. unkillable) to Appendix V (hunting may be permitted – i.e. killable) if it is found in the Finnish ‘Reindeer Management Area’ in the north. Hunting licences for wolves may be issued (under certain conditions) in these areas, given a concern at the effects of predation on reindeer herds.

Further, in an interesting twist in the spatiality at work in the distinction between *ferae naturae* and domestic animals, the so-called ‘yard wolf decree’ was introduced in 2013 by the Ministry of Agriculture and Forestry, producing a new legal reality. A wolf becomes a ‘yard wolf’ when it repeatedly visits human settlements and thus is designated as a threat to human security, expediting the issuance of a hunting permit. Naukkarinen (2013) notes that the designation of a ‘yard wolf’ is based on the professional ability

of the wildlife officials, who are to determine whether a wolf has become habituated to human spaces, or whether it is merely a ‘wild’ wolf, that is passively transiting through such territories. The biopolitical power to kill or to let live is thus a discretionary one, worked out in subtle evaluations of space and behavior by the ‘border agents’ of biosecurity (Collard, 2012). However, it is possible that such evaluations may be based on evidence of wolf behavior from more remote parts of Finland where wolves tend to avoid human contact, as opposed to the more populous regions of southwestern Finland. Further, such designations may not properly weigh the effect of age and seasonality (discussed below) on wolf mobility (Kaartinen et al., 2005; Kojola et al., 2015).

### 3.1 The territories of encounter

The human–nonhuman relationship is quintessentially spatial, produced through numerous interactions, perceived and real. Philo and Wilbert (2000: 2) note that a complex human–animal relation can be established without physical proximity: animals are able to have an effect on humans at-a-distance. Similarly, wolves need not be actually present to generate anxiety. Research in Sweden reveals that negative attitudes to wolves is more commonly based on indirect, rather than direct experience (Karlsson and Sjöström, 2007: 614). Similar results have been found in the study area. From 2005 onwards, local people have reported seeing wolves in their domestic spaces. Yet on further study, only 30% of all animal observations were confirmed to be wolves: 45% entailed another animal.<sup>8</sup>

Whether as a real or imagined presence, the reappearance of the wolf has generated considerable uneasiness and insecurity among local people, as is evident in online fora.<sup>9</sup> Such anxiety is territorialized. Wolves are designated as ‘out of place’ when they enter territories designated as human (Cresswell, 2008; Buller, 2014). Biodiversity is all very well, but not when it threatens biosecurity. The two must be spatially divided, as one older male respondent noted:

“We [local people] should be given a chance to discuss and negotiate the issues of what should be done [in relation to the wolf’s re-emergence]...so that it is not just a case of let the wolf exist or kill it altogether... Of course the wolf should survive but it should stay out there in areas of remote wilderness. Then we are able just to live... with no need to fence our yards, and we can walk freely outside”.

[interview; Karjala village, 2012]

It is not the existence of the wolf that is deemed problematic, in other words, but its relative location. Anxiety is spatially mediated. One older respondent expressed this fear, calling upon the State, as a regulator of the wolf, to intervene in order to shore up human territories:

“As you know, wolves are the property of the State<sup>10</sup>. If they cause this fear among local people and they belong to the State ... something should be done... It’s wrong that we who live here have to suffer from the fact that wolves are now here...”.

<sup>6</sup> The laws at issue are many, for instance the Finnish Game and Damages Act (105/2009), the Hunting Act (615/1993) which govern game animals, the State decree on Game Damage (309/2013), the Government Decree on Compensation for Damages Caused by Predatory Animals (277/2000) and Office of Agriculture Decrees on compensation level on animals (791/2010) (<http://www.finlex.fi/en/laki/kaannokset/2009/en20090105.pdf>).

<sup>7</sup> The current state compensation for wolf-predated sheep is 430 euros for breeding animals and 100 euros for meat animals. Farmers can apply for compensation for their dead or injured livestock under to the Finnish Game and Damages Act (2009/105), the State decree on Game Damage (309/2013), and the Government Decree on Compensation for Damages Caused by Predatory Animals (277/2000).

<sup>8</sup> Härkälä, A, Game Office, Game and Fisheries Research Institute, personal communication, 22nd April 2014.

<sup>9</sup> Some notorious wolf attacks occurred before wolves were eliminated from the region. In the Turku area two wolves killed at least 22 victims (possible up to 35) in the 1880s. An earlier episode saw 42 children and 2 adults killed by wolves (Teperi, 1977). These incidents continue to be evoked by residents.

<sup>10</sup> This is not technically correct. Wolves are *ferae naturae* in Finnish law. However, the fact that the respondent treats this as common knowledge suggests that her interpretation may be widespread.

Zones of overlap between spaces designated wild and those coded as human, such as forest peripheries surrounding homes, grazing lands, or paths through forest, become spaces of fear. The presence of wolves in unexpected sites, designated as ‘non-wild’, is seen as particularly alarming. Local residents expressed heightened concern at sightings (real or perceived), wolf tracks and dead prey animals near dwelling places/yards and village centers (Hiedanpää et al., 2014), or evidence of wolf prints found on the doorsteps of residential houses. The territory of the home – supposedly a space of security – has been breached, upending deeply entrenched assumptions about the relation between inside and outside. For one mother, living within the territory of a pack (Eura, 2011):

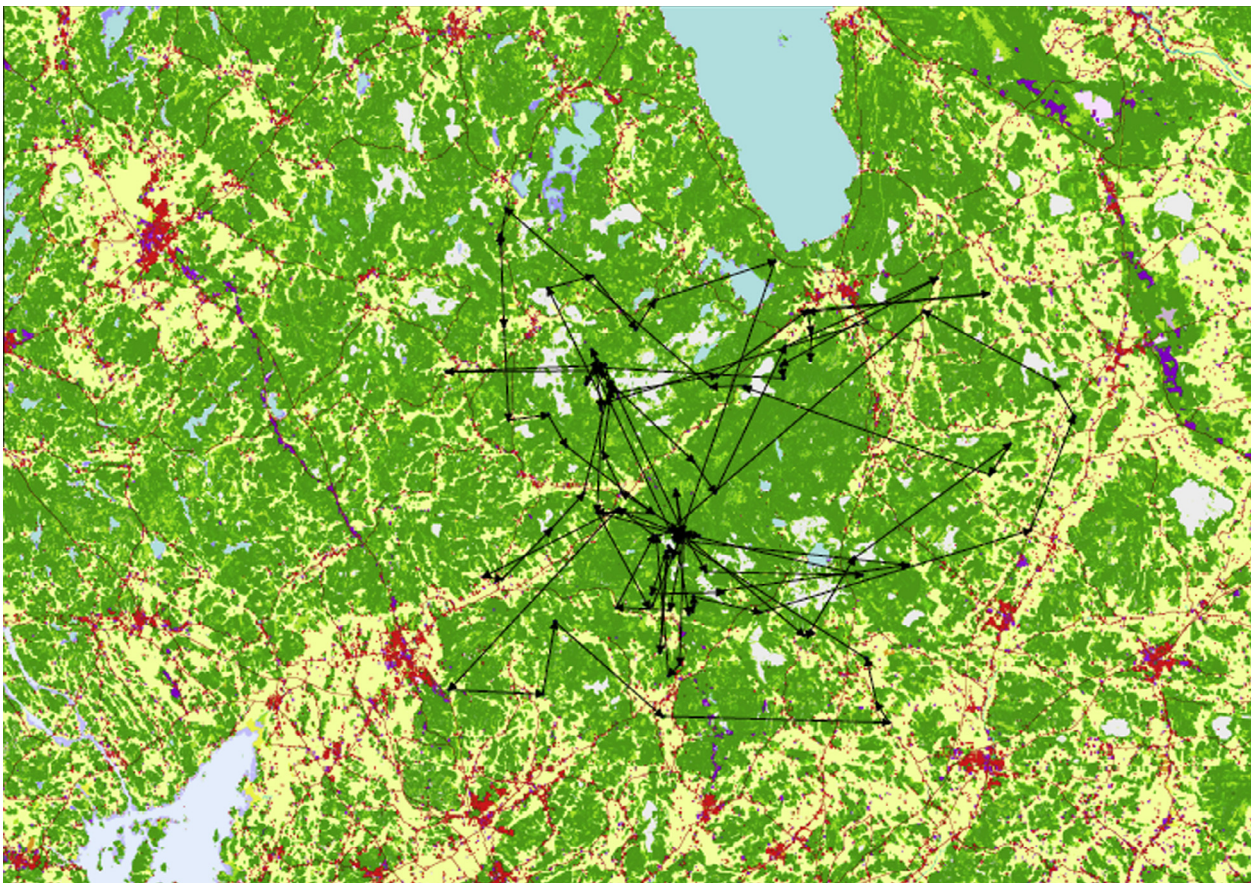
‘If a wolf eats deer... that’s normal. But if a wolf eats deer in someone’s yard... that is a sign of something... Usually wolves live in remote wilderness areas, and thus, they cause no worry. But now... they come too near and you may encounter them nearly anywhere’.

But such spaces ‘are not bounded and demarcated by humans alone. Other entities engage in their own spatial practices. Humans’ spatial practices and other species’ spatial practices entangle with each other in complex and precarious ways’ (Collard, 2012: 37). Wolves are geographers too, enacting space through forms of mobility and territoriality. The wolf is a highly adaptable animal that can breed quickly, and expand into new regions. Like many other large carnivores, wolves are territorial, maintaining exclusive use of home ranges, although with occasional overlap with other wolf territories (Latham et al., 2014). Jordan et al. (1967) has shown that a wolf pack maintains a common territory despite the frequent separation of the pack into various subgroups. Within these territories,

they engage in structured forms of mobility, frequently visiting certain specific sites while avoiding others. High use areas for wolf packs include home rendezvous sites, used more intensively during the summer, and food resource areas. These areas act as biological centers of activity for wolves (Ausband et al., 2010). Adult wolves may be frequently absent from a wolf pack’s home rendezvous sites during daylight hours (van Ballenberghe et al., 1975). Wolves were found to range up to 13 km from their rendezvous site, although variation in movement rates can occur on shorter time scales (Mech, 1966). Irregular attendance at home rendezvous sites is characteristic of females with young, and adult males, but generally wolves return regularly to home rendezvous sites to rest. Similar findings have been observed in the wolf territories of southwestern Finland (see Fig. 2).

Wolf territories rub up against human territories. Some local residents anticipate certain spatial patterns of wolf mobility, monitoring behavior closely. One older farmer described a wolf encounter in 2009 in his fields, noting the wolf’s use of human infrastructure.

“Wolves have their certain routes... I saw wolves crossing over our fields three years ago. I... heard that during the same day same wolves had crossed over the river bridge and walked ahead. Two of them continued along to road to Turku... After six days I saw them again. Two wolves were walking there... I went and checked their foot-prints in the snow. Then they continued to trot over a drainage pipe. I whistled, and they stopped for a moment and continued running ahead. In the autumn wolves use these usual routes frequently. They cross over small river bridges and do not go over the iced lakes. They would rather use local roads...”



**Fig. 2.** Making wolf space: A radio-collared alpha-female wolf’s movements on October 2011 in southwestern Finland (Jani Pellikka, FGFR1). Background-map: Corine 2006 data, © SYKE (partially ©METLA, MMM, MML, VRK).

However, wolves may be more wide-ranging in their movements, especially when juveniles are expelled from their home territories (Fritts and Mech, 1981; Gese and Mech, 1991). Usually young wolves aim to acquire information of their environment outside their home territory before they finally depart to establish their own territories (Gese and Mech, 1991; Messier, 1985). It is also then when they may transit spaces of human use, such as gardens, home yards and fields. Such spaces do not merely frame the actions of the wolf, however. By its presence, the wolf begins to remake such spaces. Its movements are interpreted by human residents as unusual and abnormal, who assume that the wolf has lost its fear of humans and its 'natural' capacity to stay in areas designated as 'wild'. A young mother with five children from Varsinais-Suomi Region described the wolf's sudden unsettling incursions into domestic territory:

"Emotionally 2005 was a terrible time. . . It did not occur to us that wolves could be there. All of a sudden, wolves had walked along our village roads. Large prints of wolf paws were seen beside our mail box"

The daily spatial routines of parents of young children have responded to these unsettling presences. According to focus group discussions in 2014 with local parents, many local women in peripheral village areas tend to avoid outdoor walks at dark, even accompanied with their dogs, because there are no nearby settlements or lights near their homes. Interestingly, there is some evidence of a reduction in fear, with some women noting that they have been obliged to become accustomed to the idea of wolves around their homes.

It is through these dense entanglements that space is made and remade. Prior geographies of wolf territory and mobility, and human residence and use, are drawn upon, and reconstituted. As space is produced through wolf–human relations, so law is also constituted and reworked. By virtue of their space-making, the wolf contributes to law-making. Rather than a passive object of regulation, its spatial entanglements resist and push back against law, forcing recalibration. This is evident in the comments of the Finnish Chancellor of Justice:

"The damage caused to domestic animals by carnivores and the threat they pose to people or are perceived to pose in consequence of being observed near people's homes and immediate living environment are factors that *undermine security* in such a way as to make it the responsibility of the public authorities to eliminate the said factors. Wolves and indeed other carnivores are *not part of the natural fauna of inhabited areas in Finland*. In this respect, the authorities must have at their disposal fast-acting and effective means of dealing with carnivores that come *near human habitation, built-up areas or traffic routes and other roadways used by people*. On the other hand, the authorities also have duties concerning nature and biodiversity under section 20(1) of the Constitution. . . It must be emphasized that upholding the security that is guaranteed as a fundamental and human right is the first priority of the public authorities. . . *When a carnivore is observed in a place where there is a clear danger to human safety, it is self-evident that the threat must be averted*. The extreme action is to kill the animal. Assessment must, however, be based upon the provisions for derogation given in Article 16 of the Habitats Directive (Ministry of Agriculture and Fisheries, 2005, p. 30, emphasis added).

If only, he seems to suggest, the wolf remained in its designated space. However, wolves 'will not stand still . . . [nor] confine themselves to the spaces in which humans may seek to secure them' (Buller, 2008: 1593). Through their motion, wolves rework the

biosecurity/biodiversity balance, and thus it may be necessary to 'kill the animal'. This tense legal/spatial calculation takes on an added urgency, as we shall see, when the wolf transgresses human property codes, and kills 'domestic' animals.

### 3.2 Wolf/farmer/sheep territory

As noted, the study area is used for livestock production. In 2012, there were about 270 sheep farms in southwestern Finland, with an average of c.70 sheep/farm ([www.lammasyhdistys.fi](http://www.lammasyhdistys.fi)). As wolf populations grow, sheep pastures increasingly overlap with wolf territories, with predictable results. Wolves appear to preferentially target sheep rather than other livestock (Gula, 2006: 288), and usually attack during the June–August grazing season. The most vulnerable pastures are close to smaller water resource such as minor rivers or near forests. The first severe predation in the study area occurred in August 2008 in Köyliö, when wolves killed or lethally injured 65 sheep on four different pastures (Hiedanpää et al., 2012). Three wolves attacked two sheep farms at Tourula-Keihäskoski, in Yläne village, in the municipality of Pöytyä in July, 2010. The first target was a farm, which borders forest, thus allowing access for the pack. Access to the second farm was via the Yläne River. In total, the wolves killed 27 sheep, injuring an additional 30. In September 2012, a wolf attack took place on a livestock farm in Karjalan kylä village, in the municipality of Mynämäki, with a wolf killing three calves. At the end of August 2013 wolf attacks took place 50 km west of the village of Kalsinkulma near Loimaa, in an area outside existing wolf territories. A group of younger wolves killed 16 sheep and severely injured 3 more animals. It was assumed that wolves had crossed over the Loimi river and entered into sheep pastures.<sup>11</sup>

Such predations combine with a sense of the wolf's 'out of place' presence to generate human stress. A woman described life on her farm in Keihäskoski, in Yläne village, after the wolf attack in 2011.

"The house windows are open all the time because of stress. We cannot leave for a journey either because all our sheep cannot be taken into the sheep fold at one time. During the night the door of the sheep-fold is closed . . . Due to the presence of wolves I built an alarm made of metal bottles in front of the sheep fold door, which would make noise if a wolf tries to enter. This way the wolf cannot leave the place without a sound".

As sheep/human space increasingly overlaps with and is threatened by wolf space, the tension between the logics of biosecurity and biodiversity intensifies, as one farmworker on the Lallin Lammas business farm bitterly noted:

"If the risks [of wolf attacks] become too high, our coastal pastures may quietly turn back into wild bush again [as we abandon them]. Even if we get good state compensation for our sheep loss, an injury is still left in our minds, with a bad feeling for the injured and suffering livestock . . . Maybe the wolf will become a more valuable animal than domestic animals? . . . Maybe it's the same if meat is produced for humans or wolves, as long as a payee exists?"

The state, she suggests, has reformatted territory, opening up that which designed for the exclusive production of one form of organic property, the sheep, into a space of threatening biodiversity. The effect is to recalibrate spatial exclusion and related logics of value, such that the wolf may become more valuable than sheep, with farmers raising livestock for wolf, rather than human consumption.

<sup>11</sup> [www.ts.fi](http://www.ts.fi); [www.satakunnankansa.fi](http://www.satakunnankansa.fi): last accessed December 15, 2014.

One significant strategy in response to these anxious negotiations is a hardening of territory in the name of biosecurity. Traditionally, pastures have been fenced with board or wire mesh fences (Karttinen et al., 2007). From 2008, many sheep farmers have constructed multi-strand, high-tensile, electric fences with barbed wire and mesh. This again entails a property transaction involving the state as a biopolitical referee. Currently, electric fences are loaned to sheep/livestock farmers by the Finnish Wildlife Agency for five years, with funding from the Ministry of Agriculture and Forestry. The erection and maintenance of the fence is the farmers' responsibility. After five years, the fence becomes the farmers' property.

After repeated wolf predations, a farmer in Tourula-Keihäskoski in Yläne village, who has been keeping sheep for 20 years, extended 500 m of electric fence with an additional kilometer of regular fencing. Likewise in the village of Kalsinkulma near Loimaa, another farmer constructed new electric fences on her grazing lands after a severe wolf pack attack in 2013. In 2013 Lallin Lammas, a business farm at Köyliö, in the village of Tuiskula, held 340 sheep on six different grazing land areas. In 2008, 65 sheep were killed. Electric fences now surround many more pastures (Fig. 3).

The territorialization of property requires both communication and enforcement. The electric fence is thus an attempt to do both, through technologies designed to inflict pain upon animal bodies. It is tempting, therefore, to think of this exclusively as a human space that encodes anthropocentric constructions of property upon the world of nature. While initially a human artifact, and one that mediates between competing human logics of biosecurity and biodiversity, it also can be seen as a product of human-animal

entanglements in space. If we think of the territory of property in relational terms, we can begin to think of it as a human–nonhuman assemblage, albeit a more adversarial one than that proposed by Philippopoulos-Mihalopoulos (2012). Access and exclusion are negotiated, resisted and resolved in the various interactions between humans and nonhumans. This is not simply an edge between nature and culture, in other words, but also a zone of interaction and entanglement: 'When entities entangle... spatial [and, we would add, legal] relations are simultaneously enacted' (Collard, 2012: 37). Entanglements produce complex and shifting spaces of overlap and interstitiality, which are, in turn, spatially variable.

The fence, put another way, is an assertion that seeks to produce the effect of exclusive property. But like any performative enactment, it is open to failure and slippage. Trudeau and McMorran (2011: 447) argue that borders are constantly being produced, negotiated, challenged, and redrawn in space not only by humans but also by non-human actants. The fence's upkeep, suggests the Wolf Management Plan (Ministry of Agriculture and Fisheries, 2005: 45) 'requires work and vigilance', noting that during the winter fences may give way under the weight of snow, while permafrost may shift the fence-posts. Fences also limit the free movement of other animals, who may destroy the fence. One farmer bitterly observed that every year a moose would run through his fence at the same point.

Wolves routinely deploy other natural phenomena, such as waterways, to circumvent fences entirely, or dig under the fence. Vegetation provides cover for wolves, and may cause the fence to short-circuit, allowing access. The very existence of vegetation may itself be a product of human action: A worker on an organic

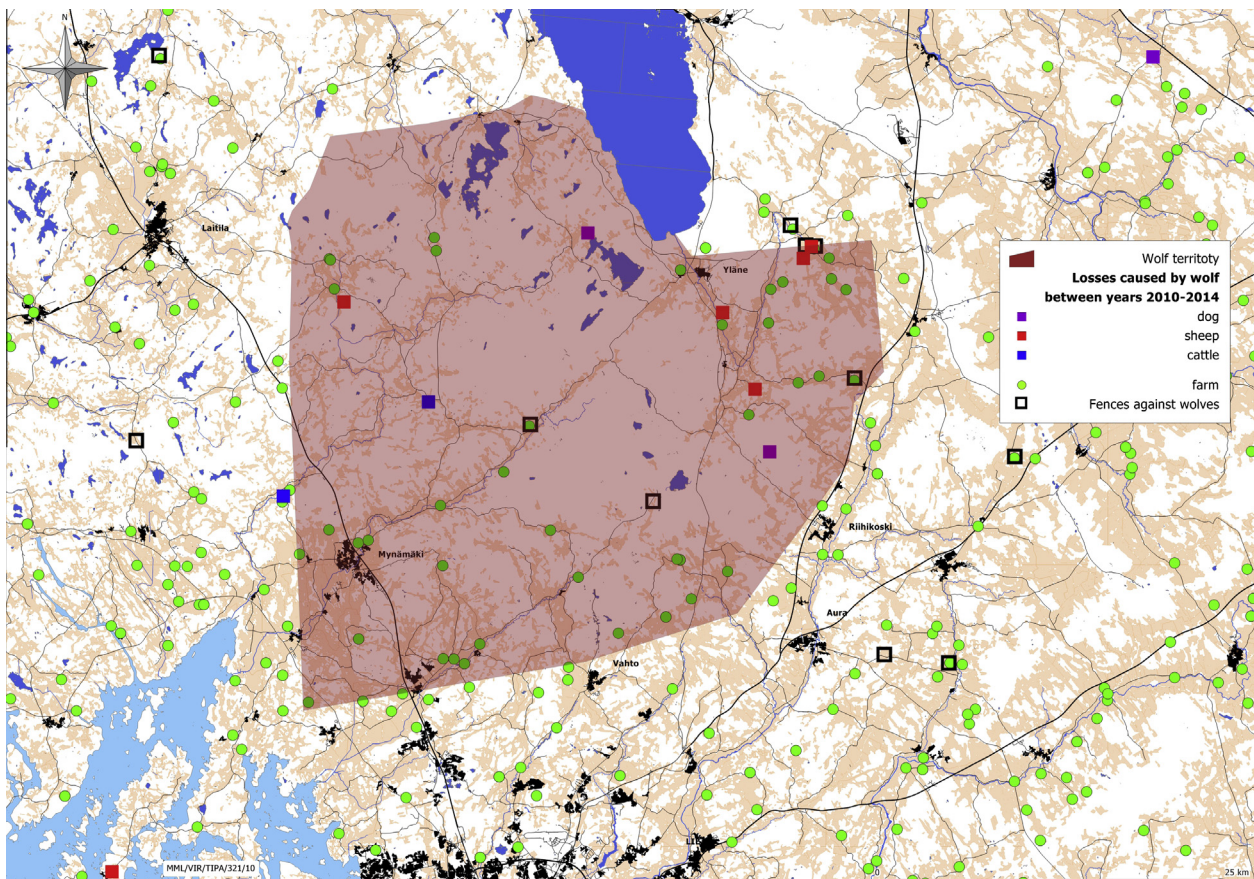


Fig. 3. Wolf/human/sheep entanglements: Wolf territory based on a radio-collared wolf's movements on October 2011 in Varsinais-Suomi – see Fig. 2 (Mikko Toivola, Finnish Wildlife Agency).



sheep farm noted during an interview that the maintenance of electric fences around pastures has been particularly demanding because the use of pesticides is forbidden by EU regulation.

But the relations that go into making these spaces are not simply those between wolf and human (with other intermediaries, such as weeds). Other points of intersection and overlap can be found. For example, farmers are currently encouraged to use dogs to protect their sheep, in an adaptive departure from previous practice. Guard dogs are deemed a good visual deterrent to wolves (Järvenpää, 2010). However, the addition of dogs as agents of biosecurity may complicate biodiversity, given hybridization between 'wild' wolves and 'domestic' dogs (*Canis lupus familiaris*), a border crossing that has been documented across Europe (Trouwborst, 2014; Heikkilä, 2014).<sup>12</sup> Ironically, the use of large sheep dogs in the French Alps appears to pose a greater threat to humans than does the wolf (Buller, 2008). Similar concerns are expressed in Finland (Ministry of Agriculture and Fisheries, 2005), particularly in light of the 'everyman's right' that guarantees human access to private land.

And let us not forget the role of sheep in the coproduction of space. Rather than mere objects of property, they too also remake territory. Respondents noted that sheep change their behavior during or after a wolf attack, becoming more mobile and 'wild'. They run around their pasture areas, with some fleeing from fenced grazing lands into forested areas. They also try to avoid resting areas where previous encounters with wolves had taken place. Farmers often relocate their sheep from grazing pastures, or move them between different pastures during peak threat periods (July–August), with younger sheep kept in a fold during nighttime. At one organic farm, sheep were kept in a sheepfold in July, in contravention of requirements for organic farms. Farmers engage in other adaptive behavior, shaping space in response to the wolf:

"We had lambs born at June. During the nighttime the sheep fold doors had to be nearly closed. But I cannot close the door totally, so I have built a temporary wooden fence. Every day I have to fix and undo the fence again."

Human/non-human relations in the study area, to conclude, are clearly shaped by and productive of both space and law. Shifting and overlapping patterns of use and mobility, as well as more rigid forms of territorialization have been formed with the re-emergence of the wolf. Space is formed in the relations between humans and nonhumans. It both polices (practically, and metaphorically) the divide between nature and culture, and is produced through the entanglements between humans and nonhumans. Law, particularly regarding property, has served to constitute the identities of the various players, their relationships one to another, and their ultimate status (killable, to be protected, as prey, and so on). It is materialized in space. Such legal spaces are also a product of human/non-human interactions.

#### 4. Discussion

Our broad goal in this paper was to promote the connection between legal and animal geography. We conclude this paper with two broad sets of conclusions that we draw from this intersection, relating to the ethics of human/nonhuman relations, and the making of legal space. On the latter point, our aim has been to demonstrate the centrality of law and space in the creation and regulation of human/nonhuman relations. Legal categories such as *ferae*

*naturae*, for example, rely not only upon assumed relations to humans, but also spatial relations of independent mobility. These legal/spatial codings are immensely important in producing an animal biopolitics of life and death, while also governing human relations. Western conceptions of property, in particular, are crucial in this regard. As the relations at work in property shape the making of space, so we should anticipate that the resultant legal geographies will implicate nonhumans and humans alike. The performance of property entails many agents, we have suggested. A richer understanding of legal geography thus requires a sustained engagement with the more-than-human.

The legal spaces produced through such entanglements take many forms. The designation of particular zones of legal exception, such as the 'Reindeer Management Area', or categories produced by inappropriate forms of wolf spatiality (the 'yardwolf' decree) are examples, as are the jurisdictional spaces of European and Finnish law (Valverde, 2009). While multiple forms of law are clearly operative, we have chosen to focus on property, underscoring its territorial format. An attention to territorialized property relations, we suggest, offers a useful window into wolf–human relations in southwestern Finland. We have underscored the importance of property's territory as both marker and container. As property organizes relations, so territory can be thought of as a relational effect (Painter, 2010). As such, it becomes important to explore the multiple relations that go into its performance, whether those are between human or more-than-human actors.

This then takes us to a final, more overtly ethical question, implied in any understanding of relationality. If legal spaces are understood as made, rather than found, the question becomes: What legal spaces should we produce, with what effects? If politics is a struggle for resources, entailing deployments of power by various actors, then the relations at work in the spaces of southwestern Finland are inherently political. The wolves, surely, are also political geographic subjects (Hobson, 2007).

Most importantly, the recognition of legal spaces as co-constituted, rather than exclusively human products, shifts the argument in some important ways. Discussions of the reintroduction or re-emergence of species, such as wolves, tend to assume the reinsertion of a wild geography into a human space. Two spaces thus appear to confront each other. It is hard to say how the wolves think about these spaces, but for the humans in our sample, there appeared a clear sense of wolves as appropriately confined to 'their' spaces, with considerable anxiety generated by their 'incursions' into 'human' spaces. Arguably, the role of territorialized property in the production of particular forms of security-based identity played a crucial role here. Conversely, we can imagine conservationists advocating for 'more space' for the wolf (Philo and Wilbert, 2000).

Through the intricate and often violent 'dance' between humans and wolves in Finland, we have sought to explore the possibility of more-than-human spaces, predicated not only on overlap, but entanglement. Human and nonhuman uses and movements intersect, interpret, misconstrue and rework each other. Fences are built, and buried under. Legal geographies seek to order and govern, differentiating spaces where wolves are to live from those where they are killable, and are then remade, based on different patterns of movement and presence, as in the 'yard wolf' decree. To recognize that legal space is made by humans and nonhumans alike is not, of course, to imply an equality of power. Although the power of the wolf is undeniable, it is far more likely to be killed, than to kill, raising urgent questions concerning the human obligation to 'live responsibly within the multiplicitous necessity and labor of killing' (Haraway, 2008:80). Policy changes in recent months have made the killing of 'problem' wolves easier (Ministry of Agriculture and Fisheries, 2014). As such, a recognition of the presence of a co-produced legal space, rather than one of

<sup>12</sup> The Ministry of Agriculture and Fishery (2005) expresses considerable anxiety at such hybrids, both in terms of the integrity of the wolf population, and the threat that hybrids or feral dogs may cause to human populations: 'The Finnish wolf population will be kept genetically pure. Wolf-dog hybrids and feral dogs running in packs with wolves will be removed from the wild.' (54)

wolves in human space, or vice versa, is useful in nudging us toward a ‘cosmopolitics’ (Hinchcliffe et al., 2005) understood as ‘an interspecies contact or symbiogenesis based upon a more convivial, less fixedly human... approach to boundaries, to political actors and to political outcomes that inherently challenges what it means to ‘belong’ or to ‘pertain’” (Buller, 2014: 314). To the extent that law produces, encodes and organizes such boundaries, it becomes essential to take it seriously.

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