

# Supervising Veterinarians as Boundary-Spanning Agents: Human–Animal Relations in Law-Science Interaction

*Tomi Lehtimäki*

*University of Helsinki, Helsinki, Finland/tomi.lehtimaki@helsinki.fi*

*Jaakko Taipale*

*University of Helsinki, Helsinki, Finland*

## Abstract

Boundary-spanning agency is important for weaving together different ways of doing and knowing. This article examines boundary-spanning agency in the context of courtroom contestation of veterinary expertise. Analysing Finnish supreme administrative court judgments, we highlight how knowledge claims about animal welfare and about the process of supervisory inspections are deployed and contested by both veterinarians and animal owners in a bid to set down an authoritative interpretation about empirical actuality at the inspected sites. A central finding is that veterinarians, contrary to the implications of earlier studies, are in a potent position in their supervising role. Given the lack of intermediary soft law mechanisms such as inspection guidelines, the interpretative space left between animal protection law and veterinarians' inferences about the conditions at the inspected site leaves veterinarians with a wide mandate to make decisions about ending livelihoods and euthanising the inspected animals.

**Keywords:** Boundary-spanning agency, Expertise, Animal Welfare, Veterinary Practice, Law-Science Interaction, Judgment, Boundaries

## Introduction

Veterinary expertise is situated in the intersections of different forms of knowledge. When dealing with these various “traditions for knowing and acting” (Law and Mol, 2010: 1), veterinarians are required to manage boundaries between traditions to maintain their mediating position concerning, for example, animal and public health (Enticott et al., 2011; Hobson-West and Jutel, 2020). In their *supervising* role, veterinarians are also

engaged as experts in managing animal welfare in the contexts of law and regulation, which makes their task more complicated (Asdal and Druglitrø, 2017; Singleton, 2012).

Animal welfare inspections performed by supervising veterinarians are often highly charged situations. While the law can be a source of certainty, inspections also carry with them an element of uncertainty (Anneberg et al., 2012).



Inspections also often involve a breach of privacy and, in the case of animal production, the veterinarian's inspection report carries the potential of sanctions possibly influencing whether the owner is entitled to financial support from the state (cf. Andrade and Anneberg, 2014; Väärikälä et al., 2020). In many cases, veterinary decisions are based on economic considerations alone. No money to treat one's animals often means euthanasia for the animals and loss of livelihood for the owner.

The fact that the supervising veterinarian is a threat to some animal owners is reflected in the abuse and threats veterinarians potentially encounter. In an anecdotal example, Finnish veterinarians in training have even been instructed to park their car in a way that allows for a fast escape from the farmyard if a situation escalates (Kivimäki, 2023). Whether the case is about companion animals or production and livelihood, veterinarians are also targeted in social media and often accused of *not* doing a better job of protecting animal welfare, with issues of confidentiality often making it difficult for veterinarians to defend their decision making (Vaarala & Siniauer, 2023). Adding to this load, some supervising veterinarians' decisions are contested in the courtroom. We discuss veterinary agency in the context of complaint cases in the Finnish supreme administrative court, where the legitimacy of veterinary decision making is disputed and eventually resolved.

Our aim is to understand and explain what we see as the core feature of the *supervising* veterinary practice: the fact that supervising veterinarians as both state officials and veterinary experts span the boundary between different ways of knowing and doing, that is, between the law and credentialed knowledge of animals and their (observed) welfare. We examine complaint cases featuring contested understandings about expert decision-making and accounts of animal welfare at the Finnish supreme administrative court. These provide an empirical vehicle to examine and conceptualise boundary-spanning agency in context. Thus, we complement the understanding of the veterinary profession and its position of power. In this, we draw on earlier studies about the veterinary profession and practice (Enticott,

2012; Hobson-West and Jutel, 2020). We also draw on STS literature on boundaries (Mol and Law, 2005; Law and Mol, 2010), law-science interaction understood as contestation and negotiation of knowledge (Edmond, 2001; 2004; Jasanoff, 2005; Taipale, 2019; Taipale and Hautamäki, 2021), as well as on studies of how expertise is deployed in disputes (Lynch, 2014; Wynne, 1996).

The empirical analysis we present below focuses on three aspects of epistemic contention in the court cases. First, who gets to set the authoritative interpretation of animal welfare and on what epistemic basis? The result of this contest between the supervising veterinarian and the animal owner is central to the ability of the supervising veterinarian to span the boundary between the law and veterinary expert accounts of the inspected site. Second, a prominent strategy for animal owners is to question the veterinarians' accounts by questioning the appropriateness of the inspection process as well as the motives underlying this inspection, thus trying to influence the credibility and authority of the supervising veterinarians and their inspection accounts. Third, we argue that by drawing on their experience and history of inspections, supervising veterinarians engage in a practice of creatively working their inspection accounts to meet the minimum level of animal welfare as specified in the animal protection law.

An important finding concerns the relative position of power the veterinarians inhabit: the veterinarians seem to be in possession of an extensive mandate marked by an unmediated interpretative space between the animal protection law and particular instances of animal welfare. The finding complements the conventional understanding according to which veterinarians have a relatively weak position of authority. Our results suggest that the veterinary jurisdiction is quite powerful in granting rights to override privacy and ownership rights and issuing immediate relocation or euthanasia of animals by drawing on Article 44 of the Animal Welfare Act, the decision being based on the veterinarians' trained judgment and interpretation.

The following section discusses earlier literature on veterinary expertise as mediating human–animal relations, as well as law-science interac-

tion and boundaries. It also outlines the conceptual framework for analysis and the central theoretical aims. The subsequent section presents the complaint cases at the supreme administrative court and explains the methodological rationale for focusing on a handful of these cases. The penultimate section then presents three themes for empirical analysis and further develops them in discussion of what we can learn about supervising veterinary expertise and boundary-spanning agency based on these court cases. The final section sets out the conclusions.

### **Veterinary expertise and human–animal relations**

Veterinary expertise is a relatively understudied topic compared to the sociological study of human medicine and health and illness (Hobson-West and Jutel, 2020; Hobson-West and Timmons, 2016). According to Pru Hobson-West and Anne-Marie Jutel (2020: 393), veterinary practice operates as a “key site of human–animal relations,” where veterinarians mediate between humans and animals in multiple situations, whether in the context of animal production, companion animals, or wild animals. Veterinarians also control boundaries between them. In relation to animals, veterinarians do not occupy just one position: drawing on the notion of multiplicity, veterinarians can occupy multiple positions and mediating roles that are not always compatible (cf. Law and Mol, 2010; Singleton, 2012). We contribute to this emerging line of study by examining contestations of veterinary practice, as well as how its legitimacy is maintained by the legal system.

The mediating work being done by veterinarians is also filled with multiple tensions. This is illustrated by Clinton Sanders’s (1995: 199–200) comparison concerning the ways in which veterinary practice differs in multiple ways from the performance of human medicine. In the human setting, physicians are commonly in control, directing the interaction from an authoritative position. Physicians are also subjected to “extensive legal and ethical regulation” (Sanders, 1995: 199), and considerations of financial costs are of limited importance in conjunction with the health of human patients or saving human lives.

In contrast to this, veterinarians are situated in a triadic relation, mediating between the animal patient and the human owner. Veterinary practice is client oriented, and considerations of costs are of high significance. Thus, euthanasia is an option in many such cases that in human medicine would be unthinkable. The result of these differences is that the legal regulation of veterinarians is much looser in comparison with human medicine, contributing to both flexibility and conflict in veterinary practice (Hobson-West and Timmons, 2016).

Animals are thus not patients in the way humans are. Instead, they have a dual status both as sentient beings and as economic objects. They warrant care and medical attention as living beings, but at the same time, the work veterinarians perform is also part of the ‘maintenance’ of animals used in production. As John Law (2010: 61) somewhat bluntly expresses it, the way veterinarians ‘care’ for animals can be seen to include killing them as well: “[T]his isn’t cruelty, which is what a sentimental urban world might imagine. For caring for the calf is also, and crucially, a matter of a good death.” However, emotional stress is not a quality of the ‘sentimental urban world’ alone, but subjects veterinarians to various tensions (e.g., Enticott, 2012). Furthermore, questions about what constitutes good care for animals are at the heart of animal welfare debates.

Veterinarians and veterinary expertise are part of the enactment of the “state-controlled killing” of animals, where this capacity is taken away from, for example, religious authorities, to ensure the ‘rational’ and ‘humane’ treatment of animals (Asdal and Druglitrø, 2017: 74). Veterinary practice is part of the processes of limiting the treatment of animals to certain controlled locations – such as the slaughterhouse or the laboratory – as well as controlling the movement of animals, for example in the international trade of production animals and agricultural markets (Enticott, 2012). This has also involved the gradual definition of animal health as a publicly relevant issue in which veterinary expertise is seen as a crucial solution for dealing with it (Enticott et al., 2011). Animal rights organisations have also demanded stricter regulation, limiting, for example, the performance of painful procedures only to veterinarians. These

demands have been countered by references to the specialist knowledge of producers who see themselves as equally qualified for such procedures. Such developments exemplify contestations about who is authorised to deal with animals and what kind of expertise is considered legitimate.

The economic status of animals as ownable objects conditions the work of veterinarians but is also related to the consequences of supervising veterinarians' work. Veterinarians can order sanctions, relocation, or, in extreme cases, the killing of animals that producers rely on for their livelihood (see Koskela, 2021; Väärikkälä et al., 2020). Supervising veterinarians are dealing with and, in some cases, severely interfering with, the property (i.e., the animals) of a citizen, and such actions require robust legitimisation. This legitimacy is partly grounded on the inspected animals' health and wellbeing. Tensions between forms of knowledge can nevertheless form grounds for controversy, as different groups struggle to define what counts as acceptable or good care for animals. As Brian Wynne (1996: 61) notes, "the basis of lay public responses to expert knowledge is always potentially an epistemological conflict with science about the underlying assumed purposes of knowledge". Legitimation based on veterinarians' expertise on animal welfare is often met with suspicion about underlying motives for interfering and controlling the relations between animals and their owners (Hobson-West and Jutel, 2020; Knights and Clarke, 2018). The suspicions are indicative of the status of veterinary expertise, which in comparison to a physician is a lower position of authority, and thus also more contestable. A successful performance of veterinary expertise, therefore, requires managing tensions between different stakeholders and the coordination of different forms of knowledge, and supervising veterinarians regularly encounter situations where this is not achieved.

The supervising veterinarians' assessments of animal welfare are connected to the enactment of animal welfare and animal protection law (Koskela, 2021; Valtonen et al., 2021; Väärikkälä et al., 2020). The Finnish Animal Welfare Act from 1996 (35:1) states that animals should not be subjected to unnecessary pain and suffering,

but the word *unnecessary* leaves considerable room for interpretation and has been contested by those advocating for animal rights or animal welfare.<sup>1</sup> The ambiguity is amplified by the different categorisations of animals and their dual/ambiguous status as sentient beings as well as economic objects in law (as discussed earlier). Even though the main purpose of the law is to prevent and remove unnecessary suffering – the main point in many legal court cases that we analyse here – production animals can still be kept in conditions that many perceive produces unnecessary suffering. Whether something is necessary or unnecessary is a question of what is considered justifiable. In terms of powers, Article 44 of the Finnish Animal Welfare Act (1996) confers extreme discretion to supervising veterinarians in cases in which the condition of the animals or the conditions in which they are kept are such that immediate action in relocating or euthanising the animals is necessary. This interpretative flexibility (Collins, 1981: 4) is underlined by the absence of a soft law instrument such as inspection guidelines mediating between the law and veterinary expertise, the consequences of which we discuss later.

## Boundaries, law, and boundary-spanning agency

Supervising veterinarians are required to manage and maintain boundaries between the multiplicity of practices and forms of knowledge related to the care of animals, but also to cross such boundaries when making inspections. Central to our examination, supervising veterinarians also span boundaries between the abstract normativity of the law and the multiple forms of knowledge and practices related to animal welfare (Enticott et al., 2011; Law and Miele, 2011). Boundaries and their management have been a central topic in STS, ranging from the flexible demarcation of science from nonscience (Gieryn, 1983) to institutional ecologies and the coordination of action with boundary objects (Star and Griesemer, 1989). While displaying differences, both approaches focus on the coordination of heterogeneous collections of actors, knowledges and interests.

Annemarie Mol and John Law (2005) state that boundaries, the possibilities of crossing them, and the identity and fate of the objects and subjects crossing these boundaries, are highly varied and in complex relations with each other. To Mol and Law (2005), boundaries and their management are crucial to all ordering. However, the authors also highlight the potential transformations in the identity or perception of the object/subject that result from crossing boundaries, and the possible consequences for order. In some instances, to maintain order some things (or the identity of some things) might need to be preserved or affirmed in the crossing of the boundaries. This is because the power of some practices or techniques is derived from the perception that they apply everywhere or are true or produce true outcomes regardless of context. A prime example of such normative arrangement is the law, the legal order, and legally mandated agency, with the caveat discussed by Bruno Latour (2010: 247-249) that law is a plural and socio-culturally situated practice. Yet, in its situatedness the legal order spreads to the extent of its web of (socio-cultural) associations and provides a uniform means to verify social order (Latour, 2010: 254-277).

From the legal courts' fact-finding perspective, Sheila Jasanoff (2005: 50) argues that "the law develops knowledge as an aid to doing justice in a particular case; by contrast, science seeks truths that are, as far as possible, detachable from their context of production." We examine veterinary expertise as situated in-between these rationales for knowledge production. On the one hand, the authority of veterinary expertise is based on the scientific training of the veterinarian and the general and detached truths of veterinary science. On the other hand, veterinarians as supervising officers with a legal mandate are tied to reporting the specifics of the case and thus combine their trained expert perception with an evaluation of what animal welfare is in the context of a given inspection case. However, we emphasise that supervising veterinarians also need to connect the details of the case with the normative (both general and abstract) aspects of legal statutes on animal welfare (cf. Latour, 2010: 254-277).

In the complaint cases we analyse, the central actors include supervising veterinarians, the

legal courts and their judges, and the complainants (and we should also add, the silent party of animals). The relations between these actors can be understood as involving jurisdictional and epistemic boundaries, understood (in general terms) as delineating any number of stabilised institutional values and epistemic stances and their logics and principles of action or operation (cf. Abbott, 1988). These "traditions for knowing and acting" (Law and Mol, 2010: 1) with their distinct rationales in this case context include law, rights, economics and veterinary expertise, but also the lived actuality of the complainants – the lay and specialist knowledge concerning, for example, animal husbandry, health, ownership and the animals owned.

These potentially complex relations point towards an agency capable of navigating and stitching together the different traditions of knowing and acting in institutional practices. The figure of the boundary-spanning agent and boundary spanning as agency has been discussed in management and organisational as well as governance and sustainability literature.<sup>2</sup> In our approach, boundary-spanning agency is something that is partly in-built in relations between institutional practices that also involve standards and guidelines (Timmermans and Berg, 1997) and partly constituted, affirmed and challenged in situated contexts such as legal courts. Boundary-spanning agency is not an actor's category (Lynch, 2014), and is (in our use) meant to capture a function of a socio-cultural practice that involves a struggle which leads into more or less temporary relations of power (order), the specifics of which depend on the context of inquiry.

What makes the cases we analyse interesting is that while complainants seek access to their rights, at the same time their questioning of the supervising veterinarians' decisions and practice can be interpreted as disruptive of the legitimacy of the system of enforcement and legal order in general. That is, what legal courts try to put together, complainants try to tear apart.

In conceptualising boundary-spanning agency, we note that by definition, the *supervising* veterinarians span the boundary between the abstract and highly general domain of law and the messy empirical reality, which in this case is a particular instance of practising animal husbandry or animal



ownership. Thus, veterinary expertise is the medium through which the veterinarians' authoritative representations and their interpretation of the facts on the ground are communicated to the law, and through which the boundaries between different ways of knowing and acting are both spanned and affirmed (Singleton, 2012). Put in different terms, the actual is transposed into the normative through the mediation work of veterinary expertise. This veterinary work presents the focus of contestation in the legal court cases we analyse.

### Examining agency through legal court disputes

Empirically our focus is on the contestation and maintenance of veterinary expertise in courts, focusing on the Finnish supreme administrative court. We approached the topic with a preliminary interest in how the actors involved argued for their case in trying to bolster or detract from the parties' credibility and the credibility of their knowledge claims. We further examined how these credibility contests (Shapin, 1995) were connected to relations between veterinarians, the court, and the complainants as well as the animals they own.

The initial case data consist of 78 Finnish supreme administrative court judgments, dating from 2013 to 2022. All cases are complaints made by the animal owner against supervising veterinarians on grounds that are discussed later, but the character, context and substance of these cases is quite varied, ranging from industrial production to concerns related to companion animals. For this study of supervising veterinary expertise, we chose five court cases for in-depth analytical examination. The criteria for choosing these judgments are twofold. First, we chose these cases due to their character as particularly contested in comparison to other cases in the full dataset. The selected cases contain exceptionally pointed argumentation, and though this exceptionality might not be representative of the case type as a whole, these judgments by their exceptionality highlight well what is at stake and provide a suitable material for empirically motivated theorisation of practice. Exceptional instances challenge, add to and provide a reflec-

tive surface to theory and its development (cf. Timmermans and Tavory, 2012).

The second criterion for choosing these cases had to do with the variance of their substance. By including different types of human–animal relations, we provide both a more varied *and* context-independent understanding of how boundaries are negotiated, and justifications contested or affirmed. In a broad stroke, the cases we focus on are about animal husbandry (dairy and meat production) and companion animals, but they also involve breeding for profit as an economic motive. More specifically, the cases involving production animals are about wild boars and cattle, and the cases involving horses, cats and (wolf)dogs represent companion and hobby animals.

It is noteworthy that the judgments we focus on also contain the relevant parts of the lower administrative court judgment, because most (if not all) of the evidence was already filed in the lower court proceedings. Supreme administrative court proceedings are based on the previous case file and additional filed written statements by the parties, whereas oral hearings are rare. The judgments are representations of court case proceedings, filtered by the judicial and epistemic reasoning of the judge or a collegium of judges. While the judgments thus provide a one-sided perspective on these cases, the judgments as resolutions are what matters for the consequences of the legal disputes, and what matters for the authority and status of the supervising veterinarian. The judgments then bring closure on these contested cases, which is significant for affirming (or contesting) the status of the supervising veterinarians.

The analysis of the judgments is complemented by news material from selected media outlets in Finland, and especially by a handful of news items that discuss or have taken the first-person view of supervising veterinarians. The issues of animal welfare and its supervision have been topical in Finland lately, as the recent reform of the Animal Welfare Act has generated debate on the practice and extent of supervision. We have used these media texts to locate the figure of the supervising veterinarian in the Finnish cultural landscape of meaning (Reed, 2009: 89–171) and provide the analysis with additional insight.

We developed the data thematically, starting from coding the smaller sample of cases with Atlas.ti case by case. We then collapsed the case-specific quotations into general themes, while preserving the richness and individual characteristics of the cases in descriptions and select quotations. The aim here was to make more general inferences about boundaries, institutional logics and practices and their interlocation. The themes that emerged as most pertinent to our analytical interests were the contestations relating to the condition and characteristics of the animals, the contestation of the propriety of the inspection process, and the role of drawing on past inspections as an argumentative strategy.

## **Examining the production and contestation of boundary-spanning agency in Finnish supreme administrative court cases**

### ***Affirming and contesting veterinarians' inspection accounts***

The central point of contestation in the analysed court judgments concerns the definitions and claims about whose assessment about animal welfare is considered legitimate and on what grounds. Both supervising veterinarians and complainants draw on their varying expertise and experience of animal welfare and husbandry, displaying the often-contradictory ways of defining animal welfare. The claims are fundamental in establishing the credibility and legitimacy of the contradicting positions, and thus consequential to the resolution of the court dispute.

Veterinary expertise appears mostly in a matter-of-fact way in the analysed court judgments. Claims in expert statements are represented as facts about animals in general, and the facts are then contrasted to the perceived mistreatment of animals observed at the inspection sites. Thus, in a case concerning wild boars (3372/1/15, 2016: 7), the court decision notes that wild boars generally reproduce rather easily. Since this had not occurred in the farm in consideration, the veterinarians and the court deduced that this was another indication of malpractice. In another case, the supreme administrative court discussed a case in which the veterinarian had ordered the castration of household cats that were breeding

profusely. The court based its decision on the notion that there is reliable veterinary knowledge about the breeding of cat populations:

The general understanding, also expressed in the previous decision [by the lower administrative court], is that [situations in which there are] uncastrated cats of opposite sexes who move freely outdoors lead to the uncontrollable growth of cat populations, which is harmful to the health, wellbeing, and security of the cats. (Case: 23579/03.04.04.04.24/2021: 5)<sup>3</sup>

Based on this general knowledge, the veterinarians did not have to inspect individual cats to make the decision, as the definition was seen to apply to all cats and cat populations. The way animals are enacted in these instances therefore relies on abstract and detached knowledge about the characteristics of the species in general, with not much room for individual or situational variation.

However, while such 'facts' are based on current veterinary knowledge, it should be noted that the question of what species-specific behaviour consists of and how it should be accounted for is a malleable issue and provides a possible opening for contestation. Production animals especially can be kept in conditions that limit their possibilities to, for example, move, take care of themselves, and socialise with others of their kind. Therefore, while indeed based in veterinary expertise and animal welfare science, it should be kept in mind that the definition of what counts as sufficient conditions is both flexible and contested (e.g., Lundmark et al., 2013).

The case concerning wild boars (3372/1/15) revolved around the question of what is and is not proper nutrition for the animals and provides another example about the flexibility of definitions. One of the main points of contention (the other being the conditions in which the animals were kept) in this case had to do with the type of feed provided to the wild boars, namely, pastries procured from a local bakery. The pastry the boars were fed with was considered appropriate nutrition by supervising veterinarians *if* the pastry was complemented with other more conventional and good quality fodder that is usually provided for farm animals. In a further twist, the pastries were found to be past their sell-by date, and if not mouldy or rotten, then they were at least stale, but

probably also somewhat tainted as food. Consider the following excerpt:

The inspections have described the [state and quality of the] fodder found on the farm. The conclusions concerning the wild boars' feeding have additionally drawn on the account of [the animal owner, farmer] A. During the first inspections A has himself given the opinion that boars would rather eat stale rather than fresh pastry and hay, and that the nutrition wild boars naturally feed on is partly rotten, which also gives the wild boar meat its correct aroma. The [regional authority] states that providing partly tainted nutrition is just one of several problems related to the feeding [of the animals]. (Case: 3372/1/15: 12)

Thus, when the quality of the fodder was raised as evidence of the farmer's compromised practice of animal husbandry, the owner/farmer responded that it was characteristic of wild boars to scavenge and eat waste or garbage – claiming that this is what they feed on, and not only that: the typical or recognisable taste of wild boar meat is dependent on the animals scavenging and eating waste. This referral to the economic and related aesthetic rationale of the feeding practice was an attempt to counter the veterinarian's judgment by referring to alternative facts about the animals, which were importantly based on the practice-based knowledge of the farmer (cf. Lynch, 2014; Wynne, 1996). While these claims also operate on the level of species-specific qualities, the economic-aesthetic aspects also go beyond considerations that are strictly about animal welfare.

The contested issue was thus the species-specific needs of wild boars – what do such animals need to fulfil their 'wild-boariness'? From a veterinarian perspective, species-specific needs connect to the up-to-date requirements of animal husbandry as a target of governance, as defined by veterinarians: it is required for the farmer/owner to know what the animals husbanded need as a species. Both the supervising veterinarians and the owner of the animals claimed to have superior knowledge on where the boundary between nature and culture is located, and the issue boiled down to the quality of the pastry fed to the wild boars. In its resolution in favour of the veterinarian's position, the court signalled preference for expert authority based on veterinary science over

the animal owner's practical experience and local knowledge of conditions (cf. Wynne, 1996).

The interpretative flexibility (Collins, 1981) of such boundaries, epistemic objects and the competing forms of knowledge were also apparent in a case judgment that concerned cattle. In this case, one cow – dubbed cow no. 107 by its number at the farm – exemplifies how both supervising veterinarians and complainants can qualify the situation in almost completely opposite ways.

First, in the account given by the supervising veterinarian, the cow in question was described as in very poor condition, which eventually led to the decision to put it down:

The cow with earmark 107 was limping and practically three-legged. In the inspection that took place Dec 16, 2015, the supervising veterinarians had given an order to either treat or to put down this cow, among others. The cow was then put down at the end of this inspection to prevent further suffering. (Case: 1253/1/16: 12)

In this description of events, the veterinarians had inspected the cow several times, noting it to be in very poor condition and in need of treatment. As the complainant-producer had not acted as advised by the veterinarians, the cow was put down. However, in the complainant's account, the same cow was described as completely fine:

The cows were milking well and therefore there could not have been any severe problems in their circumstances. For example, cow number 107, which was put down during the inspection that took place on Dec 16, 2015, was the best cow [the complainant] had based on milk production. It had milked a little under 50 kilograms per day, and according to a linear curve model its milk production would have been almost 16 thousand kilograms per year. [The complainant] had provided a report of milk production of his cows to the court. (Case: 1253/1/16: 14)

In this account, the wellbeing of the cow is based on assessing its productivity, which the complainant at another section of the judgment also supported with reference to the plans he had made in cooperation with the dairy. In addition to relying on the statistics of milk production as neutral evi-



dence for substantiating the complainant's case, the complainant had also consulted the services of other veterinarians. The purpose was to substantiate the complainant's claims with (competing) veterinary expertise:

The animals had been inspected with [another veterinarian] and no problems were noticed. Of course, in a freestall barn and in a large herd there are always some problems to do with chance and circumstance. In the complainant's experience, such injuries heal in about a week. (Case: 1253/1/16: 14)

Hence, the claims are not just the complainant's own opinions or choices but are instead substantiated by other actors and facts as well – other veterinarians, the dairy, and the cow as a productive unit that was enacted through productivity calculations.

The complainant still admits that the animals are not completely fine, but these are chance events or part of the normal life of a barn. As evidenced by this quotation, allowing for such variance and openness can also indicate intimate knowledge of the local situation and thus can serve as a justifiable basis for making knowledge claims about the disputed issue. This could also be used to avoid responsibility. An example of such an evasion is the reference to a chance event in which a certain outcome is not a result of deliberate action. The discussed court case, in general, shows how the supervising veterinarians made claims about the animals' health and wellbeing based on their (expert) observation of the condition and behaviour of the animals, whereas the complainant-producer used arguments based on productivity and economic factors to demonstrate the animals' health.

Overall, many of the complainants stated that the evaluation of the owner's practice of taking care of animals should be based on the owner's situational consideration and judgment. Instead of making inferences based on the abstract rules of the Animal Welfare Act, external observers should trust the animal owners' personal expertise. In another example, the case concerning possible mistreatment of horses (20056/03.04.04.04.24/2020), the complainant referred precisely to this kind of solution. The

police had received several complaints about the stable, as their horses were seen outside during harsh winter nights. The complainant, however, argued that if the weather was too harsh for the horses, the complainant could assess their condition situationally and then decide whether the animals needed to be brought in or not. In other words, the complainant would assess the horses' conditions and wellbeing first, and then decide what to do (instead of applying a categorical rule that the horses needed to be kept inside at a certain temperature and at certain times). Here confining judgment to the context of each situation is proposed to offer a basis for resolving the case.

In sum, in all the examined judgments, the veterinary 'facts' about animals and their relation to mistreatment of animals was explicitly contested. When mobilised successfully by the veterinarian, such facts affirmed the veterinarians' expert accounts of animal protection violations and enabled boundary-spanning agency between the abstract generality of law and particular conditions at the inspection sites, as represented in the expert inspection reports. The complainants, by comparison, sought to disrupt the spanning agency between the law and the veterinary expert account by declaring their superior knowledge of conditions on the ground at the site of inspection. This superiority was based on a different rationale of evaluating animal welfare: the intimacy or situatedness of knowledge about the animals and what their welfare requires and the economic aspect and productivity, supported by reference to the counter-expertise of contracted veterinarians.

### ***Affirming and contesting the due process of inspection and appropriate practice of animal husbandry and ownership***

In the cases we examined, a reoccurring way to challenge and undermine the credibility of the supervising veterinarians' inspection accounts was to claim that these accounts were somehow personally motivated. We interpret such claims as attempts to disrupt the boundary-spanning agency of the supervising veterinarians. In these instances, the supervising veterinarians are not portrayed as focused on the relation between

the characteristics of the case at hand and the law. Instead, their focus is claimed to be limited to the setting and the personal relations with the complainant.

The personal motives attributed to the supervising veterinarians were presented as examples of the incompetence of veterinarians, thus questioning their understanding of what it is to care for animals:

The veterinarians who made the decisions do not have experience in practice [of animal husbandry], which has led to resolutions that are incorrect and not based on facts, and to deception and a witch hunt against [the complainant]. The supervising veterinarians always arrived at the farm without notice. (Case: 1253/1/16: 14)

The notion of “witch hunt” aims to reverse the veterinarians’ account. Repeated visits to the farm and claims about recurring instances of mistreatment of animals are thus explained by a personal motive for the veterinarians’ actions. That is, recurrence is claimed to be not a quality of persistent problems at the farm, but instead signifies repeated attempts by the supervising veterinarians to find proof for their personal agenda or vendetta against the complainant. Furthermore, arriving without notice could be considered a way to make sure that the inspection is focused on the actual conditions in the farm (i.e., the producer has not had time to hide mistakes), but here the complainant interprets it as a sign of deliberately attempting to find (in the sense of making up) violations of animal welfare standards. Claiming that supervising veterinarians are motivated, or their actions influenced by ulterior or personal motives, marks an attempt to undermine the supervising veterinarians’ legitimacy and capacity to span the boundary between the expert inspection account and the abstract generality of law.

Another basis for contesting the veterinarians’ decision making are the alleged violations in the way the inspections were carried out. The protocol for inspections deriving from the animal protection law states that the owner of animals must be given a chance to be heard and respond, unless the situation is such that relocating the animals or euthanising the animals immediately is a necessity and the owner cannot be heard

for some reason (the mandate for this is set in Article 44 of the Animal Welfare Act). Consider this excerpt, detailing the complainant’s position:

The matter has not been handled impartially. To start with, the executive assistance the supervising veterinarian delivered to the police has jeopardised the supervising veterinarian’s impartiality, and his/her actions in the animal protection matter cannot be seen as separate from the police investigation. The decision made by the [involved] authority regarding the legal conformity of the premises the animal was held in is based on subjective perceptions, for in [the related] regulation there are no objectively verifiable criteria [with which to evaluate the] premises. That the [veterinarian’s] first contact with the case happens as part of a criminal [police] investigation is bound to guide the supervising veterinarian’s interpretation of the law and the application of that law in a direction that is injurious to the [complainant]. (Case: 20821/03.04.04.04.24/2020: 8)

In this case, an animal protection and wildlife crime case involving a suspected wolf and a wolf-dog, the presence of police officers during the inspection was argued by the complainant to violate the due process of inspection, since the neutrality of the supervising veterinarian was compromised. Due to suspected wildlife crime (keeping a wild wolf) the supervising veterinarian had entered the location with the police, and while the vet was questioning the owner about the canines’ origin, the police were also present. This, according to the owner of the animals, made it impossible for the owner to give his/her account to the veterinarian, because his/her right to not incriminate him/herself was compromised. In addition to an inappropriate inspection process, the complainant suggested an ulterior motive for the inspection: a police action programme for combating wildlife crimes, with the programme allegedly in desperate need of cases to show successful implementation.

Concluding the inspection, one of the canines, presumed to be a wolf, was euthanised on the spot by the decision of the police present at the location. Because the veterinarian did not receive a sufficient background explanation about the other canine, suspected to be an unregistered wolfdog, the vet made the decision and instructed

the law enforcement officials present in the location to euthanise the animal. Both the lower and the supreme administrative court dismissed the owner's complaint and established that the procedure that was followed at the location was appropriate, thus also affirming the veterinarian's account and the legitimacy of her/his expert authority.

In the wild boar case, the complainant explicitly claimed that the objectivity of the supervising veterinarians had been compromised due to them having been offended by the complainant's behaviour and comments. This was further connected to the complainant's argument that the principles of equality and legal protection had been violated because the supervising veterinarians were women. Thus, objectivity and neutrality were compromised by what the complainant perceived as gendered prejudice. The reasons the supervising veterinarians offered for their decisions were therefore interpreted only as excuses, again hiding a personal agenda. In the wild boar case the court, however, resolved the issue by noting that differences in opinions or disagreement between the parties did not mean that the officials would be unable to carry out their professional task objectively.

While in the previous section we examined instances where competing forms of knowledge and interpretations were set against each other, in the situations discussed above the focus turns to the actors themselves. In such instances, the defendants did not aim to provide alternative interpretations but, instead, aimed to introduce possible hidden motives. The enactment of successful boundary-spanning requires that such personal elements are not present in the accounts and there is a connection between the detached accounts based on expert knowledge and the law. These personal elements are almost always a part of veterinary practice, as discussed above (cf. Koskela, 2021; Sanders, 1995), and provide possible fractures through which actors can try to undermine the supervising veterinarians' authoritative position.

Despite these attempts, discrediting the supervising veterinarians' inspection accounts by drawing on allegedly inappropriate inspection procedures and veterinarians' personal or ulterior

motives were not a winning strategy for the animal owners. It is true that in considering the court judgments, most claims the animal owners made against the supervising veterinarians come across as dubious, even outlandish. However, as we work with court-produced document data only, we are also left to work solely with the perspective of the judges in evaluating such claims by the complainant. That the court overwhelmingly sided with the expert accounts reflects the default position judges often take in relation to experts speaking from the perceivably neutral position of a state (expert) functionary. It should be noted that, in comparison, expert witnesses brought in by the parties are considered much less credible in their claims (Taipale, 2019).

### ***Adjusting the relation between law and actuality***

To establish and affirm the supervising veterinarians' boundary-spanning agency, a relation between the law and the actuality represented by the inspection accounts must be established. In the last two sections we showed how notions of animal welfare and its basis in the nature of the animal were subject to contestation, and how the animal owners sought to diminish the credibility and authority of the inspection accounts by questioning the propriety and motives behind the inspection process.

In this third analysis section, we focus on a recurring element in the examined court judgments: the way in which the veterinarians bring up the history of inspections. The mention and discussion of continuous problems is an important reason why these cases are in court in the first place. Consider the following excerpt discussing the inspection at the wild boar farm:

The issue at hand concerns long-term deficiencies and negligence in the conditions and nourishment of the wild boars. At least some of the animals have been observed to be skinny, but not starved, sick or injured. [The lower administrative court] evaluated that due to these serious long-term deficiencies and negligence having to do with the basic needs of the animals, such as proper fodder and its sufficiency, these deficiencies and negligence gave sufficient grounds [for the supervising veterinarians] to take appropriate action as defined

in Article 44 of the animal protection law. (Case: 3372/1/15: 9)

Such referrals to orders that concern the same issues repeatedly construct an image of lasting problems that need to be addressed. The earlier history of inspections is a criterion for evaluating the animal keepers' ability to take care of the animals in a sensible way, which is apparent in the following excerpt:

Considering that, despite numerous instances of advice and orders, [the complainant] has systematically *decided* to follow *his own* principles of animal husbandry, the issue is therefore not about a temporary condition that could be remedied by acquiring additional help and nutrition for the cattle. (Case: 1253/1/16: 25; emphases added)

The complainant had 'chosen' to apply his own principles and these principles are not generally accepted (according to the veterinarian). Attributing this to the personal choice of the complainant underlines that it is done by this person and is against the advice given by the veterinarians. But what is the broader relevance of veterinarians bringing up the history of inspections? In our contention, the key issue lies in something that a regional vet stated in a media interview in January 2023:

The regional authority supervises the minimum level of the Animal Welfare Act - and sometimes that has nothing to do with the [good, in the sense of adequate] level of animal husbandry [...] Coercive means can only be used in cases in which harm to the animals is very considerable and long-lasting. (Vaarala & Siniauer, 2023)

The vet continued:

The lay public often reacts and questions the lack of intervention [before things get bad]. We do instruct and provide guidance to improve the conditions for the animals, but in the legal framework [we work with], we can only attempt to ensure that the minimum level [of animal welfare] is fulfilled. (Vaarala & Siniauer, 2023)

What we argue is that the strategy of making credible claims by indicating a case history expresses an important means — we might call it an 'epistemic device' — for the supervising veterinarians to span the boundaries of (or the interpretive gap between) the legal normative order and the actuality as represented by the supervising veterinarian's account or narrative.

Temporalisation, or bringing up the history of inspections, is important because it provides a means to adjust the relation or threshold between the minimum level expressed in the law and the 'greater good' of actual animal welfare, which for the most part – as evidenced by the veterinarian's interview excerpt – are a different thing (cf. Enticott et al., 2011). Bringing up past events can be understood as an argumentative strategy with which to ensure that, even though some of the animals might seem to be in good health and some experts might have expressed somewhat contrary or much less grave opinions about the current condition of the animals or the conditions in which the animals are kept, generally speaking and in the long run there are bound to be problems in the future as well, that is, according to the veterinarian's trained judgment and practice-sharpened gaze (cf. Daston and Galison, 2007).

What speaks on behalf of such considerations is that there is considerable public pressure upon the veterinarians to perform and succeed in their work. The possibility of such a practice of doing interpretive work (for the greater good) existing in our case study is also backed by earlier research. Gareth Enticott (2012) discusses bovine tuberculosis of cattle in Britain and follows the practice of testing conducted by veterinarians. The testing protocol stated that in the case of one animal in the herd testing positive, all the animals should be euthanised to prevent the disease from spreading. However, in the case of borderline test results (due in part to the very craft-like nature of the test procedure, leading to a variance in 'trained judgment' of determining infection), Enticott writes that veterinarians might interpret the results in a way that preserved the means of livelihood for the farmer/herder and preserved the lives of the animals. That is, some results were

interpreted in a certain way in support of the greater good.

Enticott (2012) based his observations on what Stefan Timmermans and Marc Berg (1997) call the local universality of protocols, which refers to the idea that for universal guidelines to work universally, they need to be interpreted and tinkered with in their local context. These interpretative spaces that are opened and what they enable across different scales of agency are very important to any large-scale coordinated action that is based on and seeks to uphold given principles and order. Guidelines mediate between general normative rules such as law and micro-level practice.

In the case of the Finnish supervising veterinarians the relevance of the veterinarians' broad discretion for attaining the greater good is pronounced. This is because there are no guidelines for inspection other than what is stated in the law. In other words, the lack of more accurately described guidelines or testing procedures (i.e., soft-law instruments) provides more autonomy for the veterinarians in providing them with an interpretive space as experts. Thus, the supervising veterinarians' mandate existing between law's normative perception and the observed actuality is quite extensive, with Article 44 of the animal protection law giving them powers to issue immediate action either relocating or euthanising the inspected animals, thus also overriding individual rights to conduct business, and terminating means to livelihood for some. This extremely extensive mandate is highly meaningful to the supervising veterinarians' practice of boundary-spanning agency between the extreme generality of law and the particularity of an animal welfare case.

Here we want to stress the issue of lack of inspection protocol for supervising veterinarians apart from what the law on animal protection states. Law, in its generality, is highly flexible to interpretations and thus also highly contestable. As earlier studies have shown, protocols can be very powerful as devices that are independent of human actors, affirming what for science counts as the generally accepted knowledge or the consensus, and the proper way to conduct one's business considering this knowledge (Taipale

and Hautamäki, 2021). In a way, protocols can both diminish and reinforce boundary-spanning agency with a stronger coordinating mechanism, stronger or much more forceful because it has been negotiated into being by a group of experts or professionals representing the full field (cf. Berg et al., 2000). Thus, the lack of such protocol for the Finnish supervising veterinarians means that their autonomy to determine 'animal welfare' and 'unnecessary suffering' is quite expansive, but these interpretations are also highly contestable with, for example, counter expertise.

## Conclusions

Animal welfare and its supervision has been topical in Finland at the time of writing due to the recent legal reform process and associated media attention. As our discussion of the cultural landscape and earlier literature on veterinary expertise shows, human–animal relations are a means to have a conversation about and also reflect upon core values that involve not only our moral stance towards non-human life but also the extent and limits of our entitlement with regard to medicine, economic activity and property rights in general (Hobson-West and Jutel, 2020; Law, 2010; Sanders, 1995).

In discussing complaint cases against supervising veterinarians' decisions in the Finnish supreme administrative court, we have sought to examine the making of legally mandated veterinary practice as boundary-spanning agency. As a theoretical construct, boundary-spanning agency provides a perspective on the general question of how transfer of knowledge (facts, legal principles) from one domain to another across their mutual boundaries is coordinated without loss of authority, and how the related tensions between different ways of knowing and doing are managed.

The analysis explored how different forms of knowledge were used by supervising veterinarians and animal owners to enact animals and their welfare (Law, 2010; Law and Miele, 2011; Singleton, 2012). Establishing such accounts is crucial to the successful performance of veterinary expertise, while animal owners, for their part, aimed to undermine this by bringing in elements



that do not go together with the official position of the veterinarians. One element of these cases is then the dynamics between different forms of knowledge related to human–animal relations, and the tension between abstracted expertise and the situational messiness of the inspection arrangements (cf. Singleton, 2012). However, this situational messiness is not just an empirical observation, but a strategy used by complainants to undermine the status of veterinarians as experts. Our analysis further shows how this veterinarian knowledge is accredited or challenged during the process of its transferral, and how the multiple boundaries that are spanned are themselves generated during the very process.

We contend that the figure of a boundary-spanning agent is a useful conceptual device to explore and compare arrangements of transfer and transformation of knowledge, while the actual way this transfer occurs is case-specific and subject to empirical examination. In our case study of examining a process involving law, supervising veterinary expertise, and local and experience-based knowledge of animal husbandry, our study focuses on the contestation and affirmation of the verity or quality of the veterinarians' observations concerning the inspected animals and the premises they were kept in as well as about procedural propriety of the inspections.

The practice of carrying out inspections generates tensions between veterinarians and animal owners. There have been calls to incorporate law enforcement officials in inspection procedures as a rule (Valtonen et al., 2021). However, as the analysed case about wolfdogs highlighted, this might lead to contestations over the neutrality of inspections, given that the police presence likely influences the inspections and alters the balance of power, at least by the presence of police possibly raising associations with criminal investigations. If inspections are conceived as negotiations between the veterinarian and the animal owner and geared towards improving animal welfare instead of looking for punishable negligence, it is not self-evidently desirable to involve law enforcement officials. However, critical opinions about supervising veterinarians' inspections being too lenient might also warrant stricter action (Valtonen et al., 2021).

Rather than law enforcement presence, this might also be achieved through establishing inspection guidelines for supervising veterinarians.

What is noteworthy is the extensive interpretative space that supervising veterinarians have at their disposal. There are no soft-law instruments such as robust inspection guidelines that would mediate between the animal protection law and the discretion of the veterinarian, or the veterinarian's trained judgment. On the one hand, the lack of guidelines might present problems, because the lack of authoritative inspection guidelines renders the veterinarian's decision more susceptible to contestation, possibly prolonging official actions in such cases (cf. Väärikkälä et al., 2020). On the other hand, the animal protection law's definition of unnecessary suffering or adequate level of well-being for animals is open to interpretation and is seen to set the minimum level of compliance. The minimum level, as we discussed, does not often correspond with adequate practice in what the veterinarians see on the ground while carrying out inspections. Here the flexibility of the law and the wide mandate of veterinary discretion enable the veterinarian to adjust the relation between the law and the actuality represented by their inspection statements and (possible) auxiliary statements given to the legal court.

The argumentative strategy that we discerned in the judgments was based on bringing up the inspection history of the given complainant, which seemed to function as a kind of 'epistemic device' for determining the threshold for improper and punishable practice of animal husbandry. Attaining such a threshold also justifies the supervising veterinarians' decisions to act immediately – the main point of contention in the case judgments we analyse – as defined in Article 44 of the animal protection law. Earlier studies on veterinary expertise have tended to highlight the relatively weak authority of veterinarians. However, when the extent of supervising veterinarians' discretionary power is tested in the legal domain, our results show that supervising veterinarians occupy a strong position of authority vis-a-vis animal owners. Our results thus complement earlier studies on veterinary expertise (e.g., Hobson-West and Jutel, 2020; Sanders, 1995).

Thus, supervising veterinarians can be interpreted to engage in epistemic work to attain what they perceive as the greater good of animal welfare that is left unserved by the low minimum level of animal welfare determined in the animal protection law. By doing this work, supervising veterinarians also span the boundaries between law and the actuality represented by their inspection account, enabling the transposition of factual and local observations into the normative and general fabric of law. Examined in the context of legal court contestation of veterinary practice, this is the core idea of what we have termed boundary-spanning agency.

### **Acknowledgements**

This research has been funded by the Strategic Research Council within the Research Council of Finland (decision n:o 335442, 335655) and Kone Foundation.

## References

- Abbott A (1988) *The System of Professions: An Essay on the Division of Expert Labor*. Chicago and London: University of Chicago Press.
- Andrade SB and Anneberg I (2014) Farmers under pressure. Analysis of the social conditions of cases of animal neglect. *Journal of Agricultural and Environmental Ethics* 27: 103–126.
- Anneberg I, Vaarst M and Sørensen JT (2012) The experience of animal welfare inspections as perceived by Danish livestock farmers: A qualitative research approach. *Livestock Science* 147(1–3): 49–58.
- Asdal K and Druglitrø T (2017) Modifying the biopolitical collective. The law as a moral technology. In: Asdal K et al. (eds) *Humans, Animals and Biopolitics: The More-than-human Condition*. London: Routledge, pp. 66–84.
- Beechler S, Søndergaard M, Miller EL and Bird A (2017) Boundary spanning. In: Lane HW, Maznevski ML, Mendenhall ME and McNett J (eds) *The Blackwell Handbook of Global Management*. London: Blackwell Publishing, pp. 121–133.
- Berg M, Horstman K, Plass S and Van Heusden M (2000) Guidelines, professionals and the production of objectivity: Standardisation and the professionalism of insurance medicine. *Sociology of Health & Illness* 22: 765–791.
- Collien I (2021) Concepts of power in boundary spanning research: A review and research agenda. *International Journal Management Review* 23: 443–465.
- Collins HM (1981) Stages in the empirical programme of relativism. *Social Studies of Science* 11: 3–10.
- Committee Report (1993) *Eläinsuojelulakitoimikunnan mietintö*. Maa- ja metsätalousministeriö, Helsinki 1993: 27.
- Daston L and Galison P (2007) *Objectivity*. Princeton: Princeton University Press.
- Edmond G (2001) The law-set: The legal-scientific production of medical propriety. *Science, Technology, & Human Values* 26(2): 191–226.
- Edmond G (2004) Judging facts: Managing expert knowledges in legal decision-making. In: Edmond G (ed) *Expertise in Regulation and Law*. Farnham: Ashgate Publishing, pp. 136–165.
- Enticott G (2012) The local universality of veterinary expertise and the geography of animal disease. *Transactions of the Institute of British Geographers* 37(1): 75–88.
- Enticott G, Donaldson A, Lowe P, Power M, Proctor A and Wilkinson K (2011) The changing role of veterinary expertise in the food chain. *Philosophical Transactions of the Royal Society B* 366: 1955–1965.
- Goodrich KA, Sjostrom KD, Vaughan C, Nichols L, Bednarek A and Lemos MC (2020) Who are boundary spanners and how can we support them in making knowledge more actionable in sustainability fields? *Current Opinion in Environmental Sustainability* 42: 45–51.
- Hazy JK and Tivnan BF (2003) The impact of boundary spanning on organizational learning: Computational explorations. *Emergence* 5(4): 86–123.
- Hobson-West P and Jutel A (2020) Animals, veterinarians and the sociology of diagnosis. *Sociology of Health & Illness* 42(2): 393–406.
- Hobson-West P and Timmons S (2016) Animals and anomalies: An analysis of the UK veterinary profession and the relative lack of state reform. *The Sociological Review* 64: 47–63.
- Jasanoff S (2005) Law's knowledge: Science for justice in legal settings. *Public Health Matters* 95(1): 49–58.

- Kivimäki A (2023) Eläinsuojelukäynnit valvontaeläinlääkärinä ovat rankkoja — eläinlääkäriksi pääsy on monen suuri unelma vaikka työ kuormittaa [Animal protection inspections are tough for supervising veterinarians – getting to be a veterinarian is a dream for many despite the stress and emotional burden]. *Yliopisto-lehti* 2: 15 March. Available at: <https://www.helsinki.fi/fi/uutiset/elaimet/elainsuojelukaynnit-valvontaelainlaakarina-ovat-rankkoja-elainlaakariksi-paasy-monen-suuri-unelma-vaikka-tyo-kuormittaa> (accessed 15.5. 2023)
- Knights D and Clarke C (2018) Living on the edge? Professional anxieties at work in academia and veterinary practice. *Culture and Organization* 24(2): 134–153.
- Koskela T (2021) The roles of the Finnish authorities specialising in animal welfare offences. *Scandinavian Studies in Law* 67, 129–162.
- Law J (2010) Care and killing: Tensions in veterinary practice. In: Mol A, Moser I and Pols J (ed) *Care in Practice: On Tinkering in Clinics, Homes and Farms*. Bielefeld: Transcript Publishers, pp. 57–69.
- Law J and Miele M (2011) Animal Practices. In: Carter B and Charles N (eds) *Human and Other Animals: Critical Perspectives*. London: Palgrave Macmillan.
- Law J and Mol A (2010) Veterinary realities: What is foot and mouth disease? *Sociologia Ruralis* 51(1): 1–16.
- Lundmark F, Berg C and Röcklinsberg H (2013) ‘Unnecessary suffering’ as a concept in animal welfare legislation and standards. In: Röcklinsberg H and Sandin P (eds) *The Ethics of Consumption*. Wageningen: Wageningen Academic Publishers, pp. 114–119.
- Lynch M (2014) From normative to descriptive and back. In: Soler L, Zwart SD, Lynch M and Israel-Jost V (eds) *Science after the Practice Turn in the Philosophy, History, and Social Studies of Science*. New York: Routledge, pp. 93–113.
- Mol A and Law J (2005) Boundary variations: An introduction. *Environment and Planning D: Society and Space* 23(5): 637–642.
- Reed IA (2009) *Interpretation and Social Knowledge: On the Use of Theory in the Human Sciences*. Chicago: University of Chicago Press.
- Ryan A and O’Malley L (2016) The role of the boundary spanner in bringing about innovation in cross-sector partnerships. *Scandinavian Journal of Management* 32(1): 1–9.
- Sanders CR (1995) Killing with kindness: Veterinary euthanasia and the social construction of personhood. *Sociological Forum* 10(2): 195–214.
- Schotter APJ, Mudambi R, Doz YL and Gaur A (2017) Boundary spanning in global organizations. *Journal of Management Studies* 54: 403–421.
- Shapin S (1995) Cordelia’s love: Credibility and the social studies of science. *Perspectives on Science* 3(3): 255–275.
- Singleton V (2012) When contexts meet: Feminism and accountability in UK cattle farming. *Science, Technology, & Human Values* 37(4): 404–433.
- Taipale J (2019) Judges’ socio-technical review of contested expertise. *Social Studies of Science* 49(3): 310–332.
- Taipale J and Hautamäki L (2021) Clinical practice guidelines in courts’ representation of medical evidence and testimony. *Social Science & Medicine* 275: 113805.
- Timmermans S and Berg M (1997) Standardization in action: Achieving local universality through medical protocols. *Social Studies of Science* 27(2): 273–305. <https://doi.org/10.1177/030631297027002003>
- Timmermans S and Tavory I (2012) Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory* 30(3): 167–186.

- Vaarala N and Siniauer P (2023) Ei-toivottu vieras [An unwanted guest]. *Helsingin Sanomat*, 15 January. Available at: <https://www.hs.fi/sunnuntai/art-2000009111915.html> (accessed 7.8.2024).
- Väärikkälä S, Koskela T, Hänninen L and Nevas M (2020) Evaluation of criminal sanctions concerning violations of cattle and pig welfare. *Animals* 10: 715.
- Valtonen E, Koskela T, Valros A. and Hänninen L (2021) Animal welfare control—Inspection findings and the threshold for requesting a police investigation. *Frontiers in Veterinary Science* 8:736084.
- Williams P (2012) *Collaboration in Public Policy and Practice*. Bristol: Policy Press, pp. 95-118.
- Wynne B (1996) May the sheep safely graze? A reflexive view of the expert-lay knowledge divide. In: Lash S, Szerszynski B and Wynne B (eds) *Risk, Environment & Modernity. Towards a New Ecology*. London: Sage, pp. 44-83.



## Notes

- 1 The debate about the term 'unnecessary' in this context was debated during the making of the Finnish Animal Protection Act in the early 1990s, as already then animal rights advocates demanded that it should be left out (Committee Report, 1993). The term was also debated during the law reform during the 2010s and 2020s. It is therefore a central point of contestation, both in the Finnish context and elsewhere, as it provides an opening for a justified infliction of pain (see Lundmark et al. 2013; Valtonen et al. 2021).
- 2 The contributions highlight boundary spanners in their varying roles and their impact in facilitating innovation in cross-sector partnerships (Ryan and O'Malley, 2016), and as a promoted quasi-professional actor category in the science-policy interface with specific skill sets (Goodrich et al., 2020), and as a necessity in network governance (Williams, 2012). Boundary spanning has also been described as a skill in managing organisation's systems to exert an influence over it (Beechler et al., 2017) or as a communicative solution or model for complex and highly divided organisations (Schotter et al., 2017), and it is also central to organisational learning (Hazy and Tivnan, 2003). Isabel Collien (2021) in her review compares discursive, structural and agential perspectives on boundary spanning by discussing the different conceptions of power related to these perspectives.
- 3 All case excerpts translated from Finnish by the authors.