

2021

Learning to Read Equine Agency: Sense and Sensitivity at the Intersection of Scientific, Tacit and Situated Knowledges

Sanna Karkulehto
University of Jyväskylä

Nora Schuurman
University of Turku

Follow this and additional works at: <https://ro.uow.edu.au/asj>



Part of the [Animal Studies Commons](#), [Comparative Literature Commons](#), [Other Feminist, Gender, and Sexuality Studies Commons](#), and the [Other Geography Commons](#)

Recommended Citation

Karkulehto, Sanna and Schuurman, Nora, Learning to Read Equine Agency: Sense and Sensitivity at the Intersection of Scientific, Tacit and Situated Knowledges, *Animal Studies Journal*, 10(2), 2021, 111-139.

Available at: <https://ro.uow.edu.au/asj/vol10/iss2/7>

Learning to Read Equine Agency: Sense and Sensitivity at the Intersection of Scientific, Tacit and Situated Knowledges

Abstract

The aim of this essay is to address the challenges and problems in communicating with horses and interpreting their communication in everyday handling and training situations. We seek ways to learn more about equine communication and agency in the prevention of cruelty against animals and in enhancing animal welfare. We ask how it would be possible to learn to read the subtle signs of equine communication and agency in a sensible, sensitive, and ethical way to increase the health and wellbeing of horses that humans interact with. We have placed this theoretical examination in a multidisciplinary framework that consists of human-animal studies, feminist posthumanities, cultural and literary studies, and equine social science, as well as applied insights from, for example, discussions on power, ethics, and politics. Our emphasis is on the need for situated knowledges, among scientific and tacit knowledges, in order to 'become with' a horse in a relationship based on mutual communication and trust. These different types of knowledges are central to an 'animal politics' that is organised politically on behalf of animals and motivated by an ethics of care and responsibility, echoing recent requests for a relational ethics in interactions with animals in multispecies societies and more-than-human worlds.

Keywords

horses, learning, equine communication, equine agency, tacit knowledge, situated knowledges, ethics, care

Cover Page Footnote

Acknowledgements: The work leading to the publication of this article has received funding from the Academy of Finland, in the project Landscapes of Interspecies Care: Working the Human-Animal Boundary in Care Practices. Footnotes: [1] Even if horses differ anatomically, physiologically, and behaviorally from many other species – such as chimpanzees, dolphins, birds, or bees – the foundational interests and procedures of learning to read equine communication and learning applies in the same way as learning almost any other nonhuman animal communication.

Learning to Read Equine Agency: Sense and Sensitivity at the Intersection of Scientific, Tacit and Situated Knowledges

Sanna Karkulehto

University of Jyväskylä

Nora Schuurman

University of Turku

Abstract: The aim of this essay is to address the challenges and problems in communicating with horses and interpreting their communication in everyday handling and training situations. We seek ways to learn more about equine communication and agency in the prevention of cruelty against animals and in enhancing animal welfare. We ask how it would be possible to learn to read the subtle signs of equine communication and agency in a sensible, sensitive, and ethical way to increase the health and wellbeing of horses that humans interact with. We have placed this theoretical examination in a multidisciplinary framework that consists of human-animal studies, feminist posthumanities, cultural and literary studies, and equine social science, as well as applied insights from, for example, discussions on power, ethics, and politics. Our emphasis is on the need for situated knowledges, among scientific and tacit knowledges, in order to 'become with' a horse in a relationship based on mutual communication and trust. These different types of knowledges are central to an 'animal politics' that is organised politically on behalf of animals and motivated by an ethics of care and responsibility, echoing recent requests for a relational ethics in interactions with animals in multispecies societies and more-than-human worlds.

Keywords: horses, learning, equine communication, equine agency, tacit knowledge, situated knowledges, ethics, care

The horse has come a long way into our world. They use their athleticism and their intellect to configure themselves in whatever version of a horse we have invented for them in each equine discipline. They do so with stoicism and with remarkably little protest. [...] Unless we have done something to shatter their trust, most horses are affable, imminently social and extraordinarily generous in their efforts to cope with the oft-times taxing environment we have created for them. These highly social beings do their damndest to communicate with us. Perhaps we should do more to venture a little further into their Umwelt and learn a little equine communication on the journey.

(Antonia Henderson, 'Talking to Horses' 49)

Introduction

The Cambridge Declaration on Consciousness, signed by a group of neuroscientists in 2012, was not only a breakthrough for ethology but also significant for animal studies. According to the declaration, nonhuman animals have the same neurological capabilities for conscious thought and emotionally motivated behaviour as humans ('Cambridge Declaration'). This admission has mostly remained an abstract principle, however, for two major reasons. First, nothing really changed for the nonhuman animals themselves: the declaration did not have a noticeable impact on human actions and practices regarding nonhuman animals in, for example, meat production. The second reason is that many people who interact with nonhuman animals daily have seen them even before as companions and considered them conscious subjects capable of emotion, intentional action, and intricate communication (Charles and Aull Davies). In the context of the Declaration and especially in terms of the second reason the paradox, then, lies in how human handling of animals regarded as companions is increasingly reported to cause them pain. This has happened in, for example, equine training, where reports of animal abuse in horse training and equestrianism have become frequent (Thomas; Lesté-Lasserre; Dyson and Pollard, 'Relationship with Gait'; 'Elite Dressage'; Tuomola et al., 'Oral Lesions'; 'Risk Factors'). There has been particular concern about certain training methods and tack, such as too-tight nosebands and

girths, supplementary reins, or in-hand working equipment that are considered painful and cruel, and that may actually pose a threat to the social license of operating equestrian sports (Thompson, 'Dressage Dilemmas'; Johannessen). How has an ethical move towards cross-species relationships, empathy, and communication between human and nonhuman animals, increasingly shared and accepted among those interacting with animals, not yet been accomplished?

The aim of this essay is to address the challenges and problems in communicating with horses and interpreting their communication in everyday handling and training situations in a novel way, by exploring the interplay between different types of knowledges in human-horse interaction. To find ways to resolve them, we explore how to learn more about equine communication and agency in the prevention of cruelty to animals and in enhancing animal ethics and welfare. We ask how it would be possible, according to these paradigms, to learn to read, in a sensible and sensitive way, the subtle signs of equine communication and agency to increase rather than decrease the health and wellbeing of the horses with whom people live, work, and spend their time. For example, in competitive equestrianism, especially dressage, many of the problems in training derive from the conception of riding as art, based on aesthetic understandings of the horse and rider-horse combination. Therefore, Thompson ('Dressage Dilemmas') suggests that making dressage more ethical requires critical attention to the ethical and aesthetic 'ugliness' of current accepted practices, and an 'aesthetic shift'. How to achieve this shift and to interpret the beauty of horses in an ethical way? More broadly, can what horses themselves have to tell be acknowledged and accommodated within the body of knowledge about horses, and shape contexts in which humans seek to approach, understand and train them? How can horses in different equestrian practices be recognised as individuals, subjects, and agents?

We place this theoretical examination in a multidisciplinary framework that consists of human-animal studies, feminist posthumanities, and cultural and literary studies (Haraway, *The Companion Species Manifesto; When Species Meet*; Byrke, Bryld and Lykke; Despret; Åsberg and Braidotti; Koistinen and Karkulehto; Eagleton; Pearce). We apply insights from recent work in human-animal studies and animal geographies, studies on equine behaviour and training in

equitation science to discussions on power, ethics, and politics in humanities and cultural theory. The analysis benefits from recent studies on human-horse relationships and equine agency in what Lynda Birke and Kirrilly Thompson call equestrian social science.

Focusing on the role of knowledge, we discuss the concept of tacit knowledge and apply the writings of Birke and Tora Holmberg on sensually constructed knowledge and bodily ways of knowing, and Donna Haraway on ‘situated knowledges’ and ‘nonanthropocentric sensitivity’ (‘Situated Knowledges’; *The Companion Species Manifesto* 93). We point out the dynamics between different types of knowledges and their need for understanding the specific contexts of individual horses – not only spatial, including human-horse encounters in situations of interaction and in different environments, but also temporal ones. By the latter we mean both the life history of horses, including what they have experienced, learned, understood and possibly suffered, as well as their daily and yearly routines, habits and abilities to cope in the interaction.

We have the posthumanist aim ‘to strive for more ethical cohabitation’ with nonhuman others (Karkulehto et al. 1) when encountering other species in the everyday, by investigating the possibilities of ‘reading’ equine communication and agency. These reading skills – as well as tireless, self-aware study and processual, material practice of these skills – are essential, especially when training young, unhandled horses; previously abused or mishandled horses who have lost their trust in humans; or horses who, as a result of prolonged pain or previous experiences in training, show signs of learned helplessness, a state where an animal ‘faced with chronic, inescapable, stress simply gives up trying, even when escape becomes available’ (Henderson, ‘Talking to Horses’ 45; see also Seligman and Maier; Maier and Seligman).¹

We begin our essay with a short review on the limitations of and the need for new scientific knowledge to promote equine wellbeing. We then present the role of tacit knowledge and bring forth a new perspective stemming from literary theory that has seldom if ever been made use of in the analysis of human-horse interaction. After this, we proceed to argue the need for situated knowledges, among other types of knowledges, of how to ‘become with’ a horse in a relationship based on mutual communication and trust. In the epilogue, we present the main

contribution of this essay: to highlight the significance of sensitive and ethical approaches to human-horse communication, based on acknowledging the dynamics between different types of knowledges.

Learning from Scientific Knowledge?

Human sensitivity and knowledge of horses' feelings, experiences, and interactions are limited. It has been suggested that a major factor in this lack of sensitivity and inability to communicate is humans' heavy reliance on verbal expression and interaction, which is not shared by nonhuman animals (Despret; Game). Although horses can learn to recognise not only humans' tone of voice but also multiple words, their natural communication systems are not based on verbality but on various forms of visual, non-acoustic, haptic, kinesthetic, and olfactory signalling such as body language, proxemics, and kinesics (Argent 114-115; Henderson, 'Talking to Horses' 45). If not carefully practiced by humans, these signs may be too subtle and delicate for humans to interpret, or even to perceive or receive.

When unaware of equine communication, humans' knowledge of horses and their ways of feeling and experiencing may remain limited, if not non-existent, causing problems in communication between horses and their human handlers. For example, when horses learn something, they simultaneously learn an emotion and a feeling they have when learning. As in humans, the emotion can be positive or negative, and anything from happiness, amusement, contentment, affection, satisfaction, and pride to severe anxiety, fear, and sadness, or feelings of confusion, frustration, distance, and resistance (Holland). It goes without saying that it is both ethically questionable and practically short-sighted to make a prey animal of over one thousand pounds, who depends on flight as its primary means of survival, learn anything when anxious, confused, or fearful, and when it is ready to flee at any second (Leiner and Fendt; Henderson, 'And How Does That'; Starling et al.). What follows such an approach is inconsistent horse training that compromises horses' welfare, puts the people handling them at risk, and develops horses with 'behavioural problems' (Henderson, 'Equitation Science' 46; Starling et al.). Due to

these limitations and shortcomings in human knowledge, equine ethology has addressed the reasons for training problems widely. Moreover, medical knowledge on horses' welfare especially in terms of pain, reasons for their pain, and pain relief is rapidly increasing.

Inconsistent horse training could also be prevented and changed by implementing a learning process about how horses learn, act, and communicate. One step in learning equine communication and agency is to learn equitation science, a field that produces new knowledge on equine health, wellbeing, behaviour, learning, and communication. The study of horses' communication, cognition, and well-being has indeed increased considerably during the 21st century (Waran et al.; Brubaker and Udell; Henderson, 'Is Your Horse Happy?'; Matsuzawa).

Supporting this body of work, Haraway suggests that we should study the relationships of people and animals seriously, in a scientific manner, in scientific terms, and with scientific means. She asks what we could learn from the ethics and politics of encounters with otherness, and especially from the importance of these encounters (*The Companion Species Manifesto: Dogs, People, and Significant Otherness*). She claims that people could save the Earth from themselves by learning from the ways in which nonhuman companions meet humans. Reading Haraway's writing carefully, we can recognise a quest for relationality regarding the acquisition and use of knowledge, as well as an ethical approach to interspecies communication.

In the training of horses, however, even the increase in scientific knowledge does not seem to be able to reduce nor solve the problems observed. It is evident that scientific input has not gained ground in equestrianism in the same way it has in, for example, human education and health care. This may be because people who spend time with horses do not always have time or opportunities to study equine learning, but it is necessary to also consider limitations of the possibilities of natural sciences to promote equine wellbeing in training.

Birke and Thompson (48) point out that ethology does not tell a lot about how horses experience being with people – nor do we meet 'the horse' at the yard but, instead, individual horses. To understand horses' subjective experiences, emotions, feelings, intentions, and actions – namely, their agency – it is therefore crucial to know them as individuals well enough to be able to interpret their actions and messages (Charles and Aull Davies). As Birke and Thompson

remind us, ‘horses have their own viewpoints and [...] although they are structurally subordinated to human power, they do have possibilities for agency, for shaping interspecies social engagements’ (4). Due to the agency of the individual horse, any interaction with horses is situated and therefore there are limits to the extent to which any specific context of interaction can be explained by universal science.

Animal subjectivity has been a central topic in posthumanist theory, and it has also been increasingly discussed within equestrian social science, the study of human-horse relationships (Ekström von Essen and Bornemark 99). Philosopher Jonna Bornemark warns about ‘the risk of fully reducing the horse into an object of science, as we then do not think about him/her as a fellow living being’ (5). She further points out that ‘[a] horse is not only a biological system or a species with its species-typical behavior: it is also a unique individual that belongs to different cultural practices, which have been formed across the species boundaries, i.e. a subject’ (4). This leads us to the question about the types of knowledges found in equestrian cultures. Human-animal interaction and practices of caring for them are primarily based on practical knowledge created in lived practices and relations, a process that is not necessarily conscious but, at least partly, unconscious (Ingold 52). This applies to knowledge about horses, their training and ways of communicating with them in equestrian cultures (McShane and Tarr; Schurrman, ‘Horses as Co-constructors’). It has to be acknowledged that the epistemological starting point of natural sciences may not be enough and has to be supplemented by a focus on cultural, societal and political dimensions – insight into what is required for promoting human learning and understanding of equine communication. The changes needed will have to take place in multispecies societies and cultures with established conceptions, beliefs, norms and practices as well as hierarchies and power structures. In the next section, we will address this question by focusing on the central role of tacit knowledge in equestrian cultures.

Learning in a Tacit Way?

The concept of *tacit knowledge* coined by Michel Polanyi refers to personal, experiential, practical, and thus contextual and embodied knowledge or skills that are used in action but are

difficult to explain verbally (Polanyi). It is understood to be the opposite of explicit or written knowledge and consists of technical knowledge and skill as well as deeper conceptions, beliefs, and modes of thought that are often taken for granted (Nonaka 14-15). In the processes of creation and passing on of tacit knowledge, what is conveyed is to a large extent worldviews and understandings of how things should be. For instance, tacit knowledge about horses includes conceptions of horses as animals different from humans and ethical understandings of proper conduct in interacting with them (Schuurman, *Hevoset hevosina*).

An important aspect of tacit knowledge about horses is the skill of 'reading' horses, communicating with them and observing and interpreting their subtle messages, expressions, and gestures (Birke; Schuurman, 'Horses as Co-constructors'). Reading the subjective actions and experiences of a horse and understanding their wellbeing and learning requires knowledge of the individual, based on continuous mutual interaction and learning, to know the other's life history. In everyday situations, the skill of reading horses manifests as the ability to interpret their emotions, experiences, and intentions, and the purpose of their actions. This is done by observing their physical appearance and movement, actions, and way of communicating with humans and other animals. A horse may look happy or apathetic, or act in a certain way to make the human understand, for example, that they wish to get into the stable or out in the field. As part of tacit knowledge, reading is a personal and experiential process that involves feelings, emotions, and affects.

The process of learning is different depending on the type of knowledge. Explicit, written knowledge is systematic and easy to teach and learn. Tacit knowledge, on the other hand, is difficult to pass on to others (Nonaka 13-14). Learning tacit knowledge cannot be reduced to following abstract rules, but instead, it can only be learned by observing the work of others and practicing to do the same, typically in a traditional master-student relationship (Polanyi 30). In such exchanges, the content of tacit knowledge often changes somewhat as information is actively and situationally interpreted in a way to blend it with previous knowledge.

Thompson ('Theorising Rider-Horse Relations' 232) emphasises the nature of horse riding and training as a long-term process of rehearsal and mutual becoming which occurs over time, in an individual human-horse partnership. This 'mutual becoming' refers to a relational development called 'becoming with', in which both human and, in this case, horse, are affected by the other and, therefore, eventually transformed (Despret; Haraway, *When Species Meet*). In an individual human-horse relationship, the animal participates in the production of tacit knowledge over time and the acquired knowledge is contextualised by that relationship (Schuurman, 'Horses as Co-constructors'). Unfortunately, long-term learning about horse handling, care, and training is often not possible, due largely to the commercialisation of contemporary equestrianism, especially at riding schools, where initial learning about horses commonly takes place. Opportunities to learn hands-on horse care at riding schools have become scarce as such work is increasingly conducted by employees.

Because of its potential flexibility and adaptability, there is no reason why tacit knowledge cannot be adapted to changing worldviews or understandings of the relationships between humans and horses. There are limits, however, to the opportunities for renewal and change of tacit knowledge, due especially to the way in which it is passed on through situational learning, from one generation to another. Thus, it has been suggested that tacit knowledge is essentially conservative in nature and often tends to maintain practices that are considered outdated, as in the case of horse training methods which were previously widely used but would now be judged abusive (Schuurman, *Hevoset hevosina*). For example, a study by Zetterqvist Blokhuis and Andersson found that 'to talk about the horse as a subject actively involved in the communication, seems not to be built into the traditional system of educating rider-horse combinations with its military inheritance' (184). By military inheritance, they mean the modern training tradition 'that views horses as objects that react mechanically' (189). Thus, the mechanising attitude to horses has been preserved in the tacit knowledge legacy of equestrianism although the underlying conception of horses as animals has changed.

Tacit knowledge is itself involved in the production of explicit scientific knowledge and in constant interaction with it, partly explaining why scientific discourses can never be purely objective, but always, to some extent, positioned or situated (Polanyi; Haraway, 'Situated

Knowledges'; Puig de la Bellacasa, "Nothing comes without its world"). As suggested by Polanyi (20), if all that is personal were to be removed from knowledge, all knowledge would be destroyed. Accordingly, transformations in the ways of thinking about animals, the resulting recent profound changes in scientific approaches to them as well as the increase in posthumanist conceptualisations about equines and their subjective viewpoints and agencies inevitably challenge ways of relating to horses.

The remarkably slow pace of adopting the newest evidence-based information produced by equitation scientists can be understood as resistance to change typical for tacit knowledge. The practices of care, handling, and training are supported by commonly held values and established conventions within networks and communities of equestrianism. These do not easily translate into scientific language nor posthumanist interpretations of animality (Birke, Hockenhull and Creighton). The situation epitomises how, despite its scientific accuracy, scientific knowledge does not readily fit into a culture that relies significantly on tacit knowledge. Therefore, for tacit knowledge to remain valid in the present environment of scientific understanding, it will eventually have to open up and transform – nevertheless retaining its contextual character, including the skill of 'reading'. In the next section, we will take a closer look at what the concept of 'reading' entails from the perspective that has seldom, if ever, been used in the context of human-horse communication: the one of literary theory.

Learning about Politics?

We have used the concept of 'reading' above in a metaphorical manner, as it is used in the equestrian world, yet simultaneously suggesting that the behaviour, communication, and agencies of horses could be literally read as if they were written texts. This may, on the one hand, underrate horses as active subjects and agents. On the other hand, when considered from the perspective of one of the main fields of study and disciplines focusing literally on reading, the literary studies, it seems that its method of close reading and analysis of research materials and their contexts could elucidate the complexity of human-horse communication relatively well. Therefore, we now turn the focus on the theorisation of reading, examined in literary studies,

with the help of feminist and queer studies, to investigate whether there are possibilities for literary theory to reconfigure the ethical and political questions concerning new understandings and new futures and ethical cohabitation that humans and horses could share (Haraway, *When Species Meet* 289, 300-301; Karkulehto et al.).

As literary theory is – according to cultural studies oriented literary scholars such as Eagleton – always political, it makes a political act out of both theory and reading. If we read horses and the signs of equine communication and agency, we are inevitably involved in politics. Reading is always performed in certain contexts, ideologies, and cultures, under certain cultural conventions, and these paradigms are under control of power (Karkulehto, ‘Litteraturforskning’ 23, 32). Often, cultural politics and knowledge production are based on authorised domination of the weak and vulnerable; that is, the others and those who are made the ‘other’, such as nonhuman animals. According to Michel Foucault (*The History of Sexuality*), politics is defined by power, and knowledge production is never objective or neutral. This can be observed in the modern history of animal training and the different power relations and hierarchies that training practices have conveyed. Following Foucault’s concept of disciplinary power (*Discipline and Punish* 136), animals in training have been approached as ‘docile bodies’ that ‘may be subjected, used, transformed and improved’ (Thompson, ‘Theorising Rider-Horse Relations’; Schuurman and Franklin, ‘Performing Expertise’; Włodarczyk).

Reading engages with theorisation and reason: the mind and the sense. In feminist and queer (literary) theory, however, the reading process is said to combine not only theoretical reasoning, the mind and the sense but also feelings, emotions, affects, and sensitivity, as well as ethics and politics in a place or space that is located at the intersection of the text and the reader (cf. McLaughlin; Pearce; Karkulehto, ‘Litteraturforskning’ 24; ‘In-Between’ 208). In feminist studies, reading and readership are based on the perception of reading as a reciprocal, interactive, affective, and touching process; in other words, as a process that operates on an emotional and affective level. The objects, or rather the collaborating subjects of the study, are approached as active and variable agents, and the information produced with them is interactive and processual. Both agents – the reader and the one who is being read – produce dynamic meanings in a mutual process of reading (Pearce 95, 238-243; Karkulehto, ‘Litteraturforskning’

24). The desires and feelings, even the fears or the shame, of the reader become pivotal. The perception of reading as a reciprocal process also intertwines with the idea of resisting readership, which tackles the currently dominant conventions and politics of reading as well as the conventional expectations of reading positions for the sake of the ones being ‘read’ (see Fetterley; Morris; Karkulehto, ‘Litteraturforskning’ 29) – the ones that, in this context, would be the horses.

When ‘reading’ horses, the affective, emotional, and embodied level of reading is merged with cognition, ethics, and politics, as well as the relational and situated contexts and histories of those involved. When approaching a horse, the intellectual intersects with the political and sense intersects with sensitivity and sensibility. The ideas of the intersectionality of knowledge, politics, feelings, and emotions are at the very core of examination when discussing the reading of the signs and traits in the communication between human and nonhuman animals. In the context of feminist posthumanities, Birke and Holmberg (123) talk about ‘sensually constructed knowledge’ that refers to ‘sensing through seeing, hearing, feeling and sniffing’ as a means of knowledge production. For Birke and Holmberg, such knowledge is central to an ‘animal politics’ that is organised politically on behalf of animals and motivated by an ethics of care and responsibility, echoing recent requests for a relational ethics in interactions with animals in multispecies societies and more than human worlds (Greenhough and Roe; Buller; Puig de la Bellacasa, *Matters of Care*). For instance, Donovan (305) suggests a dialogical approach to caring for animals where, by means of analogy based on homology, it would be possible to imagine ‘how the animal is feeling based on how one would feel in a similar situation’. Such an approach emphasises the kind of moral compassion based on affect and embodied interaction shared with the animal defined by Acampora as a ‘cross-species compassion mediated by somatic experiences’ (23). It would be justifiable in horse training, where the signs of communication and learning are subtle and the signs of discomfort or even pain that prevent learning are even more subtle and, as mentioned before, many times misunderstood or ‘misread’.

Åsberg and Braidotti refer to ‘immersive analyses’, intertwined with the ‘concerns of how to live well with multiple others on this planet’ (4). When communicating with nonhuman

animals in order to live well with them and care for them, such immersion is critical. In human–horse communication, horses often read humans and their bodily states and gestures much better than humans can read theirs (Budiansky; Henderson, ‘Is Your Horse Happy?’; Despret 115). They, for instance, can read the heart rate and muscle tension of their human handlers, and even adapt to them (Keeling et al.; Lanata et al.). The human handler is often the one who has to learn to read the horses’ gestures better in order to maintain and increase their wellbeing in training situations, and this learning requires immersion in the bodily communication of horses. This learning is remarkably enhanced by the human handler or trainer having accumulated both scientific and tacit knowledge and being prepared and able to combine them, when encountering horses, with knowledge of them as individuals with their own life history and experiences of their current situation, as we will show in the next section.

Learning to ‘Become with’ in the Human–Horse Relationship

According to Haraway (*When Species Meet* 207), training involves becoming available to each other, becoming attuned to each other, and becoming open to surprises. One of the main aims of equestrianism is that the act of riding leads to a mutual experience of partnership and harmony, in which the horse and the human create a seamless whole, a hybrid composed of two beings and led by the human. (Thompson, ‘Theorising Rider-Horse Relations’). This is described by Despret (122) as an ‘anthropo-zoo-genetic practice’, shared action that results from mutual communication between human and horse. This kind of ‘intra-action’ (Birke, Bryld and Lykke) can produce intimate knowledge of the other and their otherness, in the form of ‘animality’ and ‘humanity’. Such communication can eventually transform both the human, “‘becoming with a horse”, performing a body that a horse can read, acquiring a horse-sensitivity’, and the horse, by offering them ‘a new identity: being a horse-with-human’ (Despret 122). This sensitivity is developed individually, producing communication that sometimes only the partners involved can understand.

As Thompson (‘Theorising Rider-Horse Relations’) argues, in a rider-horse relationship the human is usually in control of the horse and retains power, while the role of the horse is one

of submission and obedience. This is to some extent inevitable, for reasons of safety. However, the aim of a harmonious partnership may not be achieved, and training may even become a distressing experience for horses. Many horses are taught and trained this way, and harmed in the process, possibly leading to injuries to humans and/or horses (Birke and Thompson). Following Zetterqvist Blokhuis and Andersson, ‘there is reason to believe that the communication between rider and horse would be improved if riders would acknowledge horses as subjects and active partners in the communication’ (190). In order to further this goal, we propose a shift towards a relational approach to knowledge in horse training, based on a situated knowing of horses as subjects and agents, capable of constructing relationships with humans and learning by experience within those relationships. We suggest that recognising the various contexts of the individual horse can make a difference to how their subjective experiences, emotions, needs, and intentions may be read and taken into account in the interaction between horses and humans. The way the relationship between a human and a horse is contextually experienced plays a major role in the understanding of human–horse communication and equine learning (Schuurman and Franklin, ‘Performing Expertise’).

Mutual learning and reading the other can be an intimate process, something that has not been included in behaviourist training principles or learning theory (for a comparison to dog training, see Włodarczyk). For owners for whom a relationship with a horse primarily involves a sharing of lived experiences, with a focus on knowing the horse well in order to care for them (Schuurman and Franklin, ‘In Pursuit’), mutual communication is based on responding to each other in ‘the intimate choreography of human/animal interrelationships’ (Birke, Bryld and Lykke 170). Such communication is not formal; instead, it is a conversation of questions and answers, proposals and responses as well as memories of past conversations, moments of knowing what the other means and fine-tuned dialogue. Training practices based on general, explicit knowledge and the guidance given by equitation science may then be difficult; the choreography and the way of interpreting the horse’s behaviour may be confused, resulting in misunderstandings and overreactions. For example, temporally – and often spatially – limited training sessions may create confusion for both horses and humans if the modes of embodied communication differ from their daily interaction.

However, what is crucial here is not only the mutual becoming of the actual horse-human pair in isolation of their environment and history. For horses, the space and the social environment, including relationships with other horses and humans as well as daily and yearly routines – or, following von Uexküll, the *Umwelt* – play a part in experiencing the interaction and, thus, learning. Further, the interaction is shaped by the life history of both the horse and the human: their histories of learning and becoming with others in the past, what they have understood and possibly suffered, their personal capabilities and habits, the dialogues that have formed their experience of interacting with the other species as well as their emotional and embodied responses to these experiences and, ultimately, their expectations of future interaction. In terms of equestrian culture, horses join humans in obtaining cultural capital on how to be with humans in training, in the form of personal and experiential – therefore tacit – knowledge (Schuurman, ‘The Transnational Image’). In the current world of equestrianism, however, horses frequently change owners, which may pose a risk to consistency in their training, if information about their previous training and possible health and welfare issues is not adequately passed on to the new owner. The act of reading has a potential to uncover some of the lost information, given that the rider or trainer is open to learning from the interaction with the horse in question.

Inevitably, there is a potential incompatibility between seeing horses’ behaviour as responses to stimuli and as signs of subjective agency involving actions that are meaningful for horses and result from their emotions, feelings, intentions, and perceptions of their environment and other actors (Schuurman and Franklin, ‘Interpreting Animals’). Because of these profound differences in understandings of the ‘animality’ of horses (Birke, Bryld and Lykke), it may well be that evidence-based knowledge on equine communication may not reach the emergent culture of contemporary equestrianism that values the horse-human relationship the most. It is interesting, however, that the concept of ‘attachment’ has recently entered the study of equine learning (McLean and Christensen; see Ekström von Essen and Bornemark), indicating a potential for narrowing the gap between the different understandings of horses.

Among questions that are not easily translated into ethological language, however, is the one about trust between humans and horses, prominent in equestrian cultures (Keaveney;

Wipper). It is embedded in embodied communication and cooperation between humans and horses and manifested, for example, in how horses allow themselves to be handled and trained by humans without fear (Despret). Trust is closely linked to the development of an individual human-horse relationship over time and can be a crucial factor in the interaction between a trainer and a horse. According to Birke and Hockenhull, instead of certain training methods carrying universal value regardless of the relationship, it may make a difference whether the horse knows the trainer and is able to read and therefore trust them. This is crucial for the training of horses, in which ‘both “horseness” and human-horse relations are repeatedly produced in material-discursive practices, in the interaction between the human and the horse’ (Schuurman and Franklin, ‘Performing Expertise’ 21).

In the process of becoming with the significant other, both human and horse are eventually transformed (Haraway, *When Species Meet*). Ideally, this longitudinal process consists of shared experiences of togetherness and a feeling of being ‘us’, but it is important to acknowledge that it does not always lead into an unproblematic companionship (Schuurman, ‘Blogging Situated Emotions’). Here, we return to the questions of power, as close relationships may also involve a subtle use of power that is not easily recognisable. This, we suggest, may take place not only in openly abusive relationships but also in intimate ones, such as those between humans and horses, which may render the horse vulnerable to the trainer. This may be due to the kind of tacit knowledge that preserves outdated practices and is not open to change in terms of acknowledging the horse’s individual contexts: past experiences, bodily dysfunctions, learned skills as well as embodied and emotional memories. Consequently, trust between a horse and the trainer can be lost if the trainer’s actions alarm the horse or make them feel very uncomfortable (‘Horses as Co-constructors’). Therefore, the trainer’s understanding of the horse as an animal and, subsequently, the choice of trainer and training technique have consequences for how the horse and their actions are read, interpreted, and understood in the training process. Central here is not only what is done, but also what is seen as worth doing, leading to discursive power to interpret and to define ‘the horse’ as well as their ‘training’ and ‘learning’.

In their book *(Un)stable Relations: Horses, Humans and Social Agency*, Birke and Thompson emphasise the instability of human-horse relationships. They note that emotional, physical, and intellectual labour are required to be able to communicate with horses and to understand their point of view. The atmosphere of trust can encourage people interacting with horses to recognise and accept their own limitations and pursue a better understanding of horses and their well-being despite the limitations. It is not possible to avoid mistakes; knowledge is always evolving and never fully accurate. Problems will occur because of misinformation, misunderstandings, and misinterpretations. Following Irvine, however, we posit that in the face of problems in the human–animal relationship, it is specifically *the effort to solve them* that is a sign of commitment to and responsibility for the animal and the affective relationship. A prerequisite of this is to acknowledge the individual contexts and subjectivity of the horse.

In order to achieve ethical cohabitation with horses, therefore, living and working with them as well as training them requires three types of knowledges: explicit knowledge produced by equine ethology and equitation and veterinary science, tacit knowledge about interacting with horses in general, and knowledge and awareness of the individual context of each horse, including situated knowledges of their education, experiences, injuries and illnesses in the past that still either remain or affect them, their physiology, health and wellbeing as well as their personal behaviour. It is possible to make tacit knowledge open to such change without falling into the abyss between recognising animal agency and following scientific knowledge. Such propositions were suggested by Morton et al. in their idea of critical anthropomorphism in the early 1990s but largely forgotten since: combining scientific knowledge about the behaviour, species-specific needs, and domestication of animals with a sensory and empathetic interpretation of their actions and communication. This kind of cumulative knowledge combination, in the intersection of the different types of knowledges, can be achieved only by long-term work and willingness to find out what is best and beneficial for each horse. In this way we can try to aim at becoming with our horses.

Epilogue: Learning the Encounter

In the introduction we set out to explore the possibilities of learning to read the subtle signs of equine agency and communication in a sensible, sensitive, and ethical way to increase the health and wellbeing of horses that humans interact with. We have placed this theoretical examination in a multidisciplinary framework that consists of human–animal studies, feminist posthumanities, literary studies and equine social science, as well as applied insights from, for example, discussions on power, ethics, and politics. Our emphasis has been on the need for situated knowledges, among other types of knowledges in establishing human-horse relationships based on mutual communication and trust.

We suggest that the challenges and problems in horse training today stem from practices of human–horse communication and its relation to different knowledges and conceptions of horses and their relationships with humans. It is important, therefore, to acknowledge the possibilities inherent in understanding the workings of different types of knowledges and the dynamics between them. Whereas scientific knowledge provides a valuable basis for understanding the species and their behaviour and tacit knowledge, in its most conservative form, preserves the hands-on learning of human-horse interaction, training and care, the role of relational and situated knowledges is evident. It is in these approaches that horses as subjects and agents can contribute to knowledge creation regarding their own lives. In the process of learning to know the horses individually by ‘reading’ them in one-to-one interactions, knowing them becomes intertwined in constructing relationships with them.

If we trust horses enough in such situations to let ourselves learn something new (from them) and create non-anthropocentric sensitivity (Haraway, *The Companion Species Manifesto*), ‘sensually constructed knowledge’ and ‘bodily ways of knowing’ (Birke and Holmberg 121-122), things may start to look different in horse training and schooling, and in the life shared between humans and horses. The institutions and traditions of horse training may only change by recognising horses’ subjectivity and agency as a starting point for a new kind of relationship, based on ethics and care in multispecies societies and more than human worlds, founded on ‘animal politics’ (Birke and Holmberg 123) and ‘interspecies solidarity’ (Coulter).

By learning to approach horses ethically and sensitively – or sensually and bodily, as they meet us – we may learn to understand their agency and communication to the extent that would render the interaction meaningful for both humans and horses alike. This requires acknowledgement of contexts, relational knowledges, and political thought and awareness that seek equality and aim to subvert culturally dominating hierarchies, power positions, and hegemonies for the sake of the subordinate. In this way, the practice of knowing may become a practice of caring (Despret).

When encountering, interacting and exercising with horses, many of us seek to connect with another living creature more powerfully than ever before and to discover, for one fleeting moment, the level of trust that is inexplicable, something beyond words (Evans and Franklin; 'Mitä ihminen ei tiedä'). Respecting and trusting instead of categorising, underestimating, and fearing difference may open new ways of encountering nonhuman and human animals. Haraway, however, reminds us that the outcomes of these meetings are not guaranteed and '[t]here is no assured happy or unhappy ending'; nevertheless, this is the only way to have a 'chance for getting on together with some grace' (*When Species Meet* 15). Since we cannot get rid of our humanity or human condition, let us strive to not abdicate our humaneness – the kind of humaneness that could be interpreted in a Harawayan way as a non-anthropocentric and sensitive manner of meeting the other (species), whether a companion or not. If we understand something about the uniqueness of the other species and their worthiness, we may learn something deeper and gentler about ourselves and about the others. The possibility of learning invites us to take horses seriously – just as we might take seriously anyone else we encounter – as subjects for whom we wish, despite our own sensual, intellectual and emotional limitations, nothing but the best. This is how we have an opportunity to create new forms of sustainable, non-anthropocentric ethics of care and accountable partnerships that are built on mutual feelings of trust and respect in our encounters with other living critters, be they similar to or different from us.

Notes

¹ Even if horses differ anatomically, physiologically, and behaviourally from many other species – such as chimpanzees, dolphins, birds, or bees – the foundational interests and procedures of learning to read equine communication and learning apply in the same way as learning almost any other nonhuman animal communication.

Works Cited

- Acampora, Ralph R. *Corporal Compassion: Animal Ethics and Philosophy of Body*. University of Pittsburgh Press, 2006.
- Argent, Gala. 'Toward a Privileging of the Nonverbal Communication, Corporeal Synchrony, and Transcendence in Humans and Horses.' *Experiencing Animal Minds: An Anthology of Animal-Human Encounters*, edited by Julie A. Smith and Robert W. Mitchell, Columbia University Press, 2012, pp. 111-128.
- Åsberg, Cecilia, and Rosi Braidotti. 'Feminist Posthumanities: An Introduction.' *A Feminist Companion to the Posthumanities*, edited by Cecilia Åsberg and Rosi Braidotti, Springer, 2018, pp. 1-22.
- Birke, Lynda. 'Talking about Horses: Control and Freedom in the World of "Natural Horsemanship".' *Society and Animals*, vol. 16, no. 2, 2008, pp. 107-126.
- Birke, Lynda, Mette Bryld, and Nina Lykke. 'Animal Performances: An Exploration of Intersections between Feminist Science Studies and Studies of Human/Animal Relationships.' *Feminist Theory*, vol. 5, no. 2, 2004, pp. 167-183.
- Lynda Birke, and Jo Hockenhull. 'Moving (with)in Affect: Horses, People, and Tolerance.' *Affect, Space and Animals*, edited by Jopi Nyman and Nora Schuurman, Routledge, 2016, pp. 123-139.
- Birke, Lynda, Jo Hockenhull, and Emma Creighton. 'The Horse's Tale: Narratives of Caring for/about Horses.' *Society and Animals*, vol. 18, no. 4, 2010, pp. 331-347.
- Birke, Lynda, and Tora Holmberg. 'Intersections: The Animal Question Meets Feminist Theory.' *A Feminist Companion to the Posthumanities*, edited by Cecilia Åsberg and Rosi Braidotti, Springer, 2018, pp. 117-128.
- Birke, Lynda, and Kirrilly Thompson. *(Un)stable Relations: Horses, Humans and Social Agency*. Routledge, 2018.

- Bornemark, Jonna. 'Introduction: Subjectivity and Ethical Questions in an Equestrian World in Transformation.' *Equine Cultures in Transition: Ethical Questions*, edited by Jonna Bornemark, Petra Andersson, and Ulla Ekström von Essen, Routledge, 2019, pp. 1-13.
- Brubaker Lauren, and Monique A. R. Udell. 'Cognition and Learning in Horses (*Equus Caballus*): What We Know and Why We Should Ask More.' *Behavioural Processes*, vol. 126, 2016, pp. 121-131.
- Budiansky, Stephen. *The Nature of Horses: Exploring Equine Evolution, Intelligence, and Behavior*. The Free Press, 1997.
- Buller, Henry. 'Animal Geographies III: Ethics.' *Progress in Human Geography*, vol. 40, 2015, pp. 422-430.
- Cambridge Declaration 2012. 'The Cambridge Declaration on Consciousness.'
<http://fcmconference.org/img/CambridgeDeclarationOnConsciousness.pdf>. Accessed 30 May 2019.
- Charles, Nickie, and Charlotte Aull Davies. 'My Family and Other Animals: Pets as Kin.' *Human and Other Animals: Critical Perspectives*, edited by Bob Carter and Nickie Charles, Palgrave Macmillan, 2011, pp. 69-92.
- Coulter, Kendra. *Animals, Work, and the Promise of Interspecies Solidarity*. Palgrave Macmillan, 2016.
- Despret, Vinciane. 'The Body We Care for: Figures of Anthro-zoo-genesis.' *Body and Society*, vol. 10, nos. 2-3, 2004, pp. 111-134. doi: 10.1177/1357034X04042938.
- Donovan, Josephine. 'Feminism and the Treatment of Animals: From Care to Dialogue.' *Signs: Journal of Women in Culture and Society*, vol. 31, 2006, pp. 305-329.
- Dyson, Sue, et al. 'Do Owners Recognise Abnormal Equine Behaviour when Tacking-up and Mounting? A Comparison between Responses to a Questionnaire and Real-time Observations.' *Equine Veterinary Education*, 23 Mar. 2021, pp. 1-10. doi: <https://doi.org/10.1111/eve.13471>.

- Dyson, Sue, and Danica Pollard. 'Application of a Ridden Horse Pain Ethogram and Its Relationship with Gait in a Convenience Sample of 60 Riding Horses.' *Animals*, vol. 10, no. 6, article 2020, 1044, doi: 10.3390/ani10061044.
- . 'Application of the Ridden Horse Pain Ethogram to Elite Dressage Horses Competing in World Cup Grand Prix Competitions.' *Animals*, vol. 11, no. 5, article 2021, 1187. doi: 10.3390/ani11051187.
- Eagleton, Terry. *Literary Theory: An Introduction*. 3rd ed., University of Minnesota Press, 2008.
- Ekström von Essen, Ulla, and Jonna Bornemark. 'Between Behaviourism, Posthumanism, and Animal Rights Theory: Negative and Positive Reinforcement in Liberty Dressage.' *Equine Cultures in Transition: Ethical Questions*, edited by Jonna Bornemark, Petra Andersson, and Ulla Ekström von Essen, Routledge, 2019, pp. 97-114.
- Evans, Rhys, and Alexandra Franklin. 'Equine Beats: Unique Rhythms (and Floating Harmony) of Horses and Riders.' *Geographies of Rhythm: Nature, Place, Mobilities and Bodies*, edited by Tim Edensor, Ashgate, 2010, pp. 173-185.
- Fetterley, Judith. *The Resisting Reader. A Feminist Approach to American Fiction*. Indiana University Press, 1978.
- Foucault, Michel. *The History of Sexuality, Vol. 1: Introduction*. Vintage, 1990.
- . *Discipline and Punish: The Birth of the Prison*. Penguin Books, 1977.
- Game, Ann. 'Riding: Embodying the Centaur.' *Body and Society*, vol. 7, no. 1, 2001, pp. 1-12.
- Greenhough, Beth, and Emma Roe. 'Ethics, Space, and Somatic Sensibilities: Comparing Relationships between Scientific Researchers and Their Human and Animal Experimental Subjects.' *Environment and Planning D: Society and Space*, vol. 29, 2011, pp. 47-66.
- Haraway, Donna. 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective.' *Feminist Studies*, vol. 14, no. 3, 1988, pp. 575-599.

- . *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Prickly Paradigm Press, 2003.
- . *When Species Meet*. University of Minnesota Press, 2008.
- Henderson, Antonia. 'Equitation Science: What Trainers Need to Know about Learning Theory.' *Horse-Canada.com*, Nov-Dec 2011, pp. 46–49.
- . "'And How Does That Make You Feel?' Decoding Equine Emotions.' *Horse-Canada.com*, Nov-Dec 2013, pp. 50-55.
- . 'Is Your Horse Happy? Identifying, Assessing and Enhancing Equine Well-Being.' *Horse-Canada.com*, March-April 2017, pp. 51-57.
- . 'Talking to Horses: The Umwelt Divide.' *Canadian Horse Annual*, 2017, pp. 45-49.
- Holland, Janet. 'Emotions and Research.' *International Journal of Social Research Methodology*, vol. 10, no. 3, 2007, pp. 195-209, doi: 10.1080/13645570701541894.
- Ingold, Tim. *The Perception of the Environment. Essays in Livelihood, Dwelling and Skill*. Routledge, 2000.
- Irvine, Leslie. *If You Tame Me: Understanding Our Connection with Animals*. Temple University Press, 2004.
- Johannessen, Crispin Parelius. 'Descriptive Falsterbo Moments – or the Art of Equestrian Photography Made Popular.' *Equine Cultures in Transition: Ethical Questions*, edited by Jonna Bornemark, Petra Andersson and Ulla Ekström von Essen, Routledge, 2019, pp. 134-149.
- Karkulehto, Sanna. 'In-Between: Genre and Gender Hybridity, and Pirkko Saisio's Novel *Punainen Erokirja*.' *NORA – Nordic Journal of Feminist and Gender Research*, vol. 3, 2012, pp. 199-214.
- . 'Litteraturforskning och Queerpolitisk Läsning.' *Queera Läsningar. Litteraturvetenskap möter Queerteori*, edited by Katri Kivilaakso, Ann-Sofie Lönnngren and Rita Paqvalén, Rosenlarv förlag, 2012, pp. 18-41.

---. 'Mitä ihminen ei tiedä.' *Kaltio*, vol. 1, 2014, pp. 4-8.

Karkulehto, Sanna, et al. 'Reconfiguring Human, Nonhuman and Posthuman: Striving for More Ethical Cohabitation.' *Reconfiguring Human, Nonhuman and Posthuman in Literature and Culture*, edited by Sanna Karkulehto, Aino-Kaisa Koistinen, and Essi Varis, Routledge, 2019, pp. 1-19.

Keaveney, Susan M. 'Equines and Their Human Companions.' *Journal of Business Research*, vol. 61, no. 5, 2008, pp. 444-454.

Keeling, Linda J., Liv Jonare, and Lovisa Lanneborn. 'Investigating Horse-Human Interactions: The Effect of a Nervous Human.' *The Veterinary Journal*, vol. 181, no. 1, 2009, pp. 70-71.

Koistinen, Aino-Kaisa, and Sanna Karkulehto. 'Posthuman(ist) Feminism, Feminist Posthumanities.' *Critical Posthumanism: Genealogy*, 2018.
<http://criticalposthumanism.net/genealogy/feminism/>.

Lanata, Antonio, et al. 'Quantitative Heartbeat Coupling Measures in Human-Horse Interaction.' *Conference Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society*. Aug, 2016, pp. 2696-2699.

Leiner, Lisa, and Markus Fendt. 'Behavioural Fear and Heart Rate Responses of Horses after Exposure to Novel Objects: Effects of Habituation.' *Applied Animal Behaviour Science*, vol. 131, nos. 3-4, 2011, pp. 104-109.

Lesté-Lasserre, Christa. 'Traumatic Horse Training: Can You Spot Abuse?' *The Horse*, 25 July 2019, <https://thehorse.com/176132/traumatic-horse-training-can-you-spot-abuse/>.

Maier, Steven F., and Martin E. P. Seligman. 'Learned Helplessness at Fifty: Insights from Neuroscience.' *Psychological Review*, vol. 123, no. 4, 2016, pp. 349-367.
doi:10.1037/rev0000033.

Matsuzawa, Tetsuro. 'Horse Cognition and Behavior from The Perspective of Primatology.' *Primates*, vol. 58, no. 4, 2017, pp. 473-477,
<https://link.springer.com/article/10.1007/s10329-017-0632-9>.

- McLaughlin, Colleen. 'The Feeling of Finding Out: The Role of Emotions in Research.' *Educational Action Research*, vol. 11, no. 1, 2003, pp. 65-78. doi: 10.1080/09650790300200205.
- McLean, Andrew, and Janne Winther Christensen. 'The Application of Learning Theory in Horse Training.' *Applied Animal Behaviour Science*, vol. 190, 2017, pp. 18-27.
- McShane, Clay, and Joel A. Tarr. *The Horse in the City. Living Machines in the Nineteenth Century*. Johns Hopkins University Press, 2007.
- Morris, Pam. *Literature and Feminism: An Introduction*. Wiley-Blackwell, 1993.
- Morton, David B., Gordon M. Burghardt and Jane A. Smith. 'Critical Anthropomorphism, Animal Suffering and the Ecological Context.' *The Hastings Center Report*, vol. 20, 1990, pp. S13-S16.
- Nonaka, Ikujiro. 1991. *The Knowledge-Creating Company*. Harvard Business Press, 2008.
- Pearce, Lynne. *Feminism and the Politics of Reading*. Arnold, 1997.
- Polanyi, Michael. 1966. *The Tacit Dimension*. Peter Smith, 1983.
- Puig de la Bellacasa, Maria. "“Nothing Comes without Its World”: Thinking with Care.' *The Sociological Review*, vol. 60, 2012, pp. 197-216.
- . *Matters of Care: Speculative Ethics in More than Human Worlds*. University of Minnesota Press, 2017.
- Schuurman, Nora. 'Hevoset Hevosina': Eläimen ja sen Hyvinvoinnin Tulkinta. University of Eastern Finland, 2012.
- . 'Blogging Situated Emotions in Human-Horse Relationships.' *Emotion, Space and Society*, vol. 13, no. 4, 2014, pp. 1-8.
- . 'Horses as Co-constructors of Knowledge in Contemporary Finnish Equestrian Culture.' *Shared Lives of Humans and Animals: Animal Agency in the Global North*, edited by Tuomas Räsänen, and Taina Syrjämaa, Routledge, 2017, pp. 37-48.

- . 'The Transnational Image of the Spanish Horse in the Leisure Horse Trade.' *Equestrian Cultures in Global and Local Arenas*, edited by Miriam Adelman and Kirrilly Thompson, Springer, 2017, pp. 119-129.
- Schuurman, Nora, and Alex Franklin. 'Performing Expertise in Human-Animal Relationships: Performative Instability and the Role of Counterperformance.' *Environment and Planning D: Society and Space* vol. 33, no. 1, 2015, pp. 20-34.
- . 'In Pursuit of Meaningful Human-Horse Relations: Responsible Horse Ownership in a Leisure Context.' *Affect, Space and Animals*, edited by Jopi Nyman and Nora Schuurman, Routledge, 2016, pp. 40–51.
- . 'Interpreting Animals in Spaces of Cohabitation: Narration and the Role of Animal Agency at Horse Livery Yards.' *Horse Cultures in Transformation: Ethical Questions*, edited by Jonna Bornemark, Petra Andersson, and Ulla Ekström von Essen, Routledge, 2019, pp. 225-239.
- Seligman M. E. P., and S. F. Maier. 'Failure to Escape Traumatic Shock.' *Journal of Experimental Psychology*, vol. 74, 1967, pp. 1-9. doi: 10.1037/h0024514.
- Starling, Melissa, Andrew McLean, and Paul McGreevy. 'The Contribution of Equitation Science to Minimising Horse-Related Risks to Humans.' *Animals*, vol. 6, no. 3, 2016, article 15, doi:10.3390/ani6030015.
- Thomas, James. 'Olympic Equestrian Events Under Fire as Research Links Riding Equipment to Stress Response in Horses.' *ABC News*, 10 May 2016, <https://www.abc.net.au/news/2016-05-10/olympic-equestrian-equipment-causing-stress-in-horses-study/7386074>.
- Thompson, Kirrilly. 'Theorising Rider-Horse Relations: An Ethnographic Illustration of the Centaur Metaphor in the Spanish Bullfight.' *Theorizing Animals: Re-thinking Humanimal Relations*, edited by Nik Taylor and Tania Signal, Brill, 2011, pp. 221-53.

- . 'Dressage Dilemmas: Ethics Where Sport and Art Collide.' *Equine Cultures in Transition: Ethical Questions*, edited by Jonna Bornemark, Petra Andersson, and Ulla Ekström von Essen, Routledge, 2019, pp. 150–164.
- Tuomola, Kati, Nina Mäki-Kihniä, Minna Kujala-Wirth, Anna Mykkänen, and Anna Valros. 'Oral Lesions in the Bit Area in Finnish Trotters After a Race: Lesion Evaluation, Scoring and Occurrence.' *Frontiers in Veterinary Science*, 12 Jul. 2019, article 206, 1-12, <https://www.frontiersin.org/articles/10.3389/fvets.2019.00206/full>.
- Tuomola Kati, Nina Mäki-Kihniä, Anna Valros, Anna Mykkänen, and Minna Kujala-Wirth. 'Risk Factors for Bit-Related Lesions in Finnish Trotting Horses.' *Equine Veterinary Journal*, 2020. doi: 10.1111/evj.13401.
- von Uexküll, Jakob. 1940. 'The Theory of Meaning.' *Semiotica*, vol. 42, 1982, pp. 1-87.
- Waran, Natalie Kay, Paul Damien McGreevy, and Rachel A. Casey. 'Training Methods and Horse Welfare.' *The Welfare of Horses*, edited by Natalie Waran, Kluwer Academic Publishers, 2007, pp. 151-180.
- Wipper, Audrey. 'The Partnership: The Horse-Rider Relationship in Eventing.' *Symbolic Interaction*, vol. 23, no. 1, 2000, pp. 47-70.
- Włodarczyk, Justyna. *Genealogy of Obedience: Reading North American Dog Training Literature 1850s-2000s*. Brill, 2018.
- Zetterqvist Blokhuis, Mari, and Petra Andersson. 'Riders' Understanding of the Role of Their Horse in Sports Dressage.' *Equine Cultures in Transition: Ethical Questions*, edited by Jonna Bornemark, Petra Andersson, and Ulla Ekström von Essen, Routledge, 2019, pp. 179-192.

Acknowledgements

The work leading to the publication of this article has received funding from the Academy of Finland, in the project Landscapes of Interspecies Care: Working the Human-Animal Boundary in Care Practices.