



Anthrozoös

A multidisciplinary journal of the interactions between people and other animals

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rfan20

Experiences of Intersubjectivity and Agency in Human–Horse Relationships Differ Between Box- and Open-Shed-Stable Environments

Sonja Elena Koski & Jenni Spännäri

To cite this article: Sonja Elena Koski & Jenni Spännäri (29 Feb 2024): Experiences of Intersubjectivity and Agency in Human–Horse Relationships Differ Between Box- and Open-Shed-Stable Environments, *Anthrozoös*, DOI: [10.1080/08927936.2024.2320999](https://doi.org/10.1080/08927936.2024.2320999)

To link to this article: <https://doi.org/10.1080/08927936.2024.2320999>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 29 Feb 2024.



Submit your article to this journal [↗](#)



Article views: 339



View related articles [↗](#)



View Crossmark data [↗](#)

Experiences of Intersubjectivity and Agency in Human–Horse Relationships Differ Between Box- and Open-Shed-Stable Environments

Sonja Elena Koski ^{a,b} and Jenni Spännäri^c

^aOrganismal and Evolutionary Biology Research Programme, University of Helsinki, Helsinki, Finland;

^bDepartment of Biology, University of Turku, Turku, Finland; ^cFaculty of Theology, Church and Social Studies, University of Helsinki, Helsinki, Finland

ABSTRACT

Human–horse relationships can be experienced in many ways and the horse companion can be given various roles, from a partner in action to a tool or commodity. How humans experience connection with horses and what kinds of roles are assigned to them may reflect or even depend on the real-life co-actions and environments. In this study, we assessed experiences of intersubjectivity in human–horse relationships, focusing particularly on whether and how agency and emotional and embodied intersubjectivity with the horse were discussed by horse owners. We conducted the study in two different stable environments, namely box stables and open-shed stables, that differ particularly in the horses' possibilities to execute independent decision-making in their daily lives. We conducted semi-structured interviews of 25 horse owners and analyzed them using theory-guided qualitative content analysis for notions of agency and intersubjectivity. Overall, while there were only a few explicit accounts of embodied intersubjectivity in action, it was most explicitly apparent in descriptions of hacking and doing other things than riding. Additionally, intersubjectivity was apparent in descriptions of horse emotions. There were several differences in the horse owners' accounts at the different stable environments. Respondents at the open-shed stables assigned agency more often to the horse or simultaneously themselves and the horse, discussed more often horse emotions, and emphasized hacking, playing, or just being with the horse as meaningful co-actions. At the box stables, accounts emphasizing competing, self-evidence of riding as the main activity, and human agency in co-action were more common. These results show that the management environment and forms of co-action are connected to the thoughts and views equestrians have on agency and experiences of intersubjectivity in horse–human relationships.

KEYWORDS

Affect; embodiment; equestrianism; human–animal interaction; human–horse relationship; husbandry

CONTACT Sonja Elena Koski  sonja.koski@helsinki.fi  Organismal and Evolutionary Biology Research Programme, University of Helsinki, P. O. Box 65 (Viikinkaari 1), 00014 Helsinki, Finland

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

The human–horse relationship has a long history, going back thousands of years (Librado et al., 2021). The roles of the horse have shifted from being a central work animal in agriculture, transport, and warfare toward companionship and partnership in leisure and sports (Crossman & Walsh, 2011; Dashper, 2017). The relationship has gained increasing research interest in recent years as our social license in equestrian activities is being challenged and horse welfare has become a major concern (ISES, 2018). Simultaneously, the rise of the post-humanistic movement that seeks to eradicate anthropocentrism and to bring forth the subjectivities of nonhuman beings (Cohen, 2019) has evoked questions about the roles of horses in today’s world. These changes challenge us to examine our relationship with the horse as a social animal that occupies a particular niche in human–animal interactions: on the one hand, they are tools of action in sports and leisure; on the other hand, they are important social companions with which people form close bonds (Birke & Thompson, 2018; Dashper, 2017; Hausberger et al., 2008; Wipper, 2000). Understanding better the way we experience and reflect this relationship and the causes and consequences of these experiences helps create practices respectful of equality in the relationship.

Intersubjectivity in Human–Horse Interaction

Intersubjectivity is a concept with a rich theoretical history. It can be seen either as a result of subjects’ internal processes that enable intersubjective interactions (e.g., Rochat et al., 2009; Zlatev, 2008) or as the interactional processes themselves through which the interpersonal sphere is brought into existence (e.g., Fuchs & De Jaegher, 2009; Gallagher, 2011). At the heart of the different conceptualizations, though, lies the idea of a shared interactional space experienced by the interactants. Definitions of intersubjectivity often emphasize meta-cognitively represented processes, which may exclude an embodied “we-space” and primary levels of intersubjectivity. Other definitions do not necessitate meta-representational capacities of interactants (e.g., Gallese, 2014; see Table 1 for some definitions).

Intersubjectivity is considered central to all human interactions (Praetorius, 2010; Rochat et al., 2009; Tomasello & Rakoczy, 2003) and is increasingly examined also in the context of human–animal relationships (Birke & Hockenhull, 2015; Brandt, 2004). Intersubjectivity in neurotypical adult human–human interactions is typically reliant on language with its meta-cognitive recursivity and shared intentionality (e.g., Gallagher &

Table 1. Some definitions of intersubjectivity.

Definition	Source
The sharing of subjective states of two or more individuals.	Scheff (2006)
What’s occurring between two minds.	Beebe et al. (2005)
Experienced shared states of mind.	Trevarthen (1998)
Mutual understanding of another’s subjective experience.	Stern (2000)
The sharing of experiential content (e.g., feelings, perceptions, thoughts, linguistic meanings) among a plurality of subjects.	Zlatev et al. (2008)
Sharing of experiences about objects and events.	Brinck (2008)
The capacity to create shared value or connection between individuals.	Demuru et al. (2022)

Note: While the list is not comprehensive, it illustrates the various emphases and viewpoints on the concept.

Hutto, 2008; Ricoeur, 2005; Tomasello, 2008), which is not similarly available in interactions with nonhuman animals. However, intersubjectivity through bodily sensations and multimodal communication is relevant also in human intersubjectivity (e.g., Gallese, 2014; Levinson & Holler, 2014; Zlatev, 2017), and perhaps even more so in human–animal communication.

Embodied intersubjectivity emphasizes the sense of bodies mutually communicating, which in some ways is close to the concept of primary intersubjectivity (Trevarthen & Aitken, 2001; Trevarthen & Hubley, 1978) and explorations on inter-corporealities (Durt et al., 2017). Brandt (2004) proposes that human–horse interactions are intersubjective particularly through bodily communication, developing through mutually and cyclically repeated common language between a horse and a rider. There is a sense of connection through inter-corporeality, being one with the horse (Argent, 2012; Brandt, 2004; Keaveney, 2008). The body can have multiple functions in these interactions, such as being a social resonance mechanism, being means and ends in communication, helping to express thoughts, and functioning as a representational device (Lindblom & Ziemke, 2008). Embodied connection is emphasized in accounts of human–horse encounters particularly in riding and care activities (Ford, 2019; Game, 2001; Hansen, 2014; Maurstad et al., 2013). Humans aspire to achieve such mutually communicated and felt a sense of connection with horses. Or, as Ford (2019, p. 329) puts it: “... the aspirational goal of sport riding is co-embodiment between horse and human, in which kinesthetic perception, intention, and volition merge.” Embodied mutuality improves fluidity of the interaction: familiar human–horse pairs work together with more cooperation, trust, and coordination than unfamiliar pairs (Birke & Hockenhull, 2015).

In this study, we took a broader view on human–horse intersubjectivity that may be experienced also through other forms of connectedness than explicit embodiment. We conceptualize intersubjectivity following Zlatev et al. (2008): the sharing of experiential content (e.g., feelings, perceptions, thoughts, linguistic meanings) among a plurality of subjects. Following this conceptualization, intersubjectivity can be experienced as a shared interaction through any modality and involve proprioceptive, sensomotoric, emotional, or cognitive processes, or any combination thereof. This definition is broad in that it does not limit intersubjectivity to language-based interactions or to an embodied sense of connection between a human and a horse. Intersubjectivity with a horse can be experienced in bodily contact as well as when not in physical contact with the horse: for example, in various forms of co-action (cf. cooperative mutuality: Birke & Hockenhull, 2015), mutual gaze, and in feelings of connection when reflecting the horse’s experiences or emotions (Aaltola, 2012).

Such intersubjectivity is, nevertheless, tightly bound to our understanding of reality, our frameworks of meaning we use to interpret it, and our own identities. It influences how we view others and what kinds of moral obligations we see with regard to them (Baumeister & Leary, 1995; Bradfield, 2013; Crossley, 1996; Honneth, 1995; Ricoeur, 2005). The aspect of moral obligations brings forth the need and possibility to examine also the actions, deeds, and practices of the interaction parties. The very basis of the moral obligations is recognition and account of the other’s agency. As intersubjectivity involves the manifestation of shared meanings in interaction (e.g., Lindblom, 2007), if the other is deprived of agency, there is significantly less space for shared interpretations of the interaction to develop.

Roles and Agency

People assign many roles to animals in human–animal relationships. An animal can be seen, for example, as a functional tool or as an independent being with agency and subjectivity (Aaltola & Keto, 2015; Dashper, 2014, 2017). Different roles may also exist simultaneously: the animal may be both a target of action and a companion, particularly when the animal has an assigned social role (Herlin, 2021). Horses occupy many roles, being seen as therapists, persons, partners, commodities, and tools (Dashper, 2014, 2017; Davis et al., 2015; Wipper, 2000). They have rich mental and emotional lives as highly cognitively sophisticated beings (Brubaker & Udell, 2016), and therefore self-evidently have the capacity to exercise agency in their actions. It is however variable to what extent and what kind of agency people allow and attribute to the horse. Horses living in human-controlled environments are subjected to the decisions people make concerning everything from management to actions done to and with the horse. Horses in interaction with humans, whether in training, sports, leisure, or therapy, typically cannot give explicit, independent consent (Jönsson, 2012). This necessarily creates “a fundamental asymmetry” (Patton, 2003, p. 90) in the relationship. Yet, people consider their horse companion to have aims and desires and speak of them as agentive beings (Carter & Charles, 2013; Dashper, 2017; Maurstad et al., 2013). For example, in sports, riders assume that a horse wants to perform the requested action (Thompson & Birke, 2014). This illustrates, on the one hand, that horses are perceived as willing agents with independent mental states, while on the other hand, people take the egocentric view on the reflected mental state by supposing that they align with human goals and may not acknowledge the fundamental asymmetry of agency in shared action. Moreover, the consideration of horses as agentive beings does not necessarily carry over to real-life actions. In some training approaches, people allow horses realized independence to choose actions, such as asking them to choose between a bitted or bitless bridle, or apply training following the horse’s individual pace in learning (“sympathetic training,” Visser et al., 2009). Such practices explicitly aim to diminish the asymmetry in the relationship and act toward granting agency to the horse. More typically, however, the “fundamental asymmetry” is the prevalent status quo. Therefore, it is fruitful to examine how the realized management and action decisions may reflect the thoughts and views people have on agency in their horse activities.

The Study

In this study, we assessed the ways in which people experience and discuss intersubjectivity in human–horse interactions and explored their descriptions of agency assigned to the horse. Although horses form bonds with people (Hartmann et al., 2021) and have remarkable cognitive skills to interpret human behavior and emotions (Jardat & Lansade, 2021; Nakamura et al., 2018; Trösch et al., 2019), in this research we did not attempt to examine the possible subjectivities or intersubjectivities from the horses’ viewpoint. Rather, we examined horse owners’ descriptions of experienced intersubjectivity and how these experiences related to the horse management environment they operate in. We examined accounts of explicit intersubjective experiences: that is, those

where informants describe in clear terms their experiences of embodied and inter-corporal connectedness with the horse, sensory sharing, and common language.

In addition, we propose that experiences of intersubjectivity can be examined also in accounts of doing things together and in reflections of what the horse is experiencing. In this paper, we call these implicit accounts of intersubjectivity. We examine reflections and descriptions of horse emotions as an element of intersubjective experiences because resonating and mentally representing horses' emotional processes orients the human to the horse's experiential world, which is in itself an intersubjective process (Aaltola, 2012; Gallese, 2003). In a similar vein, intersubjectivity can be observed in accounts of reflecting the horse's sensory perceptions. We also examine reflections and descriptions of doing things together, as we see these narratives of co-action as a form of sensemaking relevant in the human–horse intersubjective context.

We conducted the study in two different stable environments that differ in the degree of actualized agency the horses can employ in choosing their activity patterns, environment, and social companions: box stables, where horses are housed in individual boxes the majority of the time, and open-shed stables that house horses in social groups and allow free movement in an indoor-outdoor system (see further details of the stables in Methods). We asked whether these different horse management environments reflect, or possibly result in, differences in descriptions of agency and intersubjective experiences: that is, whether people describe intersubjectivity and their views on horse agency differently in situations where the horses are managed differently.

Methods

We recruited people who owned and/or were the main trainer of at least one riding horse at a Finnish stable of one of the two types, which we refer to as “box stable” ($n = 3$) and “open-shed stable” ($n = 2$). The stable types differed particularly in the horses' social environment and their degree of liberty to move and choose their ecological and social environment. Some of the horses were used in competitions, others were leisure-riding horses. The ways in which the respondents worked with their horses varied from structured training with regular competitions to leisure riding and groundwork. None were used for riding-school lessons. The box stables housed horses indoors in individual boxes with visual and auditory, but limited or absent tactile, access to other horses. The horses were turned out daily on small, typically solitary paddocks for a few hours at a time, and ridden regularly. They thus had a limited range of possibilities to choose their environment, social companions, and type of action throughout the day. The open-shed stable housed horses in groups and they were kept either full time on large paddocks with a shelter or in an open-shed stable with free access to outdoors and semi-heated indoors with straw or peat bedding, or in a combination of these. These horses had thus a relatively broad range of possibilities to make choices concerning social companions, activity patterns, comfort, and often also in their training.

We assessed the respondents' experiences of intersubjectivity and descriptions of agency in horse activities using semi-structured thematic interviews during 2019–2021. No selection of respondents was made at this point by the research team. Interviews were conducted in times and places preferred by the respondents: break rooms, tack

rooms, or outside on a sunny day. A typical interview lasted for 30–40 min. All interviews were performed by the same researcher. We obtained interviews from 25 respondents ($n = 15$ at box stables, $n = 10$ at open-shed stables). Only one of the respondents was male. The age of the respondents ranged from 17 to 57 years, the median age being 35.5.

The interview centered on four themes: (1) The person and their horse (opening question: “Tell me about you and your horse”), (2) Compassion (first question: “What comes to your mind when you hear the word ‘compassion?’”), (3) Connectedness to nature (first question: “Describe your relationship to nature”), and (4) Meaning in life and particularly in horse activities (first question: “Describe your worldview or conviction”). The respondents were also asked if there was anything else they wanted to talk about in this context. The opening question of each theme was designed to study the topics of the current paper as well as several other themes in human–horse relationships (work yet to be published). Nevertheless, as each interview was semi-structured, allowing the discussion to ebb and flow through these interwoven themes, we analyzed the entire interview material for this paper. For example, while the first theme offered valuable insights into the accounts of daily activities and the relationship of the horse and the interviewee, the second theme allowed the respondent to expand more explicitly on the theme of relationality, both in general and in relation to horses. The third theme yielded ponderings about experiences in nature, such as forest walks, from both the respondents’ and the horses’ point of view, and the fourth theme led the respondents to reflect on what various horse activities meant to them.

The interviews were recorded and transcribed. The interview material was then analyzed with theory-guided qualitative content analysis, utilizing Atlas.ti qualitative analysis software. In this approach, our conceptualization of intersubjectivity and the notions of agency and roles, as described in the introduction, were utilized as a framework for our reading of the material (e.g., Grbich, 2013, 2019). The analysis process started by thoroughly reading the material and recognizing all the appearances of notions of agency and intersubjectivity in the horse–human relationship (Graneheim et al., 2017). We took into account both explicit accounts of intersubjectivity (such as expressions of togetherness, sense of connection, shared experience, shared emotion) and more implicit descriptions of intersubjectivity in reflection of horse and/or own emotions and connectedness in action. These were coded inductively, according to the various notions and qualities given to intersubjectivity. This stage of the analysis resulted in 188 codes, which were then in the next stage of the analysis grouped and regrouped to reveal three key themes, which are the three foci of this paper.

Ethics

The study was approved by the Helsinki University Viikki Campus Research ethics committee (number 5/2020). The participants signed informed consent, being aware they were free to withdraw from participation at any time and that all data were handled pseudonymized.

Results

Our analysis examined three foci: (1) whose agency was discussed in the recounts: dyad’s, horse’s, or human’s, as seen from the human’s perspective, (2) how the emotions of the

horse were described, and (3) doing things with the horse related to embodied intersubjectivity and to forms of and experiences in co-action. In the interview excerpts below, we use “B” to denote interviews conducted at a box stable and “O” for interviews at an open-shed stable.

Descriptions of Agency

First, we observed who was assigned agency when the interviewees talked about their human–horse relationships and activities. The interviewees discussed both self and horse agency in their stories, either when replying to different questions or in a single answer. Emphasized human agency was, however, the most prevalent description of agency in accounts of care and maintenance and in accounts of exercise. Interestingly, the process of daily interaction was at times described containing *only* human agency, as seen in this answer to the question “What do you (plural) do?”:

And what we do is, I get him from the pen and then I brush him and make sure that everything is more or less fine and there are no weird marks on his legs or anything, then I put his stuff on him and go riding, and after riding I shower him if it’s summer and hot, but if it’s winter we just wipe him down. (ID14, B)

In some cases, exclusively human agency was used even where it grammatically or factually made little sense: for example, “I jump fences 140cm high” (ID11, B). Such self-oriented descriptions of joint action thus focused the agency entirely on self.

In a particular group of cases, namely in accounts of play and “hanging out” with the horse, assignments of dyadic or horse agency appeared as often as human agency. Dyadic agency was manifested both in the way of talking about the human and the horse as “we,” and in describing the experiences presumed to be mutual by both parties, as this interviewee does:

We’ve been doing things together for quite a long time. And ... er, well, lately we’ve been learning about academic art of riding, and it’s been very nice and enjoyable. (ID4, O)

Finally, accounts where agency was assigned only to the horse were also numerous and appeared in various contexts, both regarding everyday activities and decisions on action, such as in the following example:

He likes doing things together with us. For example, he might run away when others are getting him from the pen. But with us he might come running and bucking to the gate to meet us. (ID8, B)

This account highlights that the horse has agency in the form of preferences (what he likes) and in taking concrete follow-up actions (running away or toward the gate). However, the account does not expand on whether the horse has a real say in the daily activities consistent with his initial reactions. We also found accounts of horse agency in descriptions that directly discuss intersubjectivity in interaction, as this interviewee explains:

[My horse] doesn’t take the impulses from someone coming there and being nervous. Instead, she¹ kind of grounds the person and invites them into its¹ own calm energy and pulse. And she does it quite consciously. (ID21, O)

Such accounts assign the agency in the human–horse interaction first and foremost to the horse, who is seen as taking initiative to change the energy of the interaction.

Regarding the different stable environments, there were differences among the interviewees in the bias toward either human or horse agency in descriptions of interactions with the horse. Solely human agency was more common in the accounts by the respondents at the box stables (17 out of 24 accounts) than open-shed stables, whereas descriptions of both horse agency (16 out of 21 accounts) and dyadic agency (9 out of 12 accounts) were more common at the open-shed stables.

Intersubjectivity and Horse Emotions

Second, we explored the affective accounts of intersubjectivity. We focused our analysis on how the emotional states or behaviors of the horse were described, as a reflection of the (animal) partner's affective state requires empathic consideration through which intersubjective experience is possible (Gallese, 2014; Maurstad et al., 2013). Fear was the most prevalent emotion assigned to horses. In some accounts, it was presented as irrational, as opposed to the true and logical understanding of the situation by a human:

What makes this horse special is that it's got like a fear for terrain. It sees some spots on the ground or something, so it gets kind of scared and jumps on them and stuff. (ID29, B)

Stories accounting horses' fear often underlined the differences between humans and horses, rather than shared experience of those emotions. Other fear-related narratives positioned the horse as having fears as sensible reactions from the animal's point of view, such as fears related to past traumatic experiences, or circumstances described as "unnatural" for a horse, such as traveling in a trailer:

Some people think that the horse should be put in a trailer with a broom. But I think that the horse can be trained so that if it is distressed, scared, it can be taught that it does not need to be afraid. And it doesn't need to be anxious. (ID26, B)

Some fear narratives emphasized the respondent's understanding and gentle orientation toward the horse. Nevertheless, these types of fear narratives presented the horse as a stranger in the human world, either acting irrationally or trying its best to comply.

Another cluster of often-mentioned emotions was excitement, both positive, such as enthusiasm, and negative, such as agitation. Positive excitement was often given positive meanings by the interviewee, and the excitement of the horse evoked positive affect in the human, too, as in the following example:

[The horse] gets excited to go and it's amazing the enthusiasm it has. Usually there are these positive surprises. It's really wonderful! (ID3, O)

It appears that positive emotions created an opportunity for intersubjectivity and compassion (and particularly co-passion, shared joy, and excitement: Pessi et al., 2021). Interestingly, feelings of joy were also expressed independently from the emotions of the horse, as this respondent states:

It makes me really happy to ride and do things with horses. I sometimes laugh like crazy when I'm riding a horse. It is a source of joy to me. (ID1, O)

Negative excitement, in turn, was often described as presenting challenges to the horse–human collaboration or the use of a horse:

The horse was a bit timid and a bit suspicious of humans. Trying to get up to the saddle was ... the horse was very tense. Even while riding, he just ran away and you couldn't use any leg. (ID31, O)

Thus, horses' positive emotions seemed to be a platform for intersubjectivity, whereas negative emotions seemed to foster notions of differences and separation between horses and humans.

The analysis showed some distinctions between the interviews made at the box stables versus the open-shed stables. In the latter, the descriptions of horse emotions were lengthier and more varied. Nine different horse emotions featured explicitly in the interviews made at the open-shed stables, ranging from apathy, frustration, and loneliness to enthusiasm, whereas the respondents at the box stables mentioned four different emotions, within which only fear and excitement were mentioned more than once.

Embodied Intersubjectivity and Doing Things (Together)

Next, we examined embodied intersubjectivity in descriptions of doing things with the horse, as well as other accounts of co-action. Unsurprisingly, riding was the most common activity mentioned in the interviews. Some respondents emphasized the intersubjective qualities of riding and “doing things together,” such as in this example:

The key idea is that two entities, the horse and the human, should do what two bodies are capable of. It's about doing together, practicing everything very carefully. (ID4, O)

Quite a few accounts of riding presented the activity in far less intersubjective terms: for example, as an activity where the horse is a target of training. However, also in these accounts intersubjective intentions or experiences might be present: for example, as a motivation to offer the horse rehabilitating exercise (ID18, O) or when experiencing joy as the horse learns new things (ID16, B).

However, there were informants who did not mention riding at all because it was considered as a self-evident part of human–horse interaction and their daily lives. Riding seemed something one is “supposed to do” to be with horses, and this was implied for some informants from the very beginning of their horse–human relationship:

At the very beginning I just thought that horses are wonderful and they smell good. Then there was the riding, that we went on horseback. I don't know where it even started that you have to ride, but my friends rode, and then I, too, rode there in a riding class. (ID 25, B)

Competing was a specific type of riding, which was mentioned quite often in the interviews. In some accounts, competing appeared as the main motivation and compound of the human–horse activity:

At first I want to jump all the heights in peace, then probably at some point I have to search for a second horse if I start to compete more and do bigger competitions. That's my aim. (ID14, B)

For others, competing was something they found themselves doing from time to time, or something they would like to do but have not been able to due to high costs of the sport.

Interestingly, in accounts where the perspective and agency of the horse were emphasized when reflecting the horses' experiences, competing was often seen as more problematic, such as in this example:

For some, it might be the pressure to perform well. That induces a loss of compassion. Competitiveness takes away the ability to see clearly. They don't see if the horse really likes what they are doing. They can say that the horse is excited and likes to jump. But anybody who can read horse emotions can see that it's not positive at all. (ID1, O)

For some interviewees, these ponderings affected their choice of co-action with the horse and views of their goals and aims – some had stopped competing or training competitively. One informant described the change as “a new era,” characterized by more joy, more freedom, and a deepened relationship between herself and her horse (ID21, O). These accounts were present only in the interviews made at the open-shed stables. Such accounts illustrate how the type of activity may directly affect the experiences of emotions and intersubjective connection with the horse.

Another specific type of riding mentioned was hacking. Hacking was experienced by the interviewees as a relaxing way of doing things together with the horse. It seemed also to coin possibilities for connection and experiencing things together. Indeed, this appeared as a context in which the respondents experienced explicit intersubjectivity in riding, in contrast to descriptions of other riding contexts. The following example describes an experience of sensory sharing in hacking:

And that's why it's wonderful out there in the woods, for example on cross-country treks: I don't try to see what I see, or hear what I hear, but I look at the horse's ears and try to see what it hears and sees. It's a wonderful feeling when you can free yourself from trying to hear. Instead, you can look at the horse's gestures and expressions and trust that we react to something because it hears and sees something I don't. Somehow I find that really fascinating. (ID21, O)

The way riding was framed in the interviews differed between the respondents from the box stables and the open-shed stables. Out of all accounts on competing, the vast majority (44 out of 51) were from the box stables. Even more drastically, all the respondents for whom competing was a profoundly important part of the horse–human relationship were in the box stables. In contrast, respondents who spoke about competing in more critical terms or as a less-central feature were mainly from the open-shed stables. Hacking was mentioned in equal numbers by respondents from both stable types – six accounts from each stable type – but in quite a different way. For respondents from the box stables, hacking was something one does in addition to “the actual riding” or for a change, to have new experiences, such as in this account:

If there's a competition, we build the weekly program around it. If I ride let's say four times a week, we might have one training session, then some poles in the arena, and then a hack. A little bit of everything. (ID 30, B)

For respondents from the open-shed stables, in contrast, hacking was a frequently performed activity that was meaningful in itself. It was also more often framed in terms of

connection and shared experience than in terms of training the horse, such as in this account:

We were the ones going to long, long hacks with the horse, to enjoy the nature together ... In our hacks, the horse is the one making suggestions on what to do ... In my opinion, during all these years, hacking has strengthened our relationship and cooperation a lot. (ID21, O)

Thus, although hacking as a type of co-action featured in the accounts of several respondents from both types of stables, the meanings assigned to it as well as how intersubjective it was experienced differed between the different stable environments.

There was also a great variety of non-riding-related activities in the material. These included in-hand training, going for walks, “just being” with the horse, playing, or “just fooling around” with the horse. These activities were considerably more common – indeed nearly exclusive – in the interviews made in the open-shed stables, such as the following example:

We do things together. Like we can together learn new things and try new things, but then sometimes just be and relax somewhere in the woods and hang out and pluck grass together. (ID8, B)

For this respondent, “just being with” the horse was something they regularly did, and it was also something they recognized as an activity worth talking about to the researcher. It clearly was a meaningful co-action with a sense of connection as the respondent was brought to tears talking about it in the interview.

Discussion

In this study, we examined descriptions of agency and intersubjectivity by horse owners when they talk about their relationship and actions with their horse. We assessed these in two different stable environments, which differ in horse management practices. We found that descriptions of intersubjectivity and agency differed in these two environments. Thus, factually different horse management environments influenced the experiences of shared connectedness with the horse along with what people do with their horse, what they think about the roles of self and the horse in co-action, and what those actions feel like.

In contrast to earlier research on intersubjectivity in horse actions, we obtained only a few direct and explicit verbalizations of embodiment together with the horse, and only a few more direct accounts of experienced sense of mutual connection in action, which have been previously described to characterize human–horse intersubjectivity (e.g., Brandt, 2004; Ford, 2019; Maurstad et al., 2013). Curiously, we found few explicit descriptions of embodied intersubjectivity in riding. While riding was discussed by the respondents, it was often framed as a self-evident “thing to do” or specifically in the context of competing and not considered as the context in which embodied connection is experienced. As an exception, riding when hacking emerged as a context of explicitly told intersubjective experiences. Instead, other forms of co-action, particularly “just being with,” playing, and learning with the horse were contexts in which experiences of intersubjective connection emerged more statedly.

We identified numerous accounts of indirectly expressed intersubjective experiences. We found that people reflected on the emotional states of the horse in ways that either described them feeling closer or more distant from their horse. Experiences and reflections of negative emotions, particularly fear, in horses appeared to decrease the sense of connectedness, while positive emotions, such as excitement, seemed to have the opposite effect. Joy and excitement were reported as shared feelings, a platform in which to experience affective intersubjectivity. Additionally, accounts of feeling connectedness and cooperative mutuality emerged in relation to the form of co-action: for example, in reflections of the horse's sensory experience and own understanding of their behavior. Markedly, also in the opposite direction, certain actions led to the loss of a sense of connection. These indications of intersubjectivity reveal that even when not explicitly underscored, people reflect their experiences of connection with their horse in more implicit terms. Further, they support our view that what people do with their horses influences their experiences of connection with them. Finally, the accounts highlight the emotional elements in intersubjectivity with nonhuman others. In the absence of a shared interaction frame governed by spoken language, emotions may become emphasized in the intersubjective experience and in reflections of the horse partner's experiences (Brandt, 2006; Gallese, 2003, 2014).

The scarcity of explicit accounts of intersubjectivity and the more often-appearing descriptions of implicit connection or lack thereof may be a consequence of our interview method: we did not ask direct questions of shared emotions or how it feels to ride a horse. Instead, we gave the respondents a broader, less directed frame to describe their relationship, actions, and experiences with their horse. This revealed that people may not often actively reflect on being and doing things with a horse as particularly consciously experienced moments of sharing. Yet, they do experience intersubjectivity in being and doing with their horse and consider them as a being with emotions – albeit oftentimes ones that increase experienced distance to the owner.

Regarding descriptions of agency, often it was egocentric, riders describing their horse as a target of action or a passive partner in action where the human is the actual subject. However, also opposite accounts were found. At the most extreme end, the horse was attributed theory of mind-like skills to purposefully modify the owner's mood. More commonly, people attributed agency to the horse as an equal partner in shared actions, such as riding, learning, and exploring nature. The simultaneously existing, even contradictory, human-focused and horse-focused accounts of agency echo earlier studies. Riders assign personhood and intentionality in action and even in mood manipulation to horses (Davis et al., 2015), yet they may be reluctant to grant the horse agency in action for fear of danger and loss of control (Brandt, 2006; Maurstad et al., 2013).

The descriptions of both intersubjectivity and agency in horse activities differed between the respondents in the two different stable environments. We found that people who assigned agency more often to the horse or both the horse and themselves when describing their horse interactions kept their horses in open-shed stables, compared with more numerous accounts of only self-agency in box-stable respondents. In the latter, riding was more commonly mentioned as the main form of shared action, and the box-stable respondents were also more often highlighting competitive riding. This is not a surprising finding as such because competition horses tend to be

managed in box stables. Competing in and training for competitions are human-centered actions, where the forms and pace of co-action are largely determined by the human. It is therefore not all that unexpected that accounts of agency in co-action were more often self-oriented – despite the ongoing discourse of horses as “co-athletes” (Furtado et al., 2021). Open-shed stable respondents, in turn, more often described other forms of doing things together, such as hacking, playing, or “just being with” the horse as meaningful co-actions. In these stories, explicit accounts of the horse’s perspective in interaction were also more numerous. Therefore, people’s experienced intersubjectivity and attributions of agency in co-action appear connected to the type of action with the horse as well as to the practices in horse maintenance.

Our material does not offer possibilities for analysis of causality: that is, whether the stable environment was chosen based on the type and goal of co-action, which then could have led to specific experiences of intersubjectivity and views on agency, or whether the choice of environment was initially made because of the views. Or indeed, whether the choice of the environment was made owing to other factors and people have then taken on the forms of co-action and views prevalent in the environment. Gilbert (2014) examined the learnt values and skills that are absorbed through culture in a stable environment, describing how the discourses and practices of the location influence the views of equestrians. Similarly, Latimer and Birke (2009) discussed the different ideologies and values surrounding horsekeeping and treating in natural horsemanship and “traditional” communities. It is therefore conceivable that the differences we found in our study are at least partly a consequence of the cultural environment – the applied practices, the choices and norms, and the language used in discussions with others in the same environment. Discourse typical for an environment may shape the types of action and their goals, and possibly thereby frame the expectations of intersubjective experiences and reflections of them. In addition, it is equally conceivable that differences in people’s experiences in horse activities influence the choices they make on where they want their horse to live. These considerations are likely to be influenced by dispositional characteristics, knowledge, values, resources, and aims of equestrianism. They may also reflect changes in how people consider themselves as equestrians, as one of our respondents brought up in their account. In future research, it would be intriguing to address further the directionality in the interconnected forms of action with horses, reflections of experiences, and the management environment. Further, an assessment of how people reflect their own role in maintenance and action with their horse would help reveal the underlying processes among these connections. Such ponderings on one’s own role and experience in conjunction with those of the other can be interpreted as a recognition work or even a struggle (see Honneth, 1995). This perspective may be helpful in connecting the reflection on one’s own role with reflecting the viewpoint of the horse. Being a person or realizing oneself is ultimately linked to being recognized, and being recognized requires that there is a recognized “other” giving the recognition (Honneth, 1995; Ikäheimo, 2009; see also Coelho & Figueiredo, 2003; Ricoeur, 2005). Thus, the more a person recognizes the horse’s agency and personhood, the fuller recognition they can receive in the interpersonal relationship, and the more self-realization can take place. Therefore, in future studies it will be interesting to examine self-realization or self-recognition (Ricoeur, 2005) framed by the lived practices of the human–horse relationship.

Our study is limited in its scope and sampling. We interviewed respondents from a relatively narrow range of equestrian activities. Although our sample included both professional equestrians, such as riding teachers and stable managers, and equestrians of leisure, we did not have, for example, the highest-level international competitors or large-scale breeders. Moreover, our sample consisted almost only of female respondents. While this is largely a reflection of the demographics of horse owners at the targeted study stables, it may have shaped the answers to directions that a more gender-balanced data set would not exhibit. Particularly, recounts of horse emotions may be emphasized in the material for this reason as there is a female bias in empathy and use of emotional terms in discussion in general (Goldshmidt & Weller, 2000; Rueckert & Naybar, 2008). We therefore acknowledge that our study produces a limited view of how people view and experience their activities and relationships with their horses. Nevertheless, our notion that (co-)actions, management environments, thoughts on the roles of the horse, and experiences of connection with the horse are all connected is meaningful for future efforts in building mutually respectful forms of interaction and practices in human–horse activities.

Note

1. In spoken Finnish language, both humans and nonhuman animals are commonly referred to as “it” or “she/he.” While in formal Finnish, the use of “he/she” is reserved for people and “it” for animals, such an enforced dichotomy is not withheld in colloquial language, nor was it in historical Finnish pronoun use. The choice between “it” or “he/she” depends on the syntactic context. Both humans and nonhumans are typically referred to as “it.” A simultaneously used logophoric “he/she” in reference to an animal – as well as to a human – can exist with “it” even in the same sentence (Kaiser, 2018; Laitinen, 2005, 2021). By referring to an animal with the logophoric she/he, the animal is positioned as a participant, or the action of the animal is particularly meaningful. This flexibility in the choice of the 3rd singular pronoun is apparent in the excerpts in our study. The respondents use both “it” and “she/he” in reference to their horse, often even in the same turn, as seen in this particular interview excerpt.

Acknowledgements

We are greatly indebted to the stables and horse owners who agreed to participate in the study. We thank the two reviewers for their constructive comments that greatly improved the paper.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

SEK thanks Kone Foundation [grant 201806482] for financial support throughout the study.

ORCID

Sonja Elena Koski  <http://orcid.org/0000-0002-0131-9174>

References

- Aaltola, E. (2012). Emotion, empathy and intersubjectivity. In E. Aaltola (Ed.), *Animal suffering: Philosophy and culture* (pp. 155–197). Palgrave Macmillan.
- Aaltola, E., & Keto, S. (2015). Toislaisisena ihmisen maailmassa [As another species in the human world]. In E. Aaltola & S. Keto (Eds.), *Eläimet yhteiskunnassa. [Animals in the society]* (pp. 7–13). Into.
- Argent, G. (2012). Toward a privileging of the nonverbal communication, corporeal synchrony, and transcendence in humans and horses. In J. A. Smith & R. W. Mitchell (Eds.), *Experiencing animal minds. An anthology of animal–human encounters* (pp. 111–128). Columbia University Press.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Beebe, B., Knoblauch, S., Rustin, J., & Sorter, D. (2005). Forms of intersubjectivity in interpersonal/relational perspective. *The International Journal of Psychoanalysis*, 90, 347–361.
- Birke, L., & Hockenull, J. (2015). Journeys together: Horses and humans in partnership. *Society & Animals*, 23(1), 81–100. <https://doi.org/10.1163/15685306-12341361>
- Birke, L., & Thompson, K. (2018). *(Un)stable relations. Horses, humans and social agency*. Routledge.
- Bradfield, B. (2013). Intersubjectivity and the knowing of inner experience: Finding space for a psychoanalytic phenomenology in research. *Journal of Humanistic Psychology*, 53(3), 263–282. <https://doi.org/10.1177/0022167812469726>
- Brandt, K. (2004). A language of their own: An interactionist approach to human–horse communication. *Society & Animals*, 12(4), 299–316. <https://doi.org/10.1163/1568530043068010>
- Brandt, K. (2006). Intelligent bodies: Embodied subjectivity in human–horse communication. In D. Waskul & V. Phillip (Eds.), *Body/embodiment. Symbolic interaction and the sociology of the body* (pp. 141–152). Ashgate.
- Brinck, I. (2008). The role of intersubjectivity in the development of intentional communication. In J. Zlatev, T. P. Racine, C. Sinha, & E. Itkonen (Eds.), *The shared mind: Perspectives on intersubjectivity* (pp. 115–140). John Benjamins Publishing Company.
- Brubaker, L., & Udell, M. A. R. (2016). Cognition and learning in horses (*Equus caballus*): What we know and why we should ask more. *Behavioural Processes*, 126, 121–131. <https://doi.org/10.1016/j.beproc.2016.03.017>
- Carter, B., & Charles, N. (2013). Animals, agency and resistance. *Journal for the Theory of Social Behaviour*, 43(3), 322–340. <https://doi.org/10.1111/jtsb.12019>
- Coelho, N., & Figueiredo, L. C. (2003). Patterns of intersubjectivity in the constitution of subjectivity: Dimensions of otherness. *Culture & Psychology*, 9(3), 193–208. <https://doi.org/10.1177/1354067X030093002>
- Cohen, E. (2019). Posthumanism and tourism. *Tourism Review*, 74(3), 416–427. <https://doi.org/10.1108/TR-06-2018-0089>
- Crossley, N. (1996). *Intersubjectivity. The fabric of social becoming*. SAGE.
- Crossman, G., & Walsh, R. (2011). The changing role of the horse: From beast of burden to partner in sport and recreation. *The International Journal of Sport and Society*, 2(2), 95–110. <https://doi.org/10.18848/2152-7857/CGP/v02i02/54066>
- Dashper, K. (2014). Tools of the trade or part of the family? Horses in competitive equestrian sport. *Society & Animals*, 22(4), 352–371. <https://doi.org/10.1163/15685306-12341343>
- Dashper, K. (2017). Listening to horses: Developing attentive interspecies relationships through sport and leisure. *Society & Animals*, 25(3), 207–224. <https://doi.org/10.1163/15685306-12341426>
- Davis, D. L., Maurstad, A., & Dean, S. (2015). My horse is my therapist: The medicalization of pleasure among women equestrians. *Medical Anthropology Quarterly*, 29(3), 298–315. <https://doi.org/10.1111/maq.12162>
- Demuru, E., Clay, Z., & Norscia, I. (2022). What makes us apes? The emotional building blocks of intersubjectivity in hominids. *Ethology Ecology & Evolution*, 34(3), 220–234. <https://doi.org/10.1080/03949370.2022.2044390>

- Durt, C., Fuchs, T., & Tewes, C. (2017). *Embodiment, enaction, and culture: Investigating the constitution of the shared world*. The MIT Press.
- Ford, A. (2019). Sport horse leisure and the phenomenology of interspecies embodiment. *Leisure Studies*, 38(3), 329–340. <https://doi.org/10.1080/02614367.2019.1584231>
- Fuchs, T., & De Jaegher, H. (2009). Enactive intersubjectivity: Participatory sense-making and mutual incorporation. *Phenomenology and Cognitive Sciences*, 8(4), 465–486. <https://doi.org/10.1007/s11097-009-9136-4>
- Furtado, T., Preshaw, L., Hockenull, J., Wathan, J., Douglas, J., Horseman, S., Smith, R., Pollard, D., Pinchpeck, G., Rogers, J., & Hall, C. (2021). How happy are equine athletes? Stakeholder perceptions of equine welfare issues associated with equestrian sport. *Animals*, 11(11), 3228. <https://doi.org/10.3390/ani11113228>
- Gallagher, S. (2011). Strong interaction and self-agency. *Humana-Mente: Journal of Philosophical Studies*, 15, 1–22.
- Gallagher, S., & Hutto, D. D. (2008). Understanding others through primary interaction and narrative practice. In J. Zlatev, T. P. Racine, C. Sinha, & E. Itkonen (Eds.), *The shared mind: Perspectives on intersubjectivity* (pp. 17–38). John Benjamins Publishing Company.
- Gallese, V. (2003). The roots of empathy: The shared manifold hypothesis and the neural basis of intersubjectivity. *Psychopathology*, 36(4), 171–180. <https://doi.org/10.1159/000072786>
- Gallese, V. (2014). Bodily selves in relation: Embodied simulation as second-person perspective on intersubjectivity. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 369(1644), 20130177. <https://doi.org/10.1098/rstb.2013.0177>
- Game, A. (2001). Riding: Embodying the centaur. *Body & Society*, 7(4), 1–12. <https://doi.org/10.1177/1357034X01007004001>
- Gilbert, M. (2014). Young equestrians: The horse stable as a cultural space. In J. Gillet & M. Gilbert (Eds.), *Sport, animals, and society* (pp. 233–250). Routledge.
- Goldshmidt, O. T., & Weller, L. (2000). “Talking emotions”: Gender differences in a variety of conversational contexts. *Symbolic Interaction*, 23(2), 117–134. <https://doi.org/10.1525/si.2000.23.2.117>
- Graneheim, U. H., Lindgren, B.-M., & Lundan, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. <https://doi.org/10.1016/j.nedt.2017.06.002>
- Grbich, C. (2013). *Qualitative data analysis: An introduction*. SAGE.
- Grbich, C. (2019). Qualitative data analysis and the use of theory. In G. W. Norbit (Ed.), *Oxford research encyclopedia of education*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.554>
- Hansen, N. C. (2014). Embodied communication, the poetics and politics of riding. In J. Gillet & M. Gilbert (Eds.), *Sports, animals and society* (pp. 251–267). Routledge.
- Hartmann, E., Rehn, T., Christensen, J. W., Nielsen, P. P., & McGreevy, P. (2021). From the horse’s perspective: Investigating attachment behaviour and the effect of training method on fear reactions and ease of handling – A pilot study. *Animals*, 11(2), 457. <https://doi.org/10.3390/ani11020457>
- Hausberger, M., Roche, H., Henry, S. E., & Visser, K. (2008). A review of the human–horse relationship. *Applied Animal Behaviour Science*, 109(1), 1–24. <https://doi.org/10.1016/j.applanim.2007.04.015>
- Herlin, I. (2021). Eläimet eduskunnassa [Animals in the parliament]. In R. Peltola, A. Jääskeläinen, & K. Harjunpää (Eds.), *Kieli ja Eläin. Vuorovaikutusta ja kielioppia monilajisissa yhteisöissä* (pp. 185–265). SKS.
- Honneth, A. (1995). *The struggle for recognition. The moral grammar of social conflicts*. Polity Press.
- Ikäheimo, H. (2009). A vital human need: Recognition as inclusion in personhood. *European Journal of Political Theory*, 8(1), 31–45. <https://doi.org/10.1177/1474885108096958>
- ISES. (2018). Principles of learning theory in equitation. www.equitationsscience.com/equitation/principles-of-learning-theory-in-equitation
- Jardat, P., & Lansade, L. (2021). Cognition and the human–animal relationship: A review of the socio-cognitive skills of domestic mammals toward humans. *Animal Cognition*, 25(2), 369–384. <https://doi.org/10.1007/s10071-021-01557-6>

- Jönsson, K. (2012). Humans, horses and hybrids: On rights, welfare and masculinity in equestrian sports. *Scandinavian Sport Studies Forum*, 3, 49–69.
- Kaiser, E. (2018). Effects of perspective taking on pronominal reference to humans and animals: Logophoricity in Finnish. *Open Linguistics*, 4(1), 630–656. <https://doi.org/10.1515/opli-2018-0031>
- Keaveney, S. M. (2008). Equines and their human companions. *Journal of Business Research*, 61(5), 444–454. <https://doi.org/10.1016/j.jbusres.2007.07.017>
- Laitinen, L. (2005). Hän, the third speech act in pronoun in Finnish. In R. Laury (Ed.), *Minimal reference. The use of pronouns in Finnish and Estonian discourse* (pp. 75–106). *Studia Linguistica Fennica*.
- Laitinen, L. (2021). He-pronominin käyttö eläimistä [Use of the pronoun “they” of animals]. In R. Peltola, A. Jääskeläinen, & K. Harjunpää (Eds.), *Kieli ja Eläin. Vuorovaikutusta ja kielioppia monilajisissa ympäristöissä [Language and animal. Interaction and grammar in multispecies environments]* (pp. 311–394). SKS.
- Latimer, J., & Birke, L. (2009). Natural relations: Horses, knowledge, technology. *The Sociological Review*, 57(1), 1–27. <https://doi.org/10.1111/j.1467-954X.2008.01802.x>
- Levinson, S. C., & Holler, J. (2014). The origin of human multi-modal communication. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 369(1651), 20130302. <https://doi.org/10.1098/rstb.2013.0302>
- Librado, P., Khan, N., Fages, A., Kusliy, M. A., Suchzan, T., Tonasso-Calvière, L., Schiavinato, S., Alioglu, D., Fromentier, A., Perdereau, A., Aury, J. M., Gaunitz, C., Chauvey, L., Seguin-Orlando, A., Der Sarkisian, C., Southon, J., Shapiro, B., Tishkin, A. A., Kovalev, A. A., ... Orlando, L. (2021). The origins and spread of domestic horses from the Western European steppes. *Nature*, 598(7882), 634–640. <https://doi.org/10.1038/s41586-021-04018-9>
- Lindblom, J. (2007). *Minding the body: Interacting socially through embodied action* [Doctoral dissertation]. Linköping University Diva-repository. <https://www.diva-portal.org/smash/get/diva2:23965/FULLTEXT01.pdf>
- Lindblom, J., & Ziemke, T. (2008). Interacting socially through embodied action. In F. Morganti, A. Carassa, & G. Riva (Eds.), *Enacting intersubjectivity: A cognitive and social perspective on the study of interactions* (pp. 49–63). IOS Press.
- Maurstad, A., Davis, D., & Cowles, S. (2013). Co-being and intra-action in horse–human relationships: A multi-species ethnography of be(com)ing human and be(com)ing horse. *Social Anthropology*, 21(3), 322–335. <https://doi.org/10.1111/1469-8676.12029>
- Nakamura, K., Takimoto-Inose, A., & Hasegawa, T. (2018). Cross-modal perception of human emotion in domestic horses (*Equus caballus*). *Scientific Reports*, 8, 1–9.
- Patton, P. (2003). Language, power, and the training of horses. In C. Wolfe (Ed.), *Zoontologies: The question of the animal* (pp. 83–99). University of Minnesota Press.
- Pessi, A. B., Seppänen, A. M., Spännäri, J., Grönlund, H., Martela, F., & Paakkanen, M. (2022). In search of compassion: Creating a novel concept to promote re-enchantment at work. *BRQ Business Research Quarterly*, 25(1), 82–97. <https://doi.org/10.1177/23409444211058179>
- Praetorius, N. (2010). Intersubjectivity, cognition, and language. In D. Schmicking & S. Gallagher (Eds.), *Handbook of phenomenology and cognitive science* (pp. 301–316). Springer Netherlands.
- Ricoeur, P. (2005). *The course of recognition*. Harvard University Press.
- Rochat, P., Passos-Ferreira, C., & Salem, P. (2009). Three levels of intersubjectivity in early development. In A. Carassa, F. Morganti, & G. Riva (Eds.), *Enacting intersubjectivity: Paving the way for a dialogue between cognitive science, social cognition and neuroscience* (pp. 173–190). Università della Svizzera Italiana.
- Rueckert, L., & Naybar, N. (2008). Gender differences in empathy: The role of the right hemisphere. *Brain and Cognition*, 67(2), 162–167. <https://doi.org/10.1016/j.bandc.2008.01.002>
- Scheff, T. J. (2006). *Goffman unbound! A new paradigm for social science*. Paradigm.
- Stern, D. N. (2000). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology*. Basic Books.
- Thompson, K., & Birke, L. (2014). “The horse has got to want to help”: Human–animal habituses and networks of relationality in amateur show jumping. In J. Gillet & M. Gilbert (Eds.), *Sport, animals, and society* (pp. 69–84). Routledge.

- Tomasello, M. (2008). *Origins of human communication*. MIT Press.
- Tomasello, M., & Rakoczy, H. (2003). What makes human cognition unique? From individual to shared to collective intentionality. *Mind & Language*, 18(2), 121–147. <https://doi.org/10.1111/1468-0017.00217>
- Trevarthen, C. (1998). The concept and foundations of infant intersubjectivity. In S. Bråten (Ed.), *Intersubjective communication and emotion in early ontogeny* (pp. 15–46). Cambridge University Press.
- Trevarthen, C., & Aitken, K. J. (2001). Infant intersubjectivity: Research, theory, and clinical applications. *Journal of Child Psychology and Psychiatry*, 42(1), 3–48. <https://doi.org/10.1111/1469-7610.00701>
- Trevarthen, C., & Hubley, P. (1978). Secondary intersubjectivity: Confidence, confiding and acts of meaning in the first year. In A. Lock (Ed.), *Action, gesture, and symbol: The emergence of language* (pp. 183–229). Academic Press.
- Trösch, M., Cuzol, F., Parias, C., Calandreau, L., Nowak, R., & Lansade, L. (2019). Horses categorize human emotions cross-modally based on facial expression and non-verbal vocalizations. *Animals*, 9(11), 862. <https://doi.org/10.3390/ani9110862>
- Visser, E. K., VanDierendonck, M., Ellis, A. D., Rijksen, C., & Reenen, C. G. V. (2009). A comparison of sympathetic and conventional training methods on responses to initial horse training. *The Veterinary Journal*, 181(1), 48–52. <https://doi.org/10.1016/j.tvjl.2009.03.009>
- Wipper, A. (2000). The partnership: The horse–rider relationship in eventing. *Symbolic Interaction*, 23(1), 47–70. <https://doi.org/10.1525/si.2000.23.1.47>
- Zlatev, J. (2008). The co-evolution of intersubjectivity and bodily mimesis. In J. Zlatev, T. P. Racine, C. Sinha, & E. Itkonen (Eds.), *The shared mind: Perspectives on intersubjectivity* (pp. 215–244). John Benjamins Publishing Company.
- Zlatev, J. (2017). Embodied intersubjectivity. In B. Dancygier (Ed.), *The Cambridge handbook of cognitive linguistics* (pp. 172–187). Cambridge University Press.
- Zlatev, J., Racine, T. P., Sinha, C., & Itkonen, E. (2008). Intersubjectivity. What makes US human. In J. Zlatev, T. P. Racine, C. Sinha, & E. Itkonen (Eds.), *The shared mind. Perspectives on intersubjectivity* (pp. 2–14). John Benjamins Publishing Company.