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On the edges of consciousnesses: Messaging between species

ABSTRACT

Consciousness is often defined as an experience of the world, but its definitions vary and stir up controversy. It is described through the vocabulary of philosophy, psychology, neuroscience and spirituality, to name but a few fields. Other-than-human consciousness has long been considered non-existent, a notion that has only recently changed as other-than-humans have been found to possess consciousness and a capacity for intentional behaviour (Low 2012: 2). This article presents perspectives on interspecies communication to propose that various species have consciousness and that communication between human and other-than-human consciousnesses is possible. My research aims to investigate the concept of consciousness and intuitive interspecies communication by experimenting methods within artistic practice that can foster a more profound understanding of human and other-than-human relations. I use art projects as artistic case studies to substantiate my hypothesis of consciousness being an essential connection for intuitive interspecies communication.

KEYWORDS

interspecies
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INTRODUCTION TO CONSCIOUSNESS

Definitions of human consciousness vary widely and are even more disparate for other species. Helena Telkänranta, who researches the emotions of other animals, identifies four concepts of consciousness:

(1) phenomenal consciousness, which means having feelings that matter; (2) cognitive consciousness for problem solving and knowledge; (3) self-awareness, which means understanding one's own individuality; (4) metacognition, which means understanding that one has consciousness (Telkänranta 2015: 58–59). While setting these apart from one another is challenging, the question is whether it takes all four or just one of them to ascertain that there is consciousness.

A special scientific experiment is used to establish whether or not various species have a sense of their individuality or self-awareness, as listed above. This experiment is called a mirror self-recognition (MSR) test. In the test, the face of an animal, or any other area of their body they cannot see without a mirror, is marked with a coloured spot. Then, the animal's behaviour in front of a mirror is observed to see whether they touch or try to remove the spot, which is taken to indicate that the individual perceives the reflected image as themselves (Gallup 1970: 86). Developed by Gordon Gallup, the experiment was an inspiration for my *Com Scire* art project and installation, in which I explored the self-awareness of horses (Keski-Korsu 2020). While building on Gallup's test, my project expanded it by reflecting on what the mirror meant culturally and spiritually to humans and, from this perspective, what it could mean for horses. At the time I started working on *Com Scire*, horses were not considered to have self-awareness, because they had not been tested yet. I did not perform the mirror test the way laid down by Gallup as horses were not marked with coloured spots, and they came up to the mirror together as a herd, rather than individually, which is how the test is routinely carried out. The horses seemed to be able to recognize themselves and their fellow herd members in the mirror. They would first look behind the mirror, lick it and intensively stare at themselves and play with their reflection by stomping their hooves, carefully watching the movements both in the mirror and in their bodies. They would also touch their fellow horses and then examine their reactions in the mirror. The release of the project in 2020 coincided with the publication of research findings stating that horses had actually passed the mirror test and were thus recognized as having self-awareness (Baragli et al. 2021: 1099). In their experiment, Baragli et al. found that horses would perform contingency behaviour at first. This was consistent with my observations while filming *Com Scire*. The horses would look behind the mirror, lick it and move their heads and tongues. Then, they would start touching their colour-marked cheeks. According to Baragli et al., contingency behaviour precedes self-recognition in the mirror.

Besides the MSR test, investigating the sensation of pain may be a way to research consciousness. As Telkänranta explains, consciousness makes it possible to individuals to experience relevant sensations or feelings (Telkänranta 2015: 58). The idea that pain and consciousness could be linked dates back to the seventeenth-century French philosopher René Descartes, who claimed that other-than-human animals resembled machines and did not have minds or consciousnesses similar to those of humans (Descartes [1637] 1998: 32). I argue that Descartes's thinking has prompted investigations of the sense of pain or nociception in other-than-humans and a search for their biological capabilities or intellect for consciousness. Nociception and the suffering it causes are studied, for instance, in order to improve the living conditions of cattle and other production animals (Bech Gleerup et al. 2015: 25). Recently, related debates have centred on the pain that fish may feel and on the urgency of the fishing industry taking this factor into

consideration. Research has shown that fish have nociception and that they also respond to pain behaviourally and psychologically (Sneddon 2015: 970). Studies on production animals suggest that different species most likely experience pain in different ways and that measuring this poses a serious challenge.

Arguably, the tendency to measure the sensation of pain in order to agree on whether other-than-humans have consciousness is rooted in the rationalist world-view. Powered by the neuroscience research, 'The Cambridge Declaration on Consciousness' states that other-than-human animals have consciousness and a capacity for intentional behaviour (Low 2012: 1–2). Specifically, the declaration insists that 'the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Nonhuman animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates' (Low 2012: 2). The Declaration was created by scientists who mainly worked in the natural sciences. Still, I would argue that the Declaration was driven by ethical concerns for other-than-humans and their well-being.

According to Jürgen Habermas, knowledge production is inherently informed by human interests. He states that 'if knowledge could ever outwit its innate human interest, it would be by comprehending that the mediation of subject and object that philosophical consciousness attributes exclusively to its own synthesis is produced originally by interests' (Habermas 2005: 317). This indicates that science studies other species from anthropocentric viewpoints and through anthropocentric interests. This bias is pointed out by Thomas Nagel, who claims in his famous article 'What is it like to be a bat?' (1974) that only a bat can know what it is like to be a bat, and humans cannot know a bat's experience objectively (Nagel 1974: 445). We can find out about bats' existence and behaviour, and even relate to them in our imagination, but it is impossible for us to profoundly know their experience and thus their consciousness. Following this line of reasoning, we can conclude that while various natural sciences may generate a certain knowledge of consciousness, they may be unable to offer a definitive description of the consciousness of other-than-humans.

David Chalmers avers that consciousness may be a fundamental property of nature and exist outside the laws of physics as we know them (Chalmers 1995: 14). Like Nagel's 'what-it-is-like' perspective, this concept extends beyond empirical research and the naturalist mindset. Chalmers has urged to face up to what he refers to as 'the hard problem of consciousness', one that rests on the questions why there is subjective or phenomenal experience and why this conscious experience has a specific nature (Chalmers 1996: 5). According to Chalmers, cognitive science can study other processes of consciousness, such as states of wakefulness and sleep, as well as self-awareness, and explain them by recourse to neural or computational mechanisms. If consciousness were a fundamental, intrinsic and unquestionable property, such as mass (which is the amount of matter in an object), this would mean that all matter had consciousness, and consciousness could have its forces and principles. Aligned with Chalmers's thinking are the panpsychist view and its panexperientialist variety, which propounds that all entities of matter have an associated form of consciousness. This also means that when the universe began, consciousness emerged with matter and has co-evolved with it (Velmans 2013: 371). Interestingly, this view goes hand-in-hand with Indigenous animistic thinking, which attributes consciousness or spirit to all beings.

Other-than-human consciousness can also be approached from the standpoint of some feminist theories that hold that consciousness is a fundamental property. Within feminist new materialism, Karen Barad proposes that human bodies are material-discursive phenomena, beings in constant becoming and material (re)configurations of the world (Barad 2008: 136). Essentially, they are not different from other-than-human bodies (Barad 2008: 141). New materialist scholars generally argue that all matter has vitality and a capacity for agency (Truman 2019: 3–4), which can arguably be construed as meaning that matter also has consciousness and its becomings. Notably, feminist new materialism has been criticized for implementing Indigenous epistemologies and ‘inventing’ theories that have been known in these communities for centuries (Truman 2019: 9).

CONSCIOUSNESS AND INTUITIVE INTERSPECIES COMMUNICATION

If consciousness inheres in all matter and thus in all entities both human and other-than-human as described above, a question arises whether it can play a part in communication between them. It could be similar to Astrida Neimanis’s concept of water as an extension of embodiment in time, stretching from body to body (Neimanis 2017: 3). Humans communicate with other-than-humans in many ways such as body language, facial expressions and, often, talking to other species in words. Even if humans’ words are not recognized, their tone or pitch can speak, too. There are less obvious communication channels as well; for example, the gut microbiota bacteria inside the human body communicate bidirectionally with its central nervous system (Clapp et al. 2017: 131). While this exemplifies species-specific communication, my work with consciousness involves speculating if it is possible to create a joint consciousness that, rather than being species-specific, would operate as a flow of exchange between different entities. I am looking for artistic methods to experiment with consciousness theory in practice. I refer specifically to notions of David Chalmers’s conscious as fundamental property and new feminist materialism’s matter having agency or consciousness. These notions might not be easily studied within methods of natural or cognitive sciences and artistic research could add another layer of experimentation as well as possible narrative.

I focus on intuitive interspecies communication (ICC) as a feasible practical example of joint consciousness. ICC is defined as ‘a detailed, non-verbal and non-physical form of communication’ between species that can include ‘visceral feelings, emotions, mental impressions and thoughts, embodied sensations of touch, smell, taste, sound, as well as visuals in the mind’s eye’ (Barrett et al. 2021: 151).

ICC is anchored in intuition. Asta Raami offers several definitions of human intuition, the most general of them being a complex information integration process related to empathy and instinct (Raami 2015: 47–49). Similarly to the definition of ICC, she does not define any form of intuition as ‘true’ or ‘false’. Instead, she thinks of intuition as a tool or a method – a form of knowing – that can be employed by creative designers in their work (Raami 2015: 55). Importantly, Raami claims that there is a super intuition, which she defines as a connection to all knowledge through an ability to go beyond one’s own experience and knowledge (Raami 2020: n.pag.). This is another point where her theory ties in with ICC.

ICC can also be considered telepathic, which is based on the idea that everything has an energy field that affects others and the environment. First

called thought-transference, the phenomenon was renamed as telepathy by physical researcher Frederic W. H. Myers in 1882 (Myers and Gurney 1882: 147). As the existence of telepathy has not been proven scientifically, this kind of communication is often dismissively regarded as parapsychology. However, some scholars, such as Valerie V. Hunt, have extensively researched human energy fields and established that thoughts are energy and cause vibrations (Hunt 1996: 133).

ICC is recognized in Indigenous cultures. In an array of Indigenous traditions, humans and other-than-human species have been considered equal partners in a social network, all of them boasting an ability to communicate and act together (McGinnis et al. 2019: 162). For instance, in the Nordic and Baltic animistic hunter-gatherer traditions, other-than-humans were believed to possess consciousness, with which hunters could connect in trance or while dreaming (Pulkkinen 2014: 205). In the 1960s, shamanism with its involvement with other-than-humans typical of the animistic traditions was adapted to the New Age subculture and as a part of western spirituality (Hiimäe 2019: 30). Apparently, New Age could also have been inspiration for non-Indigenous intuitive interspecies communicators, who call themselves animal communicators. While some of them may have learned from Indigenous practitioners, many others also learn from each other by taking part in workshops and courses organized by the communicators.

Arguably, all human practice involves one or another form of ICC, and anyone can train to improve it. For instance, parapsychology researcher Deborah Erickson's recommendations on the practice of ICC include: (1) one should believe in one's intuitive skills and neither validate nor criticize any messages, impressions or images; (2) one should be mentally calm; (3) one should be humble and receptive to what the other species may say (Erickson 2011: 150). This manner of communicating can be considered meditation. Animal communicators also talk about metaphorically opening their heart connection in order to exchange messages with other-than-human species (Gurney 2001: 12). It is not clear whether they rely on such imagery because they know that the heart has a strong electromagnetic field, which can be detected at a considerable distance from the physical body. At the same time, the emotions that humans have, such as anxiety, stress, happiness and calm, affect their heart rate (McCraty et al. 2005: 16).

Some of animal communicators' experiences have been documented. Most of them are described in books authored by the animal communicators themselves. Notable examples include *Animal Talk* (2008) by Penelope Smith and *The Language of Animals* (2001) by Carol Gurney. Some animal communicators report their experiences on their websites, where their services are advertised to, for example, pet owners. The documentary film *The Animal Communicator* (Foster and Thiyagarajan 2012) shows the work of animal communicator Anna Breytenbach accompanied by her own commentary. Breytenbach claims to send and receive messages to and from various species. A well-known part of the documentary relates the case of a black leopard called Diablo, who was brought from a European zoo to the Jukani Wildlife Sanctuary in South Africa. In his previous home, Diablo was mistreated, which made him suspicious and aggressive. He would not leave his night shelter. Nobody was able to come close to Diablo, and he severely attacked Jurg Olsen, the owner of the sanctuary. According to the film, Olsen did not believe an animal communicator would be able to help. Breytenbach had been given no information about Diablo beforehand, but after she met Diablo and talked with him, the leopard

calmed down. Breytenbach explained that Diablo was worried about the leopard cubs with whom he had earlier been living in the zoo and that he did not want to be called Diablo. After the first communication session, the Olsens found out that the cubs were well. They also changed Diablo's name to Spirit. An immediate change in Spirit's behaviour followed. He began to come out from the night shelter in which he had spent six months, and his aggression was replaced by a relaxed and happy attitude. The caregivers and the journalist making the documentary were surprised.

In the film, Breytenbach is asked how she connects with the other-than-human species. She replies that every individual has their own energy field that has its unique vibration on the cellular level. This may be linked to the body's electromagnetic field such that when different individuals find the same frequency, they can connect with each other. According to Breytenbach, this is similar to what many Indigenous hunters and elders say about their relations with other-than-humans. This kind of communication does not qualify as scientific evidence, but the change in Spirit's behaviour after Breytenbach's visit is well documented.

The ICC of animal communicators is also documented in Erickson's research on therapeutic riding horses and their recovering war veteran partners (Erickson et al. 2016: 404). In this rather small pilot study, the experiment set-up included the caregivers of the horses, who daily obtained reports on the individual horses. Located in another town, the animal communicators, who knew the horses' names and ages and had their images, asked them a variety of questions. The questions ranged from standard questions to all horses (such as what advice they would give to the new therapy horse, what they wished from the veterans and how they liked their job) to veterans' questions to their individual horse-partners. The caregivers also had a question about mouth pain.

The veterans and the caregivers provided qualitative data by rating the information usefulness on the scale from 1 (low) to 6 (high). The average rate of usefulness was 4.9 for the veterans and 5.75 for the caregivers. The study also found that all the comments on the mouth health of respective horses provided by the animal communicators were correct, according to the following veterinarian's examination (Erickson et al. 2016: 414). These findings suggest that such a mix of methods offers new insights into the *Equus* therapy and contributes to its further development.

ICC IN THE ART OF KATHY HIGH

There are some artists who experiment with ICC. For example, Kathy High has explored ICC in her documentary film *Animal Attraction* (2000). Over the 59 minutes of the film, High captures life on a sanctuary farm run by women who practise ICC, though the term used in the film is telepathic animal communication. The film starts with the challenges High herself experienced with her family cat. The cat called Ernie was causing trouble by biting, bullying the other cat in the family and waking up everyone at night. High called Dawn Hayman, a professional animal communicator, for help. Though initially suspicious, after two sessions, she could not but recognize changes in Ernie who, according to Hayman, needed more attention and activities. High was not convinced that it was Hayman's communication that helped Ernie, but she anyway wanted to meet Hayman at Spring Farm CARES, an animal sanctuary in upstate New York, where she lived with several horses, lamas, sheep,

chicken, goats, ducks, rabbits, cats and dogs. The film presents the life of the caregivers on the farm and Hayman's communication with the other-than-humans, as well as with the clients outside of the farm, through telepathic animal communication.

When Hayman is being filmed on the farm, she looks like she is first listening to other-than-humans and then telling in words what she thinks they are saying. This happens rather fast as if she heard actual words in some language and simultaneously translated them into English. She often starts her sentences with 'she says'. This gives an impression that there may be a problem of representation that begs the question if she stands in a power relation to the other-than-humans when speaking for them. This kind of anthropomorphism may be considered a disadvantage of interspecies communication. However, Hayman's communication can also be interpreted from a different angle to claim that she acts and communicates with other-than-humans the way that presupposes their personhood. Anne-Christine Hornborg is among those who believe that while personhood is often attributed to human existence, all living beings have personhood, like consciousness, if a biocentric, rather than human-centric, approach is adopted (Hornborg 2008: 21).

Besides *Animal Attraction*, many other of High's art projects seem to involve ICC. At the end of *Animal Attraction*, she attached a short film clip made of images transmitted to her by Ernie the cat. The *Animal Films* series (2005), in which she continued to work with other species, includes video pieces that were facilitated by her but directed by various cats and dogs. The film series focuses on fear and fantasies, and the images it contains were conveyed by other species for High to make films of. High's art practice is an example of how ICC can inspire art and foster collaboration between species. Within her work, ICC could be defined as a tool or method of art making.

INTERSPECIES COLLABORATION WITHIN ORACLES

Empathic ICC has been a part of my artistic practice and knowledge production since 2013. I was curious whether other-than-humans had guidance for humans amidst the climate breakdown, the depletion of natural resources, pollution, the loss of biodiversity and numerous related social problems globally. This thought was based on the Indigenous world-view in which other-than-human animals were teachers, guides, messengers or protectors of human individuals and communities (Legge and Robinson 2017: 6). At first, I studied the skills of ICC and trained under animal communicator Maiccu Kostainen. I was learning, but the next question was how to carry such methods beyond the personal sphere and into the art context. Whereas Kathy High was presenting ICC in her work and implementing it in her video art, I wanted to incorporate this tool into participatory performance.

I wanted to explore the idea of joint consciousnesses by bringing together small ensembles of humans and other-than-humans. Kostainen continued to work with me as I developed a series of encounters for humans and other-than-humans. I chose alpacas as the species to work with, because they have lived beside humans for thousands of years. My project developed into what I have called the *Oracles* series. Its first session, the *Alpaca Oracle*, was held on the Alpaca Fuente farm in Lohja, Finland, in 2014. The participatory performance included a short introduction to ICC by Kostainen, the introduction of alpacas by their caregiver Päivi Partanen and a meditation together with the humans and the alpacas guided by myself.

In developing the *Alpaca Oracle*, it was essential that the other-than-humans should be taken care of well and that the species-specific information should be taken into account. I also had spent a lot of time on the farm to make sure the alpacas should become accustomed to me. The project work conformed with 'The code of ethics for interspecies telepathic communicators' formulated by Penelope Smith in 1990. The first session included thirteen human participants and a herd of twenty alpacas. In this session, the alpacas chose to run around over a rather big field. They looked like they were showcasing a joyful ability to move fast while humans looked serious, sitting in their meditation positions.

The second *Alpaca Oracle* (2015) was held without Maiccu Kostiainen, but it was joined by another collaborator, performance artist Eija Ranta. We experimented with various meditation models in order to see how the alpaca herd reacted to them. Among the other meditation models, Ranta proposed testing the Nichiren Buddhist mantra *Nam Myoho Renge Kyo*, which seemed to gain reaction from the alpacas. The alpacas responded to the mantra by relaxing and lying down. Thus, we decided to use it in the actual *Alpaca Oracle* session with other people, basically forming a small choir chanting the mantra. The alpaca herd came very close to the human herd, relaxing, lying down and some almost falling asleep. According to Päivi Partanen, this was not their common behaviour, because the alpacas usually tended to stay away from people they did not know. The session became more intimate as compared with the first *Alpaca Oracle* since both the humans and the alpacas stayed peacefully close to each other.

After holding several *Oracle* sessions with different human and other-than-human groups, I realized few practicalities that needed to be taken into account. As the participants did not share their everyday lives, it became important to educate the human participants about the other-than-humans species involved. This information seemed to help the humans relate to the other-than-humans. It also played a role in ensuring a safe space for all the participants, both human and other-than-human. For instance, alpacas are very herd-oriented, and they are considered prey. If strangers approach them in their own home environment, they may experience stress. The particular herd with which we collaborated included two lamas that had the role of herd guardians. At the beginning of an *Alpaca Oracle* session, the humans would line up by the gate to the paddock, and one of the lamas would go from one person to another, sniffing their hair. Then, the lamas would step aside and let the people in. It was not clear why the lamas wanted to do this and what they found out about the people's hair, but without this being done, the lamas would have fiercely protected the herd and would not have let the people come near the alpacas. It was also important to work closely with the caregiver of the other-than-humans, who possessed a lot of general information about the species and personal knowledge of the individuals. This resembled Erickson's research on therapy horses, where the caregivers played an important role as mediators and informants.

I have not collected qualitative data on how the human participants experienced these sessions, but they have often said that they felt very calm and relaxed, and some have added more specific comments on what they felt during the session. Nonetheless, I claim that the human participants had an experience of communication of some kind. Whether the communication between the species has actually been intuitive or telepathic is ultimately more or less irrelevant. These experiences can represent a way of reflecting on

and imagining the rhizome of connections between species regardless if they were 'true' or 'false'.

CONCLUSION

When consciousness and intuitive communication are broached as practical examples in disciplinary fields and science contexts, the shared experiences often create confusion. ICC events can hardly be repeated in the way considered mandatory for scientific experiments, and there is a risk of anthropomorphizing other-than-human species. However, sharing species-specific behavioural and other information as presented in the *Oracles* can partly help with this challenge. Anthropomorphism can also be used as a tool to decentre human agency *vis-à-vis* other-than-human agency. Humans have an ability to imagine the other's state of being through empathy, which should be explored more in the context of other-than-humans.

ICC can also be defined as interpersonal communication where the sender and the receiver of the message are the same, such as for example when writing a diary. Thus, experimenting ICC to connect multiple different consciousnesses in the *Oracles* proposes a method for expanding personal experience. M. J. Barrett claims that ICC can cross the norms of power, privilege, competing epistemologies, ontologies and ethics. Thus, it can disrupt the ways of being and knowing endorsed in western culture (Barrett et al. 2021: 159). Arguably, this narrative requires practical, aware attempts to collectively communicate in such manner and understanding that there are different kinds of consciousnesses that could have agency to take part. Participatory performance like the *Oracles* suggests a space for this to happen and proposes that all living entities possess consciousness. This kind of joint consciousness may also challenge subjectivity in research and art practice by opening them to multi-species co-creativity.

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