

Article

Becoming a Part of the Houyhnhnm's Environment

Reiko Goto Collins * and Tim Collins

Collins & Goto Studio, Glasgow Sculpture Studio, Glasgow G4 9SS, UK; tim@collinsandgoto.com

* Correspondence: reiko@collinsandgoto.com

Abstract: R. Goto Collins and T. Collins are environmental artists. Their goal is to challenge their own subjectivity through research and practice. Reiko's interest in relational and collaborative artwork with the more-than-human world goes back to the 1980s. In 2014, she decided to engage a horse (Darkness) as a collaborative partner, with Tim's support. In this article, the reader will find a reflection on a creative inquiry between a horse, two humans and their shared environment. How a practice (of being with) might reveal an evolving subjectivity (becoming) with a horse? With a foundation of reading and practical testing of Edith Stein's ideas in we then looked to Charles Sanders Pierce's work on signs. This would provide a structure that enabled us to appreciate and process the range of signs discovered as we sought to communicate across species. Specific questions include: does Darkness interact with and adapt to changes in his environment? Is he self-aware and evolving through life experience, uniquely engaged with his environment? By recognizing and supporting his life and intelligence, would he reveal a world Tim and I were immersed in but could not perceive? How could we communicate that world through arts-based research?

Keywords: horse; empathy; signs; environmental art



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1. Introduction

Houyhnhnm are described by the fictional character, Lemuel Gulliver in Part IV of Gulliver's Travels an allegory by Jonathan Swift (1949). A herd of reason driven horses, who have their own language to communicate with each other.

In the runup to the Scottish independence referendum in 2014, the letters 'NO' were carved into a pasture on a rolling hill north of Glasgow. A week after we lost that vote, I signed an agreement releasing a horse from his work within a riding school. I convinced my partner that the highest form of freedom would be to enable the freedom of others. As we both entered our sixth decade, we were about to adopt a horse and extend our family. I then wrote to the equine passport agency to change his indentured name from the diminutive 'Darkie' to the more formal and evocative 'Darkness'. He was born in 2003 at the Polton Farm in Midlothian Scotland. He was the last horse Mrs. Beck bred at Polton. He was subsequently bought, relocated, and trained as a school horse at Easterton Stables near Mugdock Park in Milngavie, Glasgow. Between 2012 and 2014, I leased him twice a week for two years. During this time, I had come to understand that he was gentle and clever, and sometimes mischievous. Having worked with animals throughout my life, this was the largest critter I had ever made a commitment to spend time with. Darkness has an ability to resist my wishes, to refuse or insist on his own way of doing things. He lives outdoors amongst a herd of ten horses in a series of south-facing fields that lie between the Campsie fells and Milngavie Reservoir. An entrance to the West Highland Way is nearby. He is a long-maned, heavily built yet not very tall, primarily black Irish cob.¹

We began this adventure knowing nothing about horses and having never actually ridden. In 2014, reflecting on my emergent interest in horses and how I might interact with them, I wrote a journal article (Goto Collins 2016). The paper focused on my first meetings and experiences with a herd of young horses, then some initial attempts to get to know specific horses. I had not yet met Darkness at that time. I structured that work around

Edith Stein's (1989) phenomenological theory of empathy. The article concluded with ideas about horses I had engaged, based on attention to Stein's philosophy of empathy. At that time, I was focused on how I might establish a relationship with a horse that I did not own, but that I had some access to. There were three steps. The first one was about establishing a relationship between a horse and me. The second one was to seek a feeling of oneness, the pursuit of conjoined interaction with the horse. The final one was attending to the conditions and experience where that feeling of oneness would be lost. It was important to note that my relationship with horses was informed by walking with them, as well as initial attempts to learn to ride on them. In that first article, I wrote a note to myself, "In pursuit of empathic relationships with horses I must always consider my own subjectivity. One way forward is to take the next step and develop a more intimate day-to-day relationship over time" (Goto Collins 2016). Darkness was adopted as a member of our family as I submitted that first paper. In the following pages, I describe the ideas and practices that would inform the development of what I came to see as a process of being and becoming with the horse. Would it be possible to go beyond myself to find a way to link with the horse and the environment we share?

2. Meeting with Darkness

Reiko said, "I am tired, too much horse activity over the past three weeks. I ask myself can I understand him, can we do things together, does he care about me?" One year later, Tim said, "I am watching Reiko ride him, ever so gently. He is attentive to her balance the slightest sign of discomfort and he slows, walks, and even stops. Reiko rides past sunset, at some point Darkness snorts and walks directly towards me with Reiko still on him, putting his nose in my hand he breathed in". Reiko said, "he has had enough". There is something very right about evenings like this with Darkness.

Settling into our new relationship with Darkness, we found there was much to learn. We had new responsibilities with him; we came to understand that he might feel the same. We travelled fifteen minutes by car to spend time and care for him twice a day. We worked together riding, walking, or exercising maybe four days a week. Tim claimed Saturday was a boys' day; the two of them often disappeared into the forest for a few hours. In the first year or two, I relied on my reading to inform my practice of empathy (described in detail below). I was also learning about, and in some cases working through, various ideas of traditional and natural horsemanship. There was a literature and a discourse to all of this, but in essence, the terms were understood as a form of hard-handed control versus a softer form of interrelationship and mutual interest. To be clear, I generally² would ride with a traditional saddle, a snaffle bit, and a stick. Once Darkness and I had a test to measure my 'contact' with the horse's mouth. I was told I had soft hands. I wanted to focus on being attentive to his movements, actions, and reactions, as well as the signs that would indicate he was curious and interested, or at ease, or feeling unease or perhaps discomfort or even fearful based on changes to his surroundings or my own movements. I was convinced that we could share the lead when walking or riding together if we communicated well. Tim worried and thought more control would be important.

Through the years I have become more and more convinced that Darkness talks to me, but it is hard to explain how he does so, and how I know what he is saying. Then there is a question about what I have learned from listening to him. I have read various texts to inform an interdisciplinary understanding of my attempts to listen to and hear Darkness. My reading has included: Temple Grandin's (2005) study of animal behaviour through the lens of her own autism, Lori Gruen's (2015) writing on entangled (instrumental and ethical) empathy, Konrad Lorenz's (1991) work on communicating with animals, Eva Meijer (2016) overview of animal languages, Jakob von Uexküll's (2010) writing about how animals respond to their perceived worlds, Sanna Karkulehto's and Nora Karkulehto and Schuurman's (2021) texts on working with horses, and of course Part IV of Jonathan Swift's (1949) *Gulliver's Travels*, which describes a race of horses with their own language and ethical value system. Despite the import of the range of ideas embedded in these texts,

for this current effort, I was looking for philosophical ideas which would both challenge and complicate the methods developed while I was reading Stein. Charles Sanders Peirce's writing was chosen to inform this current work. I am particularly interested in his insights about signs and how he describes the difference between icon/likeness, correspondent facts, or indices, and, finally, conventional (symbolic) meaning. Peirce defines the symbolic realm as the territory of intellectual perception and conventional meaning-making. For example, a red traffic sign means stop, and green means go; this is true all over the world. Stein thinks of symbols in terms of facial expression in humans as well as in the body movements and gestures of animals. We can rely on empathy to explore and imagine the feelings of others by attending to these expressive qualities that can be understood as the outside, of sadness, happiness, anger, or fear. This paper focuses on how I resolve this contradiction, enact, and develop these new ideas in my day-to-day relationship with Darkness.

Edith Stein's ideas about empathy as the human ability to understand the other have been very useful to me. She understands empathy as an act of perceiving in which we reach out to the other to grasp their state or condition. It consists of one's emotional and physical experiences directed towards something foreign rather than something familiar. Stein also talks about sympathy that is based on self-interest. Sympathy reflects one's current experience and intellectual understanding. Empathy perceives and reaches beyond the self but without losing or forgetting oneself, resonating with the feeling of the other and amplifying it. Empathy has a symbolic relationship between body and mind. Both altruistic mental activities help to understand the other.

When I first adopted Darkness, we were like two strangers from different places. I felt like Lemuel Gulliver, only I could not hear or speak this Houyhnhm's language. We spent time together in the same place but maybe had different ideas about why we were there together. We had to learn to care for one another. There were things that the stable manager told me to do every day. A horse is a very large creature who spends much of his life on his feet. Various people in and around the stables impressed on me the need to lift the horse's hooves, look at them carefully and clean them every day. Darkness weighs almost half a ton, and although I had watched others lift and clean his hooves, I was at a loss as to how I would get him to let me lift those great hooves and scrape out any mud and stones. I would ask him to lift one hoof. Then gently tug on the hair on the back of his leg, I even tried to lift his hoof. Sometimes it worked and sometimes he lifted the other hoof and turned to look at me. Was he making fun of me? At one point I discovered that if I gently pulled his foreleg forward with my hand wrapped behind his knee, he lifted his leg and hoof. Eventually, I did not need to pull his leg forward. I just clicked my tongue or touched his leg lightly, and he would pick up his hoof. We were both learning. Another difficulty was putting the bridle and the bit into the mouth of the horse. I did not understand how this functioned. Darkness had never bitten me, but I was afraid of putting my hands close to his mouth. It was obvious to me that he took advantage of my ignorance. Sometimes the reins became tangled with his long mane, and it took a half-hour to put the bridle on properly. This awkwardness continued for a while. One cold morning I decided to put his bit in some warm water first. I was concerned about how he would feel about the cold metal in his mouth. Surprisingly, that morning, the bit went into his mouth without trouble, and I finished putting the bridle on within a minute.

Things have changed over the years. Now when I show him the bit, he opens his mouth. I have never been comfortable with this bit of metal³, but he seems not to be bothered. Tim and I talk about being careful about how hard we pull the reins. We always use our sculpture tool ideal of working with "soft hands and full attention"; this seems right with the horse as well. When I was leasing Darkness twice a week. One day I was riding out with a small group of women over trails. The other day was spent working with him on the farm property, taking a lesson or walking and trotting in one of the arenas. 'The gallops' was also an area where we could walk, trot and canter around a mile-long sandy path. Once he left the riding school and became a member of our family, I wanted to spend

more time riding off the property, in the nearby park, forests and trails. When we went to the edge of the farm, he stopped and simply refused to go out on his own. Both Tim and I tried to work on this together and separately. We talked to the yard manager and various experienced horse people who had lots of ideas for us to try; none of them worked. Tim had started riding on his own on Saturdays. One day, he downloaded the entire New York Times onto his phone and rode to the edge of the property. Darkness refused to move beyond this point, so he just sat there reading. Fifty-three minutes later Darkness turned his head slightly and walked through the gate. They spent two hours on their own together that day exploring the park. It wasn't until years later that we learned that many of the horses at the stable would not go out without another horse.

Did Darkness think that Tim taking the time to let him decide to go out on his own was important? We would never know. Darkness continued to trust us and traveled away from the stable on his own (and with others) without much hesitation. We learned to see and hear his fear or discomfort. It was expressed when his nose was flared, his breath quickened, his ears were moving about to listen to his surroundings. Then he would walk backward when he was nervous. In response, we gently squeezed and talked to him, reassuring him there was nothing to worry about. Sometimes, when he stopped, we just got off and walked and talked with him. Then, he would relax. My study of Edith Stein's ideas about signs and symbols were paying off. I found I had to listen to him and hear what he had to say with many different ears. He was clearly communicating, but it was in a physical and gestural form I didn't recognize in the beginning. Our early conversation was between two body-to-mind relationships: a human to a horse and a horse to a human. Tim and I both started learning to interact with him through symbolic exchanges.

The Dark Dragon Speaks

We learned Darkness did not like being out in a field alone. He needed at least one member of the herd out with him; otherwise, he would become nervous. The first time Tim and I fully understood this was when we decided to let him into his field early on a gorgeous day in autumn. He walked characteristically slowly and quietly down to the field. We let him through the gate and took away his head collar. He trotted from the first to the second field, then out of sight, neighing for the other horses. Suddenly, he was galloping back to us. His nose was dilated, and his eyes were wide. He apparently did not want to be alone. Once we came through the gate and entered the field to be with him, he calmed down, but then he was running off again. Tim kneeled, and I found a spot to sit down and watch. He ran back towards us, then past us then gave a big neigh. He watched us for a long time then trotted to me, circling. He then stopped. He slowly came forward to give me his big black nose. He was now calm. Tim then came up and patted him, took him by the mane, gave him a wee tug and began jogging side-by-side with him. We turned and laughed as Darkness took off like the wind again, running along with joyful bucks. He kicked into the air as he continued a wide circle around the two of us. He seemed to be enjoying our attention and the fact that he was indeed a horse. I said to Tim, 'The Dragon is loose'. He took another loop around the field, then stopped and watched us. He went to his knees and started to roll in the dirt: first one side, then over. He then stood up and shook himself, then went down on the other side. He got up and stretched, then slowly, very slowly, decided to urinate. Shaking his large head and mane, he walked directly to me (Reiko) and gently leaned in for attention. We walked back to the gate, and he followed us like a large Labrador retriever. I picked up his head collar, and he presented his head nicely. We walked back up the hill and left him in the stable with some hay for a few more hours until we knew other horses would be out. We saw more aspects of Darkness that day than we had seen since we met with him.

Here the relationship was more distanced, but the link was obvious when we stepped through the gate. His physical presence changed, and he went from anxious to playful, perhaps even performative. The first time through the gate, he might feel he had lost the connection to us and did not find the herd connection he was counting on. Once we stepped

back inside, we communicated through our bodies and gestures. Sitting down, we made it clear we were also aware of and attendant to that connection which was important to him. We would never leave him on his own. However, it was the reaction, the dragon-horse display that unfolded a new understanding for us of what this creature truly was—despite the urban realities of our life together, we were in the presence of a wild and free spirit. The joy of being horse would hopefully always remain intact and openly expressed.

Darkness, Tim and I communicate with signs that must be tested, learned, and then applied. The voice commands ‘whoa, walk, trot and canter’ are all word signs, while our kicks and squeezes, then the releasing of pressure is a physical sign that encourages the horse to move forward. However, it always seems to take negotiation, a mixture of tone of voice and body gestures and consistent intent. Horses are excellent at hearing tone and emotion as well as reading the rider’s body movements, including their position, balance, muscle tension, breathing, energy and focus. The rider can also read the horse when he is paying attention or not, getting slower or ready to go faster. Donna Haraway describes what I understand as the ideal, stating “Both human and horse, are cause and effect of each other’s movements. Both induce and are induced, affect, and are affected. Both embody each other’s mind”. Haraway understands this as a ‘reciprocal induction’, an ‘intra-action’, and co-performing with a ‘companion species’ (Haraway 2008). Riding is not everything. It is only one way to have a relationship with a horse, but riding is a shared activity and adds an important layer to the communication and the evolution of this relationship.

3. Peirce

Living in Scotland, I am very lucky to have opportunities to spend time with friends and colleagues working on projects like ‘Uncertain Human Futures’ (Phemister and Heim 2016) organized through the Institute for Advanced Studies in the Humanities at the University of Edinburgh. I was invited to participate by co-conveners Professor Pauline Phemister, a philosopher and expert on Leibniz and metaphysics, and the philosopher/performance theorist Wallace Heim. We would spend time talking about our changing world with people like the aesthetic philosopher Emily Brady and the scientist Françoise Wemelsfelder, who studies animals as sentient beings. These people have informed my ability to perceive, source relevant context and give meanings to my experiences with more than human others. However, it was another participant, the bio-semiotician Wendy Wheeler who would provoke my thinking and convince me to read and think beyond Edith Stein. She introduced me to a semiotic understanding of life and relationship. “. . . relationships themselves are not things but are made of communication and information” (Wheeler 2016). She understood my quest and the way I dealt with empathy but thought I needed to go deeper to understand the vehicles, objects, and interpretation of pre-linguistic signs. She encouraged me to read Peirce. In 2019, Tim and I were both involved in another research network on ‘Living Organisms and their Choices’ (Phemister). It was co-convened by Phemister, with Wendy Wheeler and Jonathan Delafield-Butt, a professor of child development and neurobiology. Participants would include the environmental poet and scholar Tom Bristow, who had edited the Special Issue that included the first article on Darkness. Other important participants included Anthony Trevas, a noted expert in plant behaviour and science, Kalevi Kull, a bio-semiotician, as well as Ray Noble, a biologist and medical ethicist, and his brother Denis Noble, a physicist and systems biologist. During the first meeting of that network, Wendy asked us all to read Charles Sanders Peirce’s (1998) writing on signs. We would spend a great deal of time in that network talking about the ubiquitous condition of sentience and its relationship to the meaning of life across all living things. Through conversations in that workshop, I began to read Peirce.

Charles Sanders Peirce is an American philosopher and founder of pragmatism. He is known as a theorist of logic, language, communications, and signs. He is also recognized for his work on abduction, the use of experience and observation to arrive at obvious conclusions. It is a powerful way to orient oneself to conditions in place. It is a compliment to inductive and deductive reasoning, which he also addressed in his work. This idea

is useful in the effort underway between Darkness, Tim and me. However, my interest (following Wheeler's encouragement) has been in Peirce's theory of signs, which focuses on representation, reference and meaning. Peirce begins with different states of mind, feeling, reaction and thinking, which provide a foundation that makes it easier to recognize his description of different kinds of signs. Describing feeling as a kind of contemplation, he says, "this is about as near as may be to a state of mind in which something is present, without compulsion and without reason. Reaction is a . . . sense of acting and of being acted on. It does not reside in anyone feeling; it comes on the breaking of one feeling by another feeling. It essentially involves two things acting on one another . . . Thinking is a third state of mind. If we are thinking, we are aware, we are learning, or of going through a process by which a phenomenon is found to be governed by a rule or has a general knowable way of behaving" (Ibid, p. 5). This is a mediatory interest that relies on feelings, reactions and prior knowledge.

3.1. Peirce's Signs

Building on feeling, reaction and thinking, Peirce defines signs⁴ as "anything which is so determined by something else called its object, and so determines an effect on a person, which . . . I call the interpretant" (Ibid, p. xxx). There are three kinds of signs, a signifying likeness or icon. There is an object which determines boundaries of meaning. It is comprised of indications or indices that have a correspondent relationship. Finally, there is the symbol and the interpretant, the understanding or meaning which emerges when we recognize a fundamental link between one thing and another. I will go into a bit more details on this by paraphrasing and referencing Peirce below as he looks at how these signs can be used.

3.2. Likenesses or Icons

Paraphrasing from Peirce: photographs are one example we can consider; through various optical-technical and chemical processes, we can assume a correspondent relationship to nature. Another example would be the way a donkey generally resembles a zebra. "That resemblance has a physical cause in heredity; but then, this hereditary affinity is itself only an inference from the likeness between the two animals". There is no way that we can know the production of a zebra and a donkey in the same way we know (or understand) the production of a photograph. To extend the idea a bit further, an artist's drawing carries with it a sense of how the artist is affected by contemplating an object or scene. A mathematician suggests "in a very precise way, new aspects of supposed states of things" through measurement and calculations. Both likenesses reveal the bias and method of their production although "Pure likeness—can never convey the slightest information" (Ibid, pp. 5–7). Likeness also refers to a feeling, a singular interest in a thing for itself. Following Peirce, I refer to this at times as 'Firstness'.

3.3. Indications and Indices

Likeness tells us nothing. Peirce is clear about this, but indices show something about things on account of their being physically connected with them. Describing where Darkness lives, I generally tell people the stable name, and the fact that it is north of Glasgow. I describe the roads nearby, the towns, buildings, and landscape features you see on the way. I adjust what I say depending on how much the person knows about the area. A map is a picture filled with such indices. It can designate a place if it has reference to a known place and includes both scale and compass direction. "Experience of the world we live in renders the map something more than a mere icon and confers on it the added characters of an index". Here the sign is both likeness and indication. Differentiating the likeness from indication is not the 'experience' found in the former but the capacity for experience that is embedded in the indices. Peirce explains this is "Very different is the case of the inexperienced and the experienced person". (Ibid, pp. 7–8) The person with a depth of experience takes on a breadth of information, while the inexperienced may gain nothing.

Indication and indices refer to the idea that two things (inward and outward) are reacting on one another. Following Peirce, I refer to this as 'Secondness'.

3.4. Symbols and the Interpretant

Peirce identifies a symbol as a 'conventional sign' that evolves out of social habit and use a convention. He links it back to Aristotle's idea that a "noun is a 'symbol', that is, a conventional sign". In Greek, a watch-fire was a symbol understood as a signal agreed on; a banner, standard or ensign is a symbol, and a badge is a 'symbol'. Moreover, any expression of sentiment was called a 'symbol'. Any ordinary word, such as 'give', 'bird', and 'marriage' (or 'whoa and trot'), are examples of symbols. A symbol does not identify, enact, or describe something. It links our imagination to a word associated with a specific meaning. A symbol refers to the idea that, through thinking and learning, we process aspects of likeness and indication to arrive at meaning through the intellect. Following Peirce, I refer to this as 'Thirdness'.

4. Darkness and the Three Signs

In the previous section, I talked about Peirce's three signs. They extend my understanding of Stein's empathy. The two philosophers' ideas are standing in a line: empathy and firstness, body-mind relationship and secondness, and sympathy in relation to empathy and the thirdness. In this section, I would like to focus on signs through being with Darkness. If a sign is a representation, do we see or hear, notice, and recognize it, and give a meaning to it based on the way it reacts with other things?

Referring to entries in the 'Dark rider's diary' begun in 2014, I can reflect on how Peirce's ideas about likeness, indication and symbol helped add an additional dimension to the development of our work with Darkness. Thinking with Stein, I have been attentive to a feeling of 'otherness' to get at empathy. We are immersed in two sets of body and mind relationships and the pursuit and attention to a feeling of oneness. Through Peirce, I experience otherness as a sign, a feeling of likeness, which is then informed by indications. There is a complimentary layer to Peirce's theory, symbols unfold some of the shared complexity which we begin to discover through the integration of companionship and art practice. In the following section, I will think about the co-dependence of empathy and sympathy and of Peirce's primary, secondary and tertiary kinds of signs, reflecting on how these thoughts informed practice and why these moments became important for us all.

From the 'Dark Riders Diary': A Black Horse in a Field on a Dark Night

Glasgow is affected by its west coast location. Weather blows in from the North Atlantic causing rapid changes that include fog, rain, sleet, snow, hail. As a result, conditions can be mild and nice one minute and breathtakingly cold the next. As the weather changes, Darkness' woolly coat grows when it is wet and cold, but we worry and normally put a 'rug', a waterproof jacket, on him.

One unexpectedly cold, dark December evening, we got a parcel delivery, which was a new rug for Darkness. Until then, he always got second-hand rugs that had been ripped and mended. As we ate dinner, I began to worry about the bitterly cold night with rain forecast. Tim suggested the horse would be fine. A few hours later, it was now very late. I decided to step outside. I returned and said 'we had to go out to his field and put the new rug on him.' Tim got the car ready. As we drove, I began to worry about how we could find Darkness. I also worried about the other horses in the field, since it was so dark with no moon at all that night. As we got closer, we realized neither one of us had brought a flashlight, but we thought there had to be one in the car. We found the batteries were dead. Parked on the road along his field, I wanted to give up, as I didn't know how I could find him. Tim just laughed and picked up the rug and said, 'Let's have a go. If we find him, great, if not well, we will just have a wee adventure.' He climbed over the gate, and I followed. We stayed close together as we could only see a few meters ahead as we walked into the dark field. I called 'Darkness', but there was no response, no sound at all. The field

was huge, I was beginning to think this was a mistake. We walked and walked and neither saw nor heard any horses. Then I felt something coming toward us. This approaching creature had a familiar presence that preceded his arrival. Slowly, through the dark night, a horse was emerging. We could hear it breathing, I whispered to Tim, 'Darkness?'

He leaned closer and put his nose in my hand, knickered a bit then greeted Tim. We patted him, laughing that this great hairy beast would bother to find us on a night like this. As we engaged, we developed that sense of oneness that has interested us. The rest of the herd came forward. We couldn't quite see them, but we could hear that there were many horses around us. We got a bit nervous. Darkness stepped away and trotted toward the herd. We could hear him working in a circle. He was pushing them away from us! He came back through the dark misty night to us again, the surrounding area now very quiet. I asked if I could put the rug on him. He was very calm and relaxed, curious about our presence. He stood still as I put the rug on his back and connected the clasp at his chest, then across his belly, then through his back legs. Once it was on, he shook his head a bit and headed off into the night. We walked back to the car laughing at the magic and wonder of the experience.

If we look to Peirce to understand this experience, we are immersed in a very specific kind of feeling once we are over the gate. We are searching for a likeness of Darkness in the field on a very dark night. Up until the point that he presents himself, we are all engaged in a sense of firstness, a contemplative search for an experience that confirms the presence of the other. Once the feeling of presence is enhanced by touch, voice, and familiarity, Tim and I recognize a series of indications, an interaction between things that reveals even more about our situation. However, it is when the herd gathers out of curiosity, and we got nervous, that Darkness showed his ability to read the complexity of feelings, signs, and symbols, and acted. He pushed the herd back away from us. This was followed by his return to complete the interaction with us, where we found ourselves back to an exchange of indications.

There was no way he could 'know' why we showed up late at night, but once we started putting the rug on him, he relaxed and welcomed the attention. Once the action was completed (there were no new signs of likeness, indication or symbol), he faded into the night again. We had a complex interaction in the field with the horse amongst the herd, without the benefit of eyesight, mostly relying on sound and touch. Horses like Darkness, on the other hand, have the largest eyes of any land mammal and see very well in the dark. His sense of smell and hearing are also more significantly developed than ours. We empathised that Darkness had moved from processing likeness and indications and perhaps even interpreting complex symbols long before we would have, that night. All of this starts to raise questions about Darkness. Is he really all that different than we are? We do not speak his language, and he does not speak ours, but continuous interactions with him convince us that he has intelligence, self-interest as well as desire and memory. He can empathize with us and others that are proximate to him⁵.

During the early days of the 2019 meetings on 'Living Organisms and their Choices' (Phemister and Wheeler 2019) the group made an outline of specific ideas that we all held in common about sentience and intelligence in more-than-human others (Figure 1). One was in the form of an outline, a set of indications of intelligence, 'The ability to: interact with and adapt to changes in the environment'. The next was a recapitulation of Peirce that addressed sentience and reasoning. 'The self as a symbol, self-aware and evolving with life experiences.' This is comprised of firstness: possibility as a radical indeterminacy, with no external causation. Secondness is an emergent differentiation, an otherness or individuation that emerges through a mix of limitation and willful response. Thirdness is about habits that lead to semiotic order through mind and culture. Reality is constructed from habit, mediation, and reasoning. Finally, one of the participants said that 'the meaning of a living thing (any living thing from a microbial critter to a dolphin or a human) can be understood by what it does'. We began this writing by saying, "we are convinced Darkness talks to us". In the description of the dark horse in a field at night, we felt he was thinking and

responding to changing conditions. He was showing care and attention to our well-being. These examples provided indications of sentience and intelligence. However, ‘knowing’ was not good enough for me. I decided I needed to spend a bit of time talking to my friend Françoise Wemelsfelder to gain some insight into a scientist’s approach to interrelationship with more-than-human living things. I was looking for ways to structure my experience and practice, and potentially quicken the relationships that were developing between Tim, myself, and Darkness.

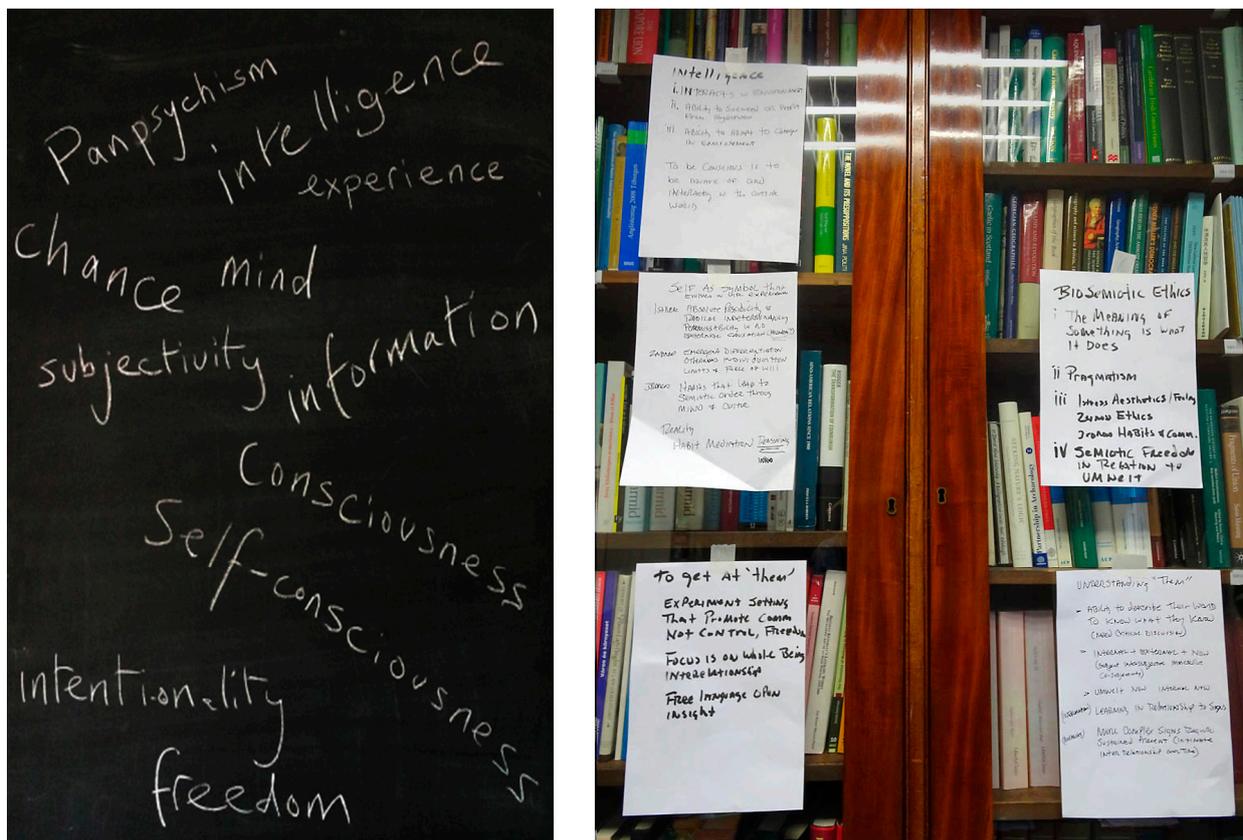


Figure 1. Collective thoughts during the ‘Living Organisms and their Choices’ workshop, 2019. (Courtesy of Collins and Goto Studio: Tim Collins).

5. Sentient Beings and Signs

Questions about animal sentience and consciousness are both scientific and philosophical. Many feel that these topics are being addressed in a “philosophically sophisticated yet empirically tractable way” (Allen and Trestman 2016). There are current peer-reviewed journals that cover relevant topics, with titles such as *Animal Cognition*, *Animal Sentience* and the *Dimensions of Animal Consciousness*. Nevertheless, critics still argue that subjective phenomenon are beyond the methods of viable scientific research.

According to I.J.H. Duncan (2006), “by the end of the 19th century, scientists and philosophers had developed a fairly sophisticated concept of [animal] sentience”. He goes on to say that the concept of behaviourism halted the development of research in the area for decades. By the late 20th century, significant work on the topic was being published. In a two-volume special issue on ‘Sentience in Animals’, John Webster (Special Issue Editor) describes the contents as philosophical consideration of the nature of sentience, scientific methods to study the onset of sentience amongst newborn animals, and evidence of cognition in the animal kingdom (Webster 2006). In 2012, the ‘Cambridge Declaration on Consciousness’ stated, “Humans are not unique in possessing the neurological substrates that generate consciousness” (Low et al. 2012). Doubts about the subjective nature of animal emotions and difficulties with measurement were addressed in a systematic review

of the literature by [Proctor et al. \(2013\)](#). This was again confirmed in a paper on the 'Dimensions of Animal Consciousness' with a focus on variations in consciousness in the animal kingdom ([Birch et al. 2020](#)).

Françoise Wemelsfelder is a biologist and researcher who focuses on animals, particularly farm animals, as whole sentient beings. One of her most widely cited papers on animal sentience and communication was published in ([Wemelsfelder 2014](#)). (This was five years before the Cambridge Declaration on Consciousness.) The method discussed is called 'Qualitative Behaviour Assessment', which relies on human observers to integrate details of animals' behavioural expressions using simple descriptive language (e.g., calm, playful, nervous, aggressive) that reflects commonly accepted ideas about the emotional experiences of animals.⁶

In a recent video, Wemelsfelder described her passion for scientific methods that help us recognise animals as whole sentient beings, a process that makes visible how animals express themselves and experience their world. She explained that when she was a student in her field of animal welfare, science students were taught to measure animal movement as 'quantifiable' indications of behaviour; this could include, for example, sitting, walking, jumping, eating, or sleeping. Wemelsfelder was certain there would be more to consider, stating, "behaviour has emotionally expressive qualities that we can see and study as well and learn to understand. You never see an animal just walking, there's always indications of how it is walking, it can be walking in a way that is shy and timid or friendly, relaxed, or tense and aggressive or confident and bold. And that is true for all animals. If we can look at and measure this expressivity, it brings alive how animals are feeling". ([Wemelsfelder 2021](#)).

Each animal expresses a communicative signal through body gestures. Wemelsfelder has worked out methods that let her observe the many different emotional states of animals, but it is the whole sentient being that she begins with rather than a series of separate indicative behaviours. I think Wemelsfelder has a fundamentally empathic interest in the whole creature. Tim talks about this as the ability we all recognize relative to health and wellbeing⁷ in family, friends even pets. Amongst myself, Tim, and Darkness, we recognize if something is wrong at a distance. Wemelsfelder claims that farmers can see unease in individuals but also in herds of cattle, schools of fish and even vast pens and cages of farm animals. This sophisticated understanding emerges with intimate interrelationships that occur over time. From Peirce's perspective, Wemelsfelder's work is formed by primary attention to and consideration of a likeness or icon, then by attention to a series of indices that confirm initial feelings and provide a structured process that enables the kind of quantitative analysis that is important to science.

After one of our discussions, Wemelsfelder passed along a paper for me to read about the 'Qualitative Behaviour Assessment of Horses'. As I understand it, my scientist friend has a unique point of view within her discipline because she begins with a likeness, an icon, a feeling. From there she identifies gestures that rely on body and mind relationships. These are secondary signs indices or indicators. For an example, in one study, the focus is on behavioural expressions that can be characterized (and objectively identified and recorded). Based on my understanding of the following protocols, positive and negative displays are characterized as: calm/relaxed/content or nervous/stressed, curious/interested or irritated/impatient/angry. This was an experimental methodology for an animal welfare assessment ([Hintze et al. 2017](#)). In another exchange, Wemelsfelder passed along a draft protocol for a study, where a more interpretive approach was taken: "aggressive, alarmed, annoyed, apathetic, at ease, curious, friendly, fearful, happy, looking for contact, relaxed, pushy and uneasy" were all under consideration.⁸ These vocabulary words are tertiary signs or symbols that represent the behaviour and emotions of the animals, thereby representing a standardized scientific protocol that is more than the analytical sum of the parts, when used within an empathic whole sentient being analysis.

6. Artwork and Signs

My work with Darkness is enabled by two kinds of freedoms. The first is based on the evolution of science toward the idea that animals are conscious or sentient. It is no longer unorthodox to think of a horse as a subject that experiences the environment and uses memory to make decisions in relation to appetites and self-interest. The second is the horse as the topic of contemporary artistic inquiry, providing context for what we have done here. For instance, Jannis Kounellis (1969, untitled) tethered twelve horses in a gallery in Rome as the essential content of his exhibition. More recently in 'Tatlin's Whisper #5', Tania Bruguera (2008) had two mounted policemen patrol the vast entrance space of the Tate Modern; the incoming audience was controlled by their movements. Then there is the work of Marion, Laval-Jeantet. In 'May the Horse Live in Me' (Laval-Jeantet 2011), she injected herself with horse plasma and performed on hooved stilts to explore trans-species relationships. For Documenta 14, Ross Birrel (2017), hired a team of long-range riding experts to enact 'The Transit of Hermes, The Athens–Kassel Ride.' As documented in photography and video, Birrel presented the care for the horses as an essential part of his narrative. In each artwork, 'horse' is variously engaged and presented as an object of creative inquiry rather than a subject. Our current work is about a horse as a subject with language capacity and his own interests, which help shape the outcome of the creative inquiry.

Tim and I are environmental artists who have been working with people, places and living things for thirty years. Our goal is always to challenge our own subjectivity through reading and experience that alters how we understand the world. Artworks emerge from our practice of reading, writing, and spending time immersed with living things in environments that have our interest. Material/studio engagement is another means of reflection and immersion in our subject or topic; it goes beyond reading and writing. As described earlier, the initial work was informed by Edith Stein and focuses on the relationships between body, mind and the environment and attention to a feeling of empathic engagement with Darkness. It was clear early on that Darkness saw me as another living being, but I was neither horse nor herd; to him, I was an otherness. Then, one day, it occurred to me he also saw me as part of his environment: part of the surrounding conditions and influences that shaped his day-to-day life. This unfolded a line of inquiry as I began to think about how he was shaping my perception of the environment. As we began to clarify the empathic relationship with non-human others with some initial experiments in art practice, we were attentive to signs that were iconic and indicative (and still in the realm of empathic engagement) and emergent symbols which were more of an intellectual pathway to meaning. Through Peirce, I have learned to explore likeness, indication and symbol. This helped to add an additional dimension to the development of our work with Darkness. In the next section, we focus on the studio methods and outcome of this arts-based research.

How He Moves in the Darkness

Our artistic inquiry began with a sense that we needed to extend our observation of Darkness when he was out overnight for twelve to eighteen hours⁹ in one of two ten-acre fields with the herd. We used a GPS (global positioning system) to track his movement, his speed, and his stationary periods in relation to three different areas: the field itself, a section of wooded hillside on the northern border facing south and a smaller moorland in the southeast corner. Each place had different vegetation. I began to work with these maps. They were like blackboard drawings that revealed ephemeral qualities of the horse's movements over time.

Each map was traced and drawn (Figure 2). I began to see where and when he walked and when he ran, as well as the spots where he stopped to either sleep or eat. Notes such as the weather and the duration of the mapping experiment helped me to 'see' what he was up to. Over 120 drawings were made between the summer solstice and winter solstice in 2018 (Figure 3). Somebody said the drawings looked like constellations with subtle colours

of dots and lines. They were patterns of the horse’s movement, showing how the horse was moving freely in the field during the nights.

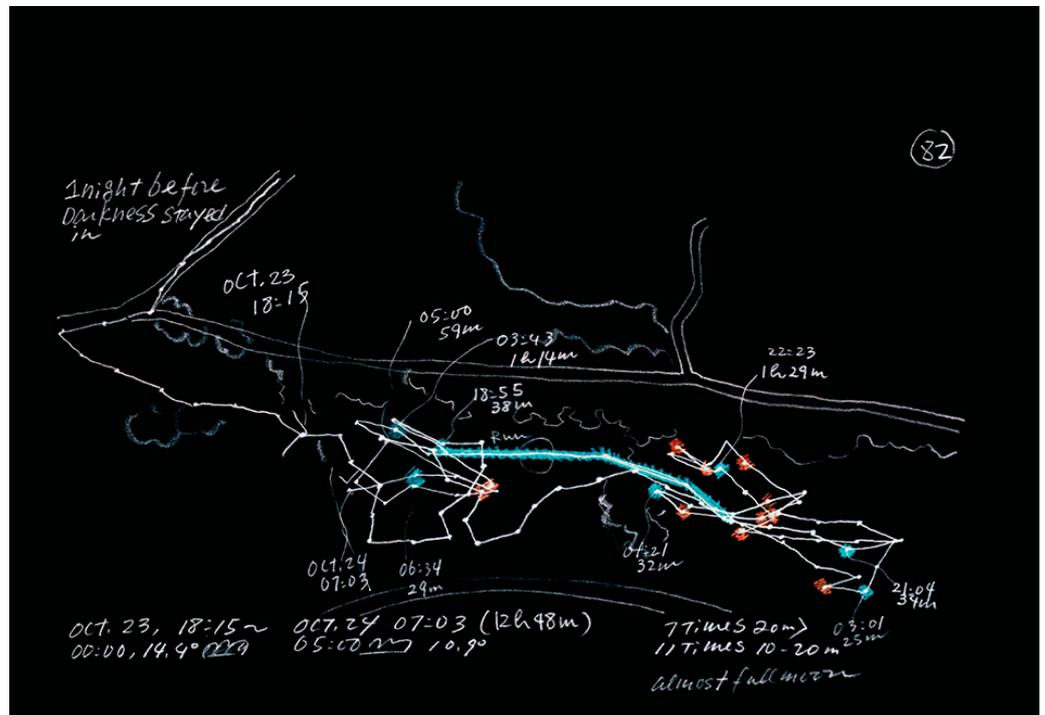


Figure 2. ‘How he moves in the darkness’ (detail), print 5” × 8” each (Collins & Goto Studio 2019).



Figure 3. ‘How he moves in the darkness’ (Collins & Goto Studio 2019).

The drawing informs the firstness—an icon. They are a technology-informed, artist’s drawing of the patterns of a horse’s appetites and movements in his primary living envi-

ronment. An exhibition (including some of the plant prints discussed below) was set up at the Institute for Advanced Studies in the Humanities at the University of Edinburgh for discussion during the final meeting of the ‘Living Organisms and Their Choices’ workshop in 2019.

‘What he likes’ consists of prints, plant specimens, digital images and video documentation of the plants and tree leaves that are consumed. He goes out of his way to eat these plants only at certain times of the year. Horses, particularly critters like Darkness with a lineage related to the Gaelic archipelago, have a passion for a wide range of vegetation that can be found across the landscape. As we began to pay attention to his desire to eat various plants, we learned his appetite changes throughout the year. He has memory and uses his eyes, his nose and sense of taste to make decisions. Wherever he is in the landscape, he seems to remember or know what his favourite plants look like, smell like and perhaps even taste like. His lips are like an elephant’s proboscis that allows him to carefully sort what he likes when he likes it. We have made photographs and shot videos. I have collected plants when he stops and eats while out walking or riding (Figure 4). Some of the specimens are his favourite, while others are seasonal plants he wants to eat only for a week or two. Darkness knows what to eat and what not to eat based on visual indications and a strong sense of smell and taste. However, a horse’s ability to focus when close to the ground is limited. Horses may make mistakes, tasting nettle or blackberry leaves instead of raspberry. Nettle stings and blackberry has harder thorns. Additionally, a young thistle makes him wince when he touches it with his nose. He must learn about plants by eating and making some mistakes. Darkness has a passion for horsetail certain times of the year, and specific tree leaves like ash and lime have his attention as well (Figures 5–7). Sometimes we taste along with him.



Figure 4. Goto and Darkness during collecting specimens of ‘What he likes’ (Collins & Goto Studio 2018).



Figure 5. Tim Collins and Darkness at an ash tree. (Collins & Goto Studio 2021).



Figure 6. 'Favourite tree leaves', (left) a print and (right) plant specimens (Collins & Goto Studio 2019).

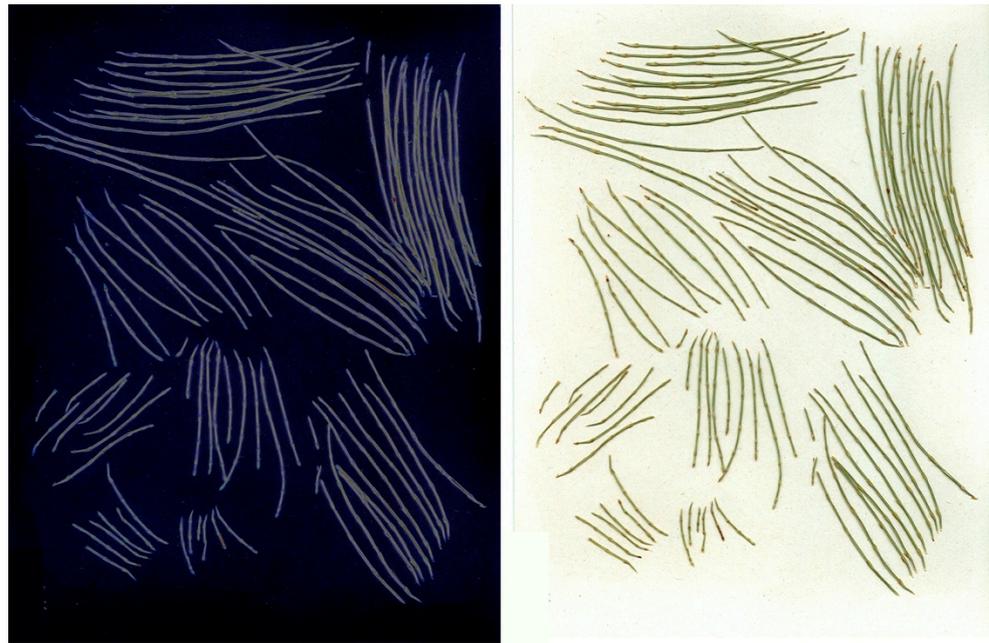


Figure 7. ‘Horsetail’, (left) a print and (right) plant specimens, (Collins & Goto Studio 2019).

It was Tim who first noticed his interest in common hogweed, also known as cow parsnip. It was at the height of summer in 2019 that Tim saw Darkness’ fascination with this plant. As they walked along a quiet road, Darkness kept pointing out this plant. When they stopped, Darkness stripped all the leaves off the stem, then clipped the flowers one by one creating a salad bowl of sorts in his mouth. He stood and chewed it. He had quite an appetite for this, but that only lasted for a few weeks. Despite what looked (to us) to be healthy and hearty plants that would be good to eat, he was no longer interested. The first year it was an anomaly, but when it happened again the second year at the same time of year, lasting only a few weeks, he had us thinking. Was Darkness processing all three aspects of Peirce’s signs, to make decisions about what to eat, when to eat and when to stop eating it? Did he have a memory that included a temporal element that initiated his search for his favorite foods?

My interest in this topic resulted in a friend recommending Marthe Kiley-Worthington’s work on animal behaviour. She is clear that “Knowledge of field botany is crucial to [a horse’s] survival in the natural environment. Learning to distinguish different plant species, . . . which taste nice which make you sick, is vital to learning what to eat and how to eat it”. (Kiley-Worthington 2005). I have learned more about these plants through the horse’s interest and intelligence. I am convinced Darkness has an awareness of and response to the first and the second sign. He responds to the iconic form, but also to indices. He recognises the plant when it is ready to eat and when to stop eating it. He has an experiential understanding that is based on senses that may be more acute than my own. This has started an interest in plants’ chemical processes and available nutrients that ‘might’ inform his seasonal appetite.

I have begun a third inquiry with Darkness. We have experienced a long twelve-mile hack this year and have begun to pay attention to the moments when he stops to look at the landscape (Figure 8). I have started to take photographs that document what I think he is paying attention to. Often, I have no idea what he is looking at. Other times, a few seconds later, I find the cause. It can be someone is coming up the road on foot, or a car, or perhaps an unfamiliar object is suddenly in the scene. Tim thinks he can ‘see him listening’ at times, those big ears moving to pick up every sound in the landscape. When he smells the air, he lifts his head. This gives us a sense of another way he ‘knows’ more than we do. He is also demonstrative. I have started taking photographs when he points out the direction where he may want to go or the plants he would like to eat. He is communicating

with me through all three signs. Sometimes I know what it means, and other times I do not know what he is saying. We struggle to understand one another at times, but we enjoy the moments being together. Documenting it allows me another level of reflection and consideration of our shared experience.

Working with attention to Peirce's writing about signs has opened up a creative inquiry that is very important to me. I am starting to see the environment through his eyes, and our relationship takes us another level of depth and import. In Darkness' look and his taste, the first and second aspects of Peirce's signs are revealed. But he also takes on the role of interpretant. At times, he tells us things we do not expect to hear.

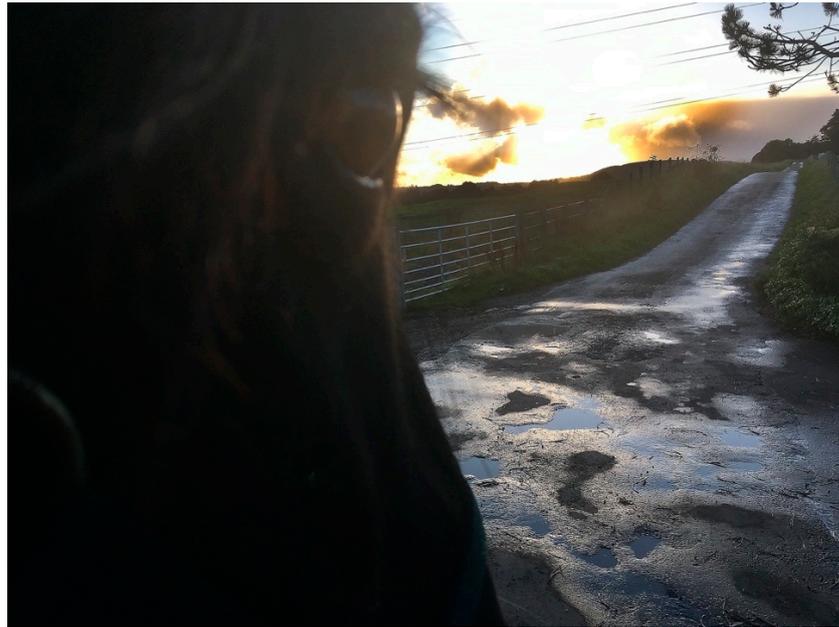


Figure 8. Two things to look for: a lot of rain last night and a rain shower this afternoon. Many big puddles are on the road. Darkness is looking around, but he is also waiting for Tim. He can hear a car is coming, although it is still out of sight and beyond my hearing. (Digital image: Collins & Goto Studio 2021).

7. Conclusions

“... he neighed three or four times, but in so different a cadence, that I almost began to think he was speaking to himself in some language of his own”. (Swift 1949, p. 317).

This paper dealt with a shared language between a horse and a human. At the beginning, I raised questions about how a practice of being with Darkness might reveal an evolving shared subjectivity. I was looking for signs of self-awareness and engagement with his environment: would he reveal something about the world that we were both immersed in, but was hard for me to perceive? Could I go beyond myself and my senses to link with this horse and see the environment differently? Peirce's capacity for experience embedded in the indices encouraged me to go forward, to discover the potential to notice something that I had never paid attention to before. Like Lemuel Gulliver, struggling with the idea that the Houyhnhnms speak, I had to let go of my doubts and listen more carefully.

In Sections 2–4 I described my initial meeting with Darkness and explained my methods of engagement and reflection. In the sub-sections *The Dark Dragon Speaks* and *A Black Horse in a Field on a Dark Night*, there was a progression from an awakening to his self-awareness in the former and an initial understanding of our shared subjectivity in the latter. Peirce's detailed analysis of signs (presented in the third section) provided essential insight on method as I reflected on the *Dark Night* narrative. The analysis of the latter situation revealed a sense of attention and care from the horse and an interest in us as other that was unexpected. It also resulted in a sense that I needed to know more about the

way other disciplines were thinking about consciousness in more-than-human beings, like Darkness.

By the time I was writing Sections 5 and 6, I benefitted from discussions with friends and colleagues in the 'Uncertain Human Futures' discussion group. Both Tim and I were invited to the 'Living Organisms and Their Choices' research network. I was able to present aspects of this work to the network and benefitted from critical feedback. The import of Peirce's work was made clear by more than one colleague, and I found a deep appreciation for Françoise Wemelsfelder's ethical interests and research. Her empathic focus on the whole animal in its environment became an important point of reference for me.

From the unexpected experience of being with a black horse in a field on a cold December night, I began to integrate my art practice into my observations and my creative inquiry to see the environment through his sensibilities. Slowly, I started seeing the immediate environment and the changing conditions of the landscape in new ways. The unexpected discovery of his changing seasonal palette and his desire to taste things as they came into season was intriguing and took a few years to confirm. 'How he moves in the darkness' consisted of a series of drawings. It was driven by our curiosity about what Darkness would be doing when we were not with him. A GPS mapping system extended our physical ability to observe the horse's movement during night. Each drawing could be interpreted as data. The subtle colours of the dots and lines indicated the duration of the horse movements. They were symbolic signs, information, and meanings. The drawings were also maps that indicated the movement of the horse in relation to the place. This was the second sign—indices. The quality of the drawing looked like a 'constellation', and I could imagine the horse was roaming around the field freely. This would belong to the firstness, the sign of icon, and feelings.

'What he likes' consisted of plants specimens and prints. We realized that Darkness was selecting seasonal plants, knowing their readiness to be eaten, and communicating his interests to us when he saw them. He stopped and pointed to the plants asking permission. It might be the changes to chemistry and nutrients that occur in the plants over time. Perhaps these were indications that only the horse could perceive, see, smell or taste when the plants came into season. Our knowledge of plants became enhanced, and the meanings of these plants have been changed through this process.

The third artwork involves taking images whenever I notice Darkness stops to look, listen or smell something. When he stops, he reveals desire and intention, but I am left to guess at his interests. I take the picture, then reflect on the meaning as I look at the landscapes that capture Darkness' attention. Sometimes, when walking with Tim, he notices different things as I focus on the picture. The horse sees, hears, and smells the world around us differently than we do. The impetus for his looking seems to be sound and smell as much as visual cues; it is the relationship between the three signs and the combinations of each other that allows the horse to 'know' the landscape. I value this conversational domain, a form of aesthetic attention with a friend, a non-human other. I have gained an understanding of Darkness' eye over the last nine years. I have learned to pay attention to his ears and nose as well.

Darkness interacts with and adapts to changes in the environment. He is demonstrating self-awareness and an ability to evolve with life experiences. He seems to embrace firstness: possibility as a radical indeterminacy, with no external causation. What kind of image of Tim and me does he have? Secondness arises as an emergent differentiation in the environment, and otherness or as individuation emerges through a mix of limitation and willful response. It can be artistic expressions to reveal the tension between seen—unseen, audible—in audible, and sensitive—insensitive that is embedded in the idea of indices.

Thirdness is about 'his' creation through playing games in the environment. Darkness continues to change the rules and the meaning of life as play. Finally, one of the 'Living Organisms and Their Choices' network participants has said that the meaning of a living thing (any living thing from a microbial critter to a dolphin or a human) can be understood by what it does. We are in the mutual game. Darkness shows us he is uniquely engaged

with his environment, where I am a part of the landscape, while he reveals a world I am immersed in but cannot perceive.

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Notes

- ¹ The Cob is a type, not a breed, but widely appreciated for its agreeable nature, intelligence, and ability to carry weight.
- ² I also ride one evening a week bareback with halter rather than a bit. We walk and trot, usually staying within the property occupied by the stable. Rule 52 of the UK Highway code specifies that one should “Never ride a horse on a public road without both a saddle and bridle”.
- ³ In *Black Beauty*, Anna Sewel uses eronification to describe a snaffle bit, “A great piece of cold hard steel as thick as a man’s finger to be pushed into one’s mouth, between one’s teeth and over one’s tongue, with the ends coming out at the corner of your mouth and held fast there by straps over your head, under your throat and under your chin” (Sewel 2004, pp. 13–14).
- ⁴ According to Albert Atkin (2013), Peirce’s thinking about signs, ‘remained largely uniform’, despite the fact that the semiotic theory evolved from a concise form in the 1860’s to a more complete form thirty years later. In the early part of the twentieth century, he started to write a more speculative form with a complexity which still occupies scholars today.
- ⁵ At one point we watched as Darkness repeatedly chased away a buzzard that was attacking a young pheasant in his field. Then there are repeated examples of his empathic sensibilities with both his herd and us.
- ⁶ I have known Françoise for many years, but I learned more about the details of her research during her professorial lecture on 5 May 2016 at the SRUC, the Scottish Rural College at, Easter Bush, Roslin Institute, Edinburgh.
- ⁷ Collins and Goto attribute this to intimate interrelationship over time, where we develop a feeling for likeness, that is normative, an iconic perception of health and wellbeing in those we care about.
- ⁸ Email communication on 16 February 2018.
- ⁹ Darkness is brought in each day for six to twelve hours. I remove a rug if he is wearing one, check his body and hooves, then brush him. He always has a bit of hay and is provided additional feed to supplement his ‘wild’ diet. He will often sleep through the middle of the day. Although we also spend an hour or more four days a week either riding, hacking, walking or doing lunge exercises together. Tim rides out for long hacks into the park and forest beyond with him every Saturday.

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