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Intuitive Interspecies Communication and Language beyond the Human: Bridging Posthumanist and Indigenous Understandings in Practice

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Abstract

Intuitive interspecies communication (IIC) is a technique used worldwide by Indigenous peoples and a rising number of professional animal communicators, to interact with the more-than-human world. It importantly disrupts a number of historically contingent boundaries that have secured hierarchical oppositions between the human/non-human and the modern/Indigenous, while interrogating the fundamental dichotomy between presumably distinct physical (natural, sensually perceivable, 'objective') and non-physical (social, mentally/emotionally perceivable, 'subjective') worlds. In light of novel insights from diverse fields, including animal behaviour, cognitive ethology, and biosemiotics, as well as new theoretical spaces opened up through posthumanist and relational approaches, this less anthropocentric form of communication can no longer be disregarded as merely exotic or mythological. Insights into IIC can contribute to the animal turn in linguistics by cross-fertilizing phenomenological, relational, and indigenous approaches, to contribute to ongoing efforts to decolonize methodologies, to further strengthen cognitive and interspecies justice, and to multiply voices in academia by practically and collaboratively engaging with human and non-human forms of knowing.

Keywords: *Interspecies communication, phenomenological approaches to language, intuition, human-animal relations, animal communicators, species turn*

Introduction

Understandings of the relationship between humans and the larger the biological world are shifting. Studies of biological evolution, comparisons of the behaviour of humans and non-humans, biological anthropology, and research on the process of hominization, as well as findings in ethology, neuroscience, and psychology, all contribute to the suggestion that 'the categorical boundary between humans and animals, so fiercely defended as a tenet of modernity, has been patently challenged, if not dismantled in places' (Franklin 1999, p. 3, see also Blake, Molloy, and Shakespeare 2012; M. Mullin 2002; Kirby 2011). The ongoing environmental crisis, including the sixth mass extinction, as well as the exponential growth of studies that point out the sentience, intelligence, consciousness, and communicative abilities of more and more non-human animals, have prompted governments and human rights groups to start recognizing certain animals as non-human persons. These entangled academic and worldly developments challenge the modernist categorization of humans as the sole subjects in an otherwise objective nature, introducing a variety of ethical and legal ramifications (Bertoni and Beisel 2013) and an urgent need to access the 'voices' of non-humans to address issues of interspecies justice (Barrett et al. 2021).

Language, classically considered only in terms of human language, is no longer seen as unrelated to other animal communication systems (Evans 2014; Amphaeris, Shannon, and Tenbrink 2022),

and has been observed in non-humans in different forms and degrees (Meijer 2016, 2019; Håkansson and Westander 2013; Prat 2019; Cerrone 2018). This has motivated researchers to question the role of linguistics in the maintenance of the idea of human exceptionalism (Appleby and Pennycook 2017) and whether language can be better understood when it is not restricted to humans (Cornips 2019; Cornips and van den Hengel 2021; Brandt 2004; Amphaeris, Shannon, and Tenbrink 2022). At the same time, the rise in conceptualizations of language as embodied and multimodal have spurred explorations of human interaction that question body/mind and nature/culture dualisms, so as to investigate 'human communicative behavior beyond the idea of languages as ordered grammatical and lexical resources that are used by particular cohorts of people' (Schneider and Heyd 2022). As language has come to be understood in a broader and less species-specific way (Meijer 2016), some scholars have successfully applied linguistic theory and methods beyond the human realm, and call for an animal turn in linguistics (Malsche and Cornips 2021; Cornips 2019). However, the investigation of language beyond the human has been hampered, as researchers continue to struggle with a lack of academic methods to access the views and expressions of non-humans (Gibbs 2019; Greenhough and Roe 2019; Taylor and Hamilton 2014; Dowling, Lloyd, and Sandra Suchet-Pearson 2017; Smuts 2001); how to speak with and for non-human others remains one of the most pressing problems in multispecies approaches (Kirksey and Helmreich 2010).

In search of solutions, I engage in an ongoing interdisciplinary study of intuitive interspecies communication (IIC), a technique used by Indigenous peoples as well as professional animal communicators to interact with the more-than-human world. Communication with non-human agents is an integrated part of local ontologies of a variety of Indigenous groups (Callicott 2013; Blenkinsop and Piersol 2013; Watts 2013), but these practices are steadily diminishing. However, over the past decennia, there has been a worldwide boom in professional animal communicators, who apply similar techniques, working mostly in global Northern contexts, where this type of communication is considered a special skill. They are increasingly hired by vets, pet-owners, and wildlife conservationists, amongst others, often to solve animal health issues or to find solutions in conflicts between humans and other animals (Ballé et al. 2022; Barrett et al. 2021). Elsewhere, I have described how IIC may be employed in multispecies research (Wijngaarden 2023; Wijngaarden and Hörner, in print) and can aid diagnosis, treatment and improved wellbeing in veterinary medicine (Wijngaarden and Hurn, under review). Here I will outline how alternative and novel theoretical approaches to language and knowledge – including phenomenological, relational, and Indigenous approaches – produce an environment in which IIC can be better understood, while appealing to how research on IIC in turn can help to decentre the influence of contingent Eurocentric and anthropocentric understandings of language and communication.

Beyond Centring Humans and their Languages

As the Enlightenment theory that humans are the only cultural, thinking, and language using creatures comes thumbling down (Meijer 2016; Derrida and Mallet 2008; Low et al. 2012; de Waal 2017; Segerdahl 2015), posthumanist theories and multispecies efforts are on the rise. Across the social sciences, scholars are progressively tending to the 'animal question,' seeking to centre other species as co-subjects and beneficiaries of research (Dowling, Lloyd, and Sandra Suchet-Pearson 2017; Gaard 2012), and pointing out the need for a "trans-species episteme" (Castricano 2016, p. 249). Anthropocentrism and the idea that humans exist in a multidimensional hierarchical relationship over non-human animals is being increasingly questioned (Hovorka 2019; Haraway 2008; Anderson 2014).

It has become clear that sophisticated communicative abilities are not limited to humans or even primates. For example, researchers working with whales and dolphins observed the (vocal) transmission of complex (cultural) information across individuals (Sickler et al. 2006; Whitehead

and Rendell 2015; Jaakkola et al. 2018; Diana. Reiss and Marino 2001), but the transmission of detailed, multifaceted information has also been recorded in honeybees, who can communicate even on things which are not physically present (Menzel 2019; Kohl et al. 2020; Meighoo 2017). The ability to process and exchange information has thus been confirmed in a wide variety of non-human animals, while their expressions are often not lingual, and it may be challenging to transfer their expressions in a way that humans easily perceive and process.

In research on communication between humans and animals, attention has traditionally been given to relatively crude communication techniques that involve simplified vocal and physical signs. The most famous examples are studies with chimpanzees, gorillas, and bonobos using signs, tokens, or lexigram boards (e.g. Washoe, Nim, Sarah, Lucy, Koko and Kanzi) (R. A. Gardner and B. T. Gardner 1969; Patterson and Linden 1981; Savage-Rumbaugh and Lewin 1994) and the controversial project that was aimed at teaching dolphins to understand and speak English (Bateson 1972). Successful projects have taken place with African grey parrots such as N'kisi, with a recorded vocabulary of over 700 words and over 7000 original sentences (Sheldrake and Morgana 2003), and Alex, whose intelligence and complex cognitive and communicative skills have been extensively documented, as he answered questions and performed tasks that exhibited his abilities to count, to (re-)categorize objects he had not encountered prior, and to understand abstract concepts (Pepperberg et al. 2000; Irene M. Pepperberg 2009; Pepperberg and Gordon 2005; Pepperberg et al. 2000; Pepperberg, Willner, and Gravitz 1997). Ongoing studies are taking place using soundboards such as with the dog Bunny, investigated by the Comparative Cognition Lab at the University of California. These studies are part of the emerging field of Animal-Computer Interaction, which interrogates how a variety of animal species may use technology to communicate with humans (Mancini 2011; Mancini, Lawson, and Juhlin 2017).

Despite some impressive results, there is an important limitation of all these studies: Their set-ups require non-human animals to learn human languages or human-designed communication systems, tending to take certain dominant (i.e. human, white, rational) understandings of the world as a measure to 'test' the capacities of other animals. My research investigates if by using IIC, then humans can tap into a communication system that is broader and less exclusive, de-centring humans and the dominant role of human language by focusing on affective, interactive, bodily, and other-sensory registers that may be used by living beings more broadly.

Intuitive Interspecies Communication

IIC is a form of communication that mediates detailed exchanges without the need for proximal visual, auditory, olfactory, voice, or other cues humans normally associate with direct interactive communication (Barrett et al. 2021). This is because IIC draws on a set of intuitive capacities through which the practitioner experiences a 'mutual, direct exchange of 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). In my analysis of different forms of human-animal communication, I compared the animal communicators using IIC with strategies used by other highly successful experts in interspecies communication, such as 'horse whisperers.' Using ethnographic data, in combination with interviews and video-assisted observations, I found that the practices of 'whisperers' primarily consist of subtle signs, including for example sounds, touch, body posture, and use of space, creating an adapted and probably simplified system of indicators that is rooted in communication practices specific to the particular species. In contrast, animal communicators who are using IIC carried out their communications without apparent physical cues, sometimes across large distances, using the same approach consistently across all species (Wijngaarden 2023).

IIC has mostly been analysed in indigenous contexts, where it is commonly integrated and supported by local ontologies (Kohn 2007, 2013; Callicott 2013; Michell 2005; Deloria 2006; Watts 2013), but over the past few decades it has become increasingly visibly employed and institutionalized in northern contexts and by non-indigenous users all over the world (Abbott 2021; Barrett et al. 2021; Hafen 2013; TEDx 2017; Thiyagarajan and Foster 2012; Pitschen 2018; Vittitoe 2005). Although it remains unclear as to how IIC functions exactly, my own as well as other studies have observed its accuracy, effectiveness, and usability. This was assessed by researchers, but also by veterinarians and animal guardians, e.g. to determine if and where animals are injured, to achieve behaviour changes in animals who are considered problematic, and to increase empathy, understanding, and cooperation between humans and animals (Thiyagarajan and Foster 2012; Erickson et al. 2016; Erickson 2014; Hurn 2018; Hafen 2013).

I executed a pilot study in Europe and Afrika that included fieldwork with successful English, Afrikaans, Shona, and KhoiSan animal communicators, who partly worked as professional consultants. I observed and recorded over 50 animal communication sessions which involved these four experts and their students from over a dozen countries, as they interacted with domestic and wild animals from a variety of species, mammals, and mostly birds. The results attest that although different animals have contrasting life worlds and personalities, including divergent sensual, mental, and emotional experiences that may influence the content of their responses, for the success of the communication, the species of animal is less significant than the individual, and the context at the time of the interaction (e.g. their activities or stress level). This aligns with the views of animal communicators worldwide, that IIC is a form of meaning transmission that is used by all species (including humans). In contrast, verbal exchanges, which are humans' primary mode of communication, are species specific. These verbal exchanges are accompanied by mental activities that often supersede more subtle intuitive cues (Petitmengin-Peugeot 1999). It thus makes sense that animal communicators claim that most often, the missing factor for successful two-way IIC is the human element. This dovetails with views that humans who process the world more through sensory information instead of words and abstractions (e.g. autists) understand animals better (Grandin and Johnson 2005).

If this view is taken seriously, it suggests that IIC can function across the taxonomical as well as the cultural categorizations constructed in dominant discourses. Some of the most exiting results of the pilot confirm this: Although each animal communicator's knowledge and practice is situated in their very divergent backgrounds (Haraway 1988), there are striking commonalities in how they engage in animal communication. These aspects include quieting the mind to achieve communication; asking permission to communicate; receiving information through embodied messages that involve the senses in an intuitive instead of a physical way (e.g. 'seeing' in the 'mind's eye'); communicating with animals immediately present but also over distance; requesting information or actions from the animals and receiving relevant responses; experiencing the animal as an active communication partner who influences the communication; and consistent use of the same approach across species. Other professional animal communicators worldwide describe these same elements in their practices and teachings according to my analysis of their books, websites, and online courses, while many are found in studies that describe intuitive interspecies exchanges at a variety of Indigenous locations (Callicott 2013; Watts 2013; Marshall 1957; Guttorm in print; Abbott 2021). The presence of shared aspects is further supported by findings of a research group led by Barrett at the University of Saskatchewan, which investigates interspecies communication from an environmental and educational perspective. They executed a major survey of 136 non-fiction books and 400 websites of animal communicators (Barrett et al. 2023), fieldwork with Cree First Nations Elders and Traditional Knowledge Keepers (Beardy's-Okemasis Elders Research Advisory Group et al. 2019; McGinnis et al. 2019), as well as ongoing studies as to the scope and demographics of professional animal communicators; the human experience of IIC internationally; its impact on human subjectivities; and practical and ethical implications (Barrett et al. 2021; Hinz

forthcoming). Comparing my results over the past four years, I found that intuitive human animal communication has striking transculturally and transcontinentally shared elements, which has spurred me to co-develop a conceptualisation of IIC (Barrett et al. 2021).

Largely owing to the fact that in dominant northern contexts, intuitive exchanges are often not formally recognized, even if they are quite a common experience (Sepie 2017; Petitmengin-Peugeot 1999), studies on IIC have often been received with skepticism (Trachsel 2022). Hurn attributes this to science's historically contingent 'desire for objectivity and a persistent fear for anthropomorphism' (2020, p. 10). Even if a certain level of subtle communication between humans and domesticated animals has been acknowledged quite widely (Cassidy and Mullin 2007; Bradshaw 2010), and studies in biology (Sheldrake and Morgana 2003; Sheldrake 2000; Sheldrake and Smart 2000) and psychology (Erickson et al. 2016; Erickson 2014) have found significant results when using experimental set-ups, the subject of IIC continues to be framed as either exotic and mythological in Indigenous contexts (Watts 2013; Sepie 2017), or suspicious in Northern contexts. When summarizing the field of human-animal communication, Kulick (2017, 2021) highlights that professional animal communicators form an important area for future study, but also approaches animal communicators' practices and experiences with an undertone that is unusual for anthropologists, who generally aim to take the world of their interlocutors seriously.

This continued proof that, although Cartesian binaries have successfully been criticized, and the underlying core dichotomy of nature/culture has been reflected on as a relatively recent Eurocentric notion (Descola 2013), the epistemological legacy in which this dichotomy is foundational has been hard to shake off (Descola and Pálsson 1996; Latour 1993). This is largely owing to the fact that the specific modernity that created them also formed the womb of modern science, and continues to root and situate academics' thinking (Haraway 1988). Hurn observes that studies on IIC continue to be received with 'scepticism, even disdain,' by the mainstream academic community (2020, p. 10), which she ascribes to science's historically contingent 'desire for objectivity and a persistent fear for anthropomorphism' (2020, p. 10). Ethologists such as De Waal (1999) warn that an exaggerated fear of anthropomorphism risks 'anthropodenial,' which inhibits a careful understanding of animals as well as humans. To prevent this, he argues for a carefully informed, empathically generated 'animalcentric anthropomorphism,' which aims to enter animals' perspectives. Even if the use of empathic approaches to access animals' voices and perspectives has been encouraged widely (Despret 2016; Haraway 2008; de Waal 1999; Nagel 1974), IIC has been strikingly absent in multispecies ethnography (Kirksey and Helmreich 2010; Ogden, Hall, and Tanita 2013). Yet, Trachsel notes that it "represents an epistemological approach to more-than-human life that is arguably consistent with post-human efforts to escape the dogma of human exceptionalism" (2022, p. 85).

Phenomenological Approaches to Language

One of the obstacles to understanding IIC is that historically, language has been cast as having no internal nor nonarbitrary connection with the physical world, and therefore can be readily separated from it. Although the field of sociolinguistics is an exception, in dominant formal language theories, language is primarily approached as a syntactic system, at the cost of its contextual, social, and emotional uses (Hurn 2020). Most of the work of critical linguistics has been to 'mend' or repair this decontextualization (Pennycook 2018; Beck 2018). Alternatives are provided by indigenous and phenomenological approaches, for example, that which is inspired by Merleau-Ponty's embodied philosophy of language (Merleau-Ponty and Landes 2012 [1945]). These emphasize intersubjectivity, as well as preverbal, affective, and contextual perceptions, and do not necessarily deny language to other-than-human beings (Meijer 2016; Abram 1996; High 2018), as shared meanings can be achieved through intersubjectivity (Hurn 2020; Abram 1996). This is in line with eco-philosophers such as Jensen (2004), who, in line with sociobiology and ethology, acknowledge

the social continuity between human and non-human life and thus the option of intentional interspecies communication (Trachsel 2022). Practically, ecological phenomenologists such as Abram (2010) describe meaning as "born of the body's native capacity to resonate with other bodies and with the landscape as a whole" (Abram 1996, pp. 52–53). Thus, dialogue becomes a bodily phenomenon which is part of all expressive bodies, centering interconnection in a way that reminds of indigenous ontologies as well as new materialism, and the practices of animal communicators.

These phenomenological approaches to language intersect with findings which have accumulated in the last fifty years in neuropsychology, in the realm of human sensual perception beyond the five classical senses (Henshaw 2012), and in animal behavior and cognitive ethology, including other-sensory and sometimes seemingly extra-sensory abilities of a variety of animal species (Hurn 2020; O'Connell-Rodwell et al. 2006; Hughes 2001). Combined with groundbreaking insights in plant communication and neurobiology (Brenner et al. 2006; Baluška, Mancuso, and Volkmann 2006; Mancuso and Viola 2015; Simard 2021), this has inspired a growing body of linguistic theory called biosemiotics, that takes phenomenology across the species divide (Tønnessen, Maran, and Sharov 2018). asserting that all living beings engage in semiotic processes (Kull 2000, 2009). I propose that in IIC, animal communicators engage in translation efforts between human and non-human animals, bridging the gap between affective, more-than-verbal and rational-linguistic, ways of knowing.

Accessing Animal Perspectives

Even if animals are approached as semiotic agents, animal perspectives remain difficult for humans to grasp, not in the least owing to divergent verbal, sensory, and bodily capacities and affordances, and the lack of direct practical and interactive methods to engage with animals as persons who have a 'voice' (Taylor and Hamilton 2014; Sandie Suchet-Pearson et al. 2013; Dowling, Lloyd, and Sandra Suchet-Pearson 2017). In attempts to frame animals as subjects and to move away from anthropocentric observations, multispecies researchers have explored empathic methods to access animals' perspectives (Nagel 1974), often by reconstituting their Umwelten, e.g. through attentiveness and 'field philosophy' (van Dooren 2019) and 'embodied communication' (Marianne E. Lien 2015). These approaches require an active, informed, and creative imagining of how the world would be experienced from a certain animals' point of view, the experiential, perceptual and sensory abilities of the relevant species often being of high importance (even if Law and Lien argue for multiplicity (2013) and Schroer (2019) tells us to look beyond species-specific bodies as loci for specific meaning making).

IIC is different, as it requires silencing the mind's capacities, a meditative letting go of (informed) preconceptions regarding the species or individual, in order to 'listen to' and receive their point of view. Animal communicators often do describe the alternate sensory and bodily experiences of animals, which are sometimes later confirmed through research (see e.g. Getten 2002). However, they employ a different way to access animals' perspectives, aiming to enter the experiences and points of view of the animals directly, instead of trying to reconstruct these while considering rational information. This approach is in line with Petitmengin-Peugeot's (1999) generic structure of intuitive perception, including meditative strategies, kinaesthetic feelings, sensory modalities, and immediacy.

Although the processes of intuitive knowing are still not well understood, intuition is increasingly acknowledged as an integrated aspect of knowing (Fox, Hagedorn, and Sivo 2016; Sternberg and Davidson 2002), even in academic research processes (Fitzpatrick 2017; Rivoal and Salazar 2013). For example, making sense of data requires perceptions outside the realm of the immediate and discrete sensual perception (Whitehead 2010 [1967]; Desmet and Irvine 2018; Johnson 1947). Trachsel (2022) argues that theoretical grounds for understanding IIC could

be found in Morton's (2018) co-existentialism, which moves away from human exceptionalism and individualism and towards 'environmentally embedded, ecologically interconnected, interspecies pluralities' (Trachsel 2022, p. 96) in which humans are a biological species entangled with others in a biological world. As such, human and more-than-human sensoria of self and other blend together. Abram (1996) describes these intuitive ways of perceiving meaning as still sensuous, because visions seen or thoughts contemplated are perceived in the body through the mind's own sensuous aspect, e.g. 'feeling' that something 'clicks' when one understands something. Callicott (2013) posits that, if non-human beings communicate – albeit in non-lingual ways – this may involve interpreting the influence these subtle signals have on body and mind, codifying and translating these experiences into culturally specific language.

Seeing the effectiveness of a variety of animal communicators I have worked with across continents, I argue that IIC involves translations that bridge the gap between affective, more-than-verbal, and rational-linguistic ways of knowing, thus connecting non-species specific and specifically human forms of communication. If other-than-human beings have agency, and communicate – albeit in ways that are beyond the dominant understandings of language – intuition is a process of resonating with and translating those signals, more so if these are transmitted and perceived subtly, or maybe even beside the five basic forms of direct sensual perception commonly attributed to humans. IIC then involves this process across species. Further research on IIC can importantly contribute to ongoing discussions as to when, how, and why intuition successfully creates insights (Bernstein 2005; Lufityanto, Donkin, and Pearson 2016; Fox, Hagedorn, and Sivo 2016) which in turn evokes concrete questions on the interrogation of the relationship between the presumably distinct physical (natural, sensually perceivable, objective) and non-physical (social, mentally/emotionally perceivable, subjective) realms.

Conclusion

Through the multispecies and ontological turns, academia increasingly invites more reflexive and relational ways of understanding the world and understanding knowledge or information and its exchange. Animal studies and science and technology studies have redefined agency and relationships between humans, other organisms and non-organic elements (Murdoch 1997; Haraway 2008; Roscher 2012), e.g. in actor-network theory (Callon, Law, and Rip 1986; Latour 2005), new materialism (Dolphijn and van der Tuin 2011; Coole and Frost 2010; Bennett 2010), and posthuman relationality (Barad 2007). These theoretical innovations importantly intersect with indigenous paradigms (Rosiek, Snyder, and Pratt 2020; Le Gange 2018), which have become increasingly recognized as conversation partners in a more decolonized and multivocal academia (Wilson 2008; Smith 2012; Connell 2014; Wijngaarden and Idahosa 2021; Moichela 2017), even if this collaboration importantly needs to be approached critically, with respect, care, and on the terms of the varied indigenous agents and groups (Fix, Burnam, and Gutteriez 2019). Specifically, both posthumanist and indigenous approaches decentre the human while centring relationship. They generally oppose the bifurcation of the world of science and the world of intuition, paying tribute to the dynamic interconnectedness between being and thinking, the observer and the observed, the material and immaterial world, and the human being embedded and entangled in a complex more-than-human web of life in which all interdependent modes are constantly co-becoming. The cosmologies and metaphysics of a variety of indigenous and other subdued peoples often explicitly deny the separation between ontology, epistemology, and axiology (Watts 2013; Le Gange 2018), as in for example Barad's (2007, 2010) onto-epistemology in which thoughts 'matter.' However, while posthumanist and relational explorations have largely been theoretical, often lacking ways to methodologically implement the non-dualist perspectives that centralize relations and interconnections (Locke and Muenster 2015; Ogden, Hall, and Tanita 2013), indigenous perspectives generally emanate from lived experience. I argue that through research on and with IIC, the concrete intersections between indigenous and novel academic worldviews and theories

can be further explored and developed, not in the least because it provides an avenue to practically engage with these theoretical ideas.

Intuitive interspecies exchanges importantly disrupt a number of historically contingent boundaries that have secured hierarchical oppositions between the human/non-human, the modern / indigenous and the material /immaterial. As a result, research into the phenomenon has been almost exclusively curtailed to specific domains. Hurn describes a 'reluctance to recognize these phenomena or to grant them any credence in so-called developed contexts' (2018, p. 85). Blenkinsop and Piersol (2013) point out that although intuitive communicative exchanges with other species are experienced widely, these experiences have been considered almost exclusively as part of the culture of a southern, often indigenous 'other.' Moreover, they are generally discarded and mythologized as 'symbolic' or 'beliefs,' an approach which is criticized by a growing number of (indigenous) scholars who outline how historically Eurocentric ontologies, epistemologies, and axiologies continue to marginalize alternative ways of knowing and being (Watts 2013; Sepie 2017; Abbott 2021; Kimmerer 2013; Harvey 2013; Bawaka Country et al. 2016). With few recent exceptions, the subject of IIC has been strikingly absent in discussions of multispecies ethnography (Kirksey and Helmreich 2010; Ogden, Hall, and Tanita 2013) and the practices of professional animal communicators form a gap in academic research (Barrett et al. 2021; Kulick 2017; Hurn 2020).

I argue that IIC may be an important subject and resource for a variety of multispecies researchers today, as they aim to approach animals as agency-possessing research participants, and for example, by valuing and seeking their research consent (Hovorka, McCubbin, and van Patter 2021). Moreover, research on and with IIC can facilitate less anthropocentric ways of thinking about and engaging in communication with other species, which can cross-fertilize for example phenomenological approaches that frame language in a broader and more embodied way. If humans and other species engage in a single communication technique that interactively connects them all as equals, this would be of high relevance to theoretical developments in communication and language studies, which aim to overcome the discourse-materiality dichotomy by seeing semiosis (meaning making) as a mutual process between (non-)humans (Appleby and Pennycook 2017). Moreover, it may contribute to escaping the much critiqued representational logic that is associated with the language / material binary (Le Gange 2018). On a more general level, IIC's boundary crossings thus further destabilize and interrogate the fundamental dichotomy between presumably distinct physical (natural, sensually perceivable, 'objective') and non-physical (social, mentally/emotionally perceivable, 'subjective') worlds (Barad 2007; Gandorfer and Ayub 2021).

Although controversial and provoking, insights from a variety of fields – including animal behaviour, cognitive ethology, and biosemiotics – as well as the new theoretical spaces that opened up as part of the ontological and species turns – especially relational approaches and indigenous paradigms – have produced an environment in which IIC has become a viable and stimulating research topic. Studies that engage IIC can stimulate critical reflections on and renewal of established research method toolkits, and may provide much called-for solutions to involve animals in the outcomes as well as processes of research. Theoretically, it may importantly contribute to understandings of what language and information exchanges are, thus invigorating debates on how contingent dominant and anthropocentric approaches towards these subjects may have affected academic methodologies and theory building.

IIC can play an important role in setting up a dialogue between divergent knowledges and species, and can further develop the insight that knowledges and understandings from a specific place and time have misguidedly been presented as universally applicable (Connell 2014; Santos 2014; Connell 2007; Le Gange 2018; Goduka 1999; Kaya and Seleti 2013), in the process propagating a certain type of anthropocentrism (Segerdahl 2015). It can thus play a role in ongoing efforts to decolonize methodologies (Wilson 2008; Smith 2012); to further the development of

cognitive and interspecies justice (Hoppers 2001; Santos 2018; Barrett et al. 2021; Visvanathan 2002); and to multiply voices in academia (Connell 2014; Wijngaarden and Idahosa 2021; Moichela 2017), by practically and collaboratively engaging with human and non-human forms of knowing.

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