

The role of trust in binding the perspectives of guide dogs and their visually impaired handlers

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Abstract. Building on anthropological discussions of perspectivism and (zoo)semi-otic accounts of sign use by humans and other animals, the article explores the cooperation of a guide dog and its visually impaired handler as contingent on the mutual adjustment of two individual perspectives. A perspective is defined as a point of view which comprises the meanings as well as the forms of objects that the subject perceives and acts upon. On certain occasions, individual perspectives can be alligated to one another, resulting in a transformation of the meaningful worlds of the subjects. Three types of connections between individual perspectives are delineated in the paper, resulting in the formation of mimetic, collaborative and comparative double perspectives. Although all of them bear relevance for the guide dog team's interactions, the collaborative double perspective is put under further scrutiny. The maintenance of the collaborative double perspective depends on the formation of trust between the two individuals. While investigating the conditions for the establishment of trust, a question is raised as to whether a shared communication system can serve as an ultimate ground for it.

Keywords: perspectivism, zoosemiotics, guide dogs, trust, interspecific communication

Introduction

Human encounters with animal gaze have given an impetus to critical accounts of the rationalist and modernist vision of humans' position among other living beings

(see Derrida 2002; Haraway 2008: 19–27; Berger 1991: 3–28). However, humans, who receive and return the look of non-human beings, continue to be the organizing point of departure for these contemplations. In contrast with the above-mentioned encounters, the subjects handled in the current paper cannot exchange looks with each other. Yet the presence of an animal gaze is fundamental for the type of human-animal relation discussed in the following parts of the article – namely, the interactions of guide dogs and visually impaired persons. Looking also underlies the etymology of the central term of the paper: ‘perspective’ (from Latin *per* ‘through’ + *specere* ‘to look’). Anthropological and semiotic paradigms converge at a definition of a ‘perspective’ as a point of view which comprises the meanings as well as the forms of objects that the subject perceives and acts upon. The term will be applied in this sense throughout the paper in order to investigate the intersection of human and animal perspectives, and more specifically, the role of trust in maintaining such forms of collaboration.

Given the loose borders of the concept of trust, several attempts have been made to define trust proceeding from sociological grounds while distinguishing it from adjacent terms. Niklas Luhmann has thus distinguished trust from confidence and familiarity, while treating all of them as different types of self-assurance and modes of asserting expectations (Luhmann 1995: 99). Luhmann considers trust to be a corollary of risk and in this connection gives a functional definition of trust as “the solution for specific problems of risk” (Luhmann 1995: 95). In his account, the preconditions of trust entail individual choices, consideration of alternatives and the risk of being turned down as a result of one’s own decisions. Contesting Luhmann’s claim that unlike confidence, trust and risk-taking presume calculated weighing between alternatives, Anthony Giddens (1990: 29–36) discusses trust as rather a special type of confidence. In his view, the preconditions of trust entail the lack of full information, contingency, and the entangled presence of risk and danger. Unlike the accounts of the two previous authors, Francis Fukuyama’s sociological treatment of trust targets not so much the preconditions of trust, but the outcomes of the presence or absence of trust for social organization (Fukuyama 1996). Fukuyama (1996: 10) argues that trust is ultimately built on the shared values and norms of groups. Depending on the amount and scope of social capital in a given group, the latter can be classified along the lines of high-trust or low-trust societies. A topic that runs through the texts of all three authors concerns the relations between personal and impersonal forms of trust as well as impersonal trust as a distinguishing characteristic of modern societies. In contrast, the current study brings the level of personal trust relations to the foreground. Encompassing non-humans in a trust-based relationship raises further questions about the means of maintaining trust on these occasions. The second part of the paper will examine whether the presence of a

shared communication system, or language, is a precondition for the preservation of trust between individuals.

Although the following investigation is largely theoretical, the impetus for exploring the role of trust in the cooperation between guide dogs and their visually impaired handlers stems from the interviews with guide dog handlers and fieldwork with the guide dog teams. The interviews were originally designed to investigate the sign use of the teams and the challenges related to that.¹ In the interviews as well as in personal conversations with the guide dog handlers, trust was frequently mentioned as the cornerstone for good intra-team cooperation. Yet it seemed to defy further explanations. My requests to expand on the topic were often returned with sentences such as: “It’s really hard to put into words” or “It’s hard to explain what it’s about”. Hence the need to look for further explanations was raised. Relying on the anthropological investigations of perspectivism and relational personhood as well as (zoo)semiotic accounts of sign use by humans and other animals, the article therefore explores the role of trust in binding human and non-human perspectives. The theoretical explorations will be substantiated with examples from autobiographic books of guide dog handlers.

1. Perspectivist link between anthropology and zoosemiotics

As a part of “new animist”² approaches in anthropology (cf. Harvey 2006: 17), discussions about perspectivism as a particular quality of Amerindian cultural cosmologies have entered the academic arena in the past decades. In anthropological parlance, the axiom has even been exploited to the extent that there is talk of “epidemic of perspectivism” (Halbmayer 2012: 11). According to Eduardo Viveiros de Castro, one of the founding figures of the perspectivism debates, perspectivism by the Amazonian cultures is based on the idea of a shared humanity and culture

¹ Cf. Magnus, Riin 2014. The function, formation and development of signs in the guide dog team’s work. *Biosemiotics*. Published online first: <http://link.springer.com/article/10.1007/s12304-014-9199-7>.

² Graham Harvey makes a distinction between the older Tylorian and Durkheimian scientific accounts of animism and what he calls a “new animism” of modern anthropology, with Irving Hallowell’s works as a point of change (Harvey 2006: 17). The core of what Harvey outlines as “new animism” is echoed in the following explanation: “Animists are people who recognise that the world is full of persons, only some of whom are human, and that life is always lived in relationship to others. Animism is lived out in various ways that are all about learning to act respectfully (carefully and constructively) towards and among other persons” (Harvey 2006: xi).

of all beings and their bodily and phenomenal differentiation (Viveiros de Castro 1992; 1996; 1998).³ The concept of humanity in the Amerindian understanding entails a belief that all beings have a soul. This goes along with having a point of view or perspective, which defines a subject position (Viveiros de Castro 1998: 476).⁴ All beings, human as well as non-human, therefore see themselves as humans and approach others primarily as predators or prey. Although the categories of meaning remain the same when we move from one class of beings to another, it is the objects subsumed under the categories and their phenomenal forms that undergo change. A classic example from Viveiros de Castro's work illustrates the principle: "[w]hat to us is blood, is maize beer to the jaguar; what to the souls of the dead is a rotting corpse, to us is soaking manioc; what we see as a muddy waterhole, the tapirs see as a great ceremonial house" (Viveiros de Castro 1998: 478). Moreover, he stresses the endonymic character of the categories of soul and humanity and their function as self-referential designators in Amerindian cultures, pointing to the need for a theory of signs in order to reach the core of those concepts (Viveiros de Castro 1998: 476).⁵ In dialogue with Viveiros de Castro's research, the idea of perspectivism has been developed and discussed by several other anthropologists and social scientists, especially in the framework of personhood studies (see e.g. Bird-David 1999, 2008; Descola 2013; Fowler 2004; Harvey 2006; Hornborg 2006; Ingold 2000; Kohn 2013; Lima 1999; Pedersen 2001; Praet 2009; Willerslev 2007). The specificity of perspectivism as an approach to personhood lies in its contention that a person is specified through his/her phenomenal world. As will be outlined later, other accounts of relational personhood may not necessarily incorporate this premise. Instead, interactions and exchange between persons may be set to the foreground. In that case, it is the activities of a person, rather than the phenomenal world *per se*, which underlie a personal ontology.

Perspectivism, if taken as a more general ontological paradigm extracted from the initial rich cultural contexts, stands for an idea that a person is defined through his/her viewpoint on the world, and this applies to both humans and non-humans. A viewpoint is in turn construed as a way of relating to other subjects and objects, whereby they gain a particular meaning and form. This means that a perspective is not centrifugally derived from the characteristics of a person, but the person is him/

³ But see for specification, criticism and refutation of this claim by some other Lowland South American scholars e.g. Halbmayer 2012, Rival 2012, Turner 2009.

⁴ Philippe Descola has covered the same idea by saying: "'Perspectivism" thus expresses the idea that any being that occupies a referential point of view, being in the position of subject, sees itself as a member of human species" (Descola 2013: 139).

⁵ "Amerindian souls, be they human or animal, are thus indexical categories, cosmological deictics whose analysis calls not so much for an animist psychology or substantialist ontology as for a theory of the sign or a perspectival pragmatics" (Viveiros de Castro 1998: 476).

herself formed through the interactions with objects and subjects that are meaningful to him/her. Perspectivism in Amerindian cosmologies, as described by Viveiros de Castro, Eduardo Kohn and others, largely presumes that each person is tied to one particular perspective, which also provides stability for identity.⁶ On the other hand, anthropological works discussing a broader phenomenon of “relational personhood” have also pointed to the constant transformation of a person and his/her perspective through interpersonal transactions (Marriott 1976: 112; Bird-David 1999, 2010; Fowler 2004). Both ideas about the person-perspective ties are relevant for understanding the cooperation of the guide dog team, as will be explained later.

A couple of anthropologists involved in the perspectivism discussions have explicitly sought for the semiotics behind perspectivism, referring thereby also to the works of Jakob von Uexküll (Hornborg 2006; Kohn 2013). Similarly to perspectivist ontologies, the biologist Jakob von Uexküll joined different living beings into a common network of meanings, while distinguishing between them according to the signs they use and the objects they perceive and act upon. However, unlike the indigenous cosmologies that do not follow the western scientific distinctions between living and non-living beings, Uexküll restricted the ability to use signs and to depart from meanings to living organisms only (Uexküll 1982[1940]). Moreover, if the perspectivist cosmologies associate a viewpoint with the presence of a soul, then no such entity is assumed by Uexküll. He takes biological existence to be the condition and ground for a meaning-based apprehension of the world. Uexküll discusses the interactions between species mainly using the examples of different non-human species. Research on the *umwelt* of dogs, which ineluctably has to consider human objects and meanings, is an exception, though (Uexküll, Sarris 1931). Also in later times, zoosemiotic research has primarily focused on the interactions of non-human animals or given comparative accounts of human and non-human semiotic behaviour (see Maran et al. 2011b). However, from the classics of zoosemiotics (Sebeok, Umiker-Sebeok 2011[1990]: 87–94; Hediger 1965, 1979) to the very recent publications (e.g. Tønnessen 2011; Martinelli 2010: 121–170), the contingency of human and non-human *umwelten* and their mutual influences have received attention as well. Mutualistic human-animal interactions (Sebeok 1980: 3) and the formation of aggregate *umwelten* and *umwelt* assemblages (*sensu* Tønnessen 2011: 79)⁷ are thereby of primary importance for the human and assistance animal relationship.

⁶ Still, there might be „privileged“ groups of persons who are more flexible in terms of their perspectives, e.g. the group of predators by Makuna (see Århem 1996: 190), or shamans by Runa (Kohn 2013), as indeed by many other animist cultures.

⁷ Tønnessen defines aggregate *umwelten* as *umwelten* which are not complete if taken individually, and considers *umwelt* assemblages as their subcategory (Tønnessen 2011: 79).

Besides the ontological premises, Uexküllian zoosemiotics and Viveiros de Castro's perspectivism also have an ideological agenda to share. Anthropological debates about perspectivism and relational personhood allow us to question the ontological premises as well as ethical consequences of a naturalist worldview (Descola 1996, 2013: 172–200; Viveiros de Castro 1998), “defined by the continuity of the physicalities of the entities of the world and the discontinuity of their respective interiorities” (Descola 2013: 173). The “interiorities” that are equated with the presence of mind and consciousness in scientific parlance should endow humans with a capacity for a conscious exchange of messages and an ability to provide true responses instead of simple reactions. In the same stroke, naturalism ejects most non-humans from the semiotic community while keeping them bound to humans through shared physical and organic forms of existence. Zoosemiotics joins in the criticism of naturalism by opening up a common field of research for both humans and animals that is based on the premise that both are capable of semiotic activity. More specifically, it aims to explain how the lives of different organisms are built on signification, communication and representation (Maran et al. 2011a: 1).

The diversity of (living) beings is approached and explained in (Uexküllian) bio-semiotics as well as in the anthropological accounts of perspectivism as a diversity of ways to perceive and act in the world. This comprises differences between subjects in their attendance to objects as well as in the exploitation of signs which help to identify the objects. The question of access to other minds also finds a somewhat similar answer in both paradigms. In order to conceive of a diversity of perspectives, one does not have to perceive the world the way the others do. Cosmological knowledge of the other perspectives is not tied to the ability to take on a perspective of another being just as knowledge about the *umwelt* of an animal and its sign relations does not presume perceiving the world in the way the animal does (Uexküll 1980[1921]: 278). Yet this separation of the phenomenal and epistemological levels gets blurred in a human *umwelt* once an ethical dimension is added. The presumption that others have a perspective as well bears relevance to how a person acts in respect with them and how (s)he shapes the meanings that are to ground action. As far as human meanings are ultimately tied to the rules of conduct and referential meanings bound with prescriptive meanings, one perspective cannot be cut off from the related others in the first place.

2. Metamorphic transformation of a perspective

Given that a perspective grounds the ontology of a person, a subsequent question concerns the preconditions and mechanisms of the transformation and exchange of perspectives. Several anthropological portrayals of Amerindian cosmologies demonstrate that even if the tie between a person and a perspective is subjected to change, the set of perspectives itself is still relatively fixed. However, selected persons travel between different perspectival positions by putting on a different ‘clothing’ via metamorphosis (Århem 1996; Descola 2013: 135–138; Kohn 2013). Furthermore, a metamorphic shift to someone else’s perspective is pragmatically motivated – there has to be a reason why the other’s point of view is sought. A transformation of the perspective might be undertaken for the sake of holding negotiations with the spirits to establish stability in society, for healing a sick person, luring prey while hunting, luring a member of another species, etc. (see e.g. Praet 2009; Willerslev 2013). In animist societies, not all persons share the perspective-shifting capacities to the same extent. The more powerful ones usually gain access to a wider variety of forms and perspectives (Hallowell 1960; Århem 1996: 190).⁸ Perspective shifting might go along with an acquisition of the language of the beings who naturally possess the perspective one has adopted, or a creation of a trans-species pidgin for communication with beings belonging to another group (Kohn 2007: 14). Despite the fact that such cosmologies allow for a movement between perspectives, each class of beings is still endowed with one proper perspective. It is the subject’s point of origin, a kind of a phenomenological home, to which he/she always returns. Thus, perspective shifting normally entails only temporary metamorphosis. True and irreversible metamorphosis goes along with the loss of the initial species adherence (Howell 1996: 135).

Perspective shifting by the guide dog team cannot be discussed in the sense of a true metamorphosis, for that would imply the handler’s adoption of canine qualia and vice versa. But one can talk of an “imaginative metamorphosis” by the handler’s attempt to envisage how the dog would establish sign relations in a particular situation. Based on the knowledge about the other’s semiotic preferences and habitual attendance to environmental cues, the handler can predict how the dog might behave in one or another circumstance. A guide dog user from Germany, whom I interviewed for the study on the sign use of guide dog teams,⁹ thus constantly

⁸ The exchange of perspectives is often highly regulated and hierarchical, so that not all persons have an equal ability for the necessary metamorphosis (see a brief summary about the possibilities of transformation in Descola 2013: 136).

⁹ See Magnus, Riin 2014. The function, formation and development of signs in the guide dog team’s work. *Biosemiotics*. Published online first: <http://link.springer.com/article/10.1007/s12304-014-9199-7>.

stressed that in order to develop a good cooperation with the guide animal, one has to “think like a dog”.¹⁰ The rationale here is to prevent the dog from responding to certain cues by providing preemptively alternative signs or signs which would change the meaning of the potentially distractive cue. On the one hand, the handler as if takes on the perspective of the dog, being attentive to the cues that might catch the dog’s attention, but on the other hand he does not let go of his own intentions and his own perspectives, which he uses for shaping the other’s semiotic relations with the environment.

As the anthropological accounts evince, several indigenous cosmologies share the premise of Uexküllian biosemiotics that a transformation of one’s bodily constitution or physical state is needed for a perspective change (see e.g. Kohn 2013; Praet 2009). The bodily transformations include morphological (e.g. by using special imitative clothing, decorations, extensions of body parts), physiological (e.g. by taking drugs, feasting, dancing, chanting) and/or ontogenetic (by entering different phases in the life cycle, often marked by rituals) modifications. Even the guide dog team can be approached from such a stance, if one member of the team is seen as a sensory and morphological extension of the other’s body plan (see Uexküll, Sarris 1931). However, in such a case the perceptual and motoric apparatus of one subject acquires the role of an organ or tool of another organism, and one of the perspectives, instead of being coupled to another, is subjugated to the other.

In the case of morphological and physiological transformations, the subject is capable of returning to his/her previous mental and physical state once the element which initiated change has been removed. If the subject has reached a new developmental stage by ontogenetic transformation, a return to the previous phase of development is impossible. All above-mentioned types of bodily modifications demand an active involvement of the subject, no matter if it is a human or non-human organism. The larva of a holometabolic insect has to find suitable conditions where the pupation can take place, just as the shaman chooses the drugs or dances to initiate a novel mental and physical state. Both thereby enter into a relationship with a new set of objects with novel meanings. Neither the conditions leading to the transformations nor their end results allow for a distinction between those examples by using the dichotomy of ‘the environment changes the subject’ vs. ‘the subject changes himself’. Looking for novel conditions in the environment or taking on a novel outlook or physiological state stem from similar reasons and serve similar ends. In both cases the transformation is initiated by a felt discrepancy between the environment and organism, which is overcome by establishing a novel kind of integrity between them.

¹⁰ Similarly, Rane Willerslev talks about “skillful trappers” by the Jukaghirs, who try to capture the animal’s way of being by claiming that you need to “think like a sable” (Willerslev 2007: 91).

3. Interactional perspective change

A transition from one stable bodily form to another might not be needed for a perspective change if the latter is taken to depend on the activities and exchange between persons (cf. Fowler 2004). In these accounts, members of a society, including things and non-human beings, can adopt different identities that depend on their entrance to one or the other of the reversible and reciprocal social positions. A person can thus be either the one who owes a gift or is to receive one, the one who is to respond or the one who is to pose a question. In their totality, the available reciprocal positions function as a cultural code, delimiting the number and kinds of possibilities for the transfiguration of a person. The possibility realized in each particular instance depends on the history of the previous activities, but also on the situation at hand, which renders some activities relevant and others inappropriate.

Needless to say, the positions of two interacting individuals are not defined by reciprocal terms only, but depend on the network of social relations they are embedded in. For example, how a guide dog handler defines him/herself in respect with the dog depends on his/her status as a family member, colleague, citizen, etc. The intra-team positions change as do the contexts that frame the team's activity. How a subject can take on one or the other of the reciprocal and reversible positions characteristic of the guide dog team is well explicated in the autobiography of Morris Frank, the first guide dog handler in the USA. Frank describes how he is not greeted with much enthusiasm, especially in public transportation, after arriving from Switzerland to the USA with his guide dog, Buddy. In this connection, Frank sets out the following episode: "When I started to board the train, the conductor put a restraining hand on my arm and said, "You can't bring that dog on the train." "You're right," I told him. "The dog is going to bring *me* on. Buddy, forward!" (Frank 1957: 42). The traditional positions of a human and a pet animal as a leader and a subservient are thereby reversed, as expressed in Morris' claim that it is the dog who takes him to the train. On the other hand, by giving the dog a command to move forward in the next sentence, the positions are reversed and the role of the controller of activity is returned to the handler.

The concept of a person is better captured by dividualistic rather than individualistic terms, if constant transformation through activities of exchange is taken to be constitutive of a person (Bird-David 2008). The term "dividual" was initially coined by the anthropologist McKim Marriott in the 1970s in his research on the Indian caste system and the meaning of a person in this context (cf. Fowler 2004: 24). Marriott claims that "boundary overflows", characteristic of Hindu thought, also apply to their notions about a person. Thus, rather than being a bounded entity, a person is divisible due to his/her giving and taking of material influences (Marriott

1976: 111). Archaeologist Chris Fowler has defined a dividual person as follows: “The dividual feature of the person stresses that each person is a composite of the substances and actions of others, which means that each person encompasses multiple constituent things and relations received from other people” (Fowler 2004: 26). If the totality of meanings circulating in a particular culture is taken into account, then dividuality appears on multiple layers of interpersonal relations. One can hereby discern between the more literal and metaphoric reality of relations that constitute a person. In Eduardo Kohn’s rendition, for example, the Amazonian Runa people’s relation to their dogs parallels the white colonists’ relation to the Runa and the forest spirits’ relation to the forest animals (Kohn 2013). On the one hand, they are all instances of certain kind of social hierarchies, but on the other hand, the literal encounters of humans and dogs are figuratively transposed to other forms of social encounters. In Michael Hingson’s autobiographic book *Thunder Dog: The True Story of a Blind Man, His Guide Dog, and the Triumph of Trust at Ground Zero*, Hingson interprets his relationship with his guide dog through the biblical motif of a shepherd and sheep, stating that: “If she doesn’t trust me as her shepherd and respond to my tugs on her harness or my verbal commands, our relationship can’t work” (Hingson 2011: 114). Also a number of other relationships, in the light of which the intra-team cooperation is construed, come up throughout Hingson’s text – from the interactions of a married couple to surgical teams and police partners. Thus, although each person can be identified through some primary or literal perspectives, the latter also function as tokens of certain types of social hierarchies.

The primacy of the dividuality of a person does not preclude the person’s individual features being highlighted from time to time (Fowler 2004: 26). However, cultural conflicts may result if in the same situation one group relies on individualistic premises, whereas another party takes on a dividualistic stance. The separation of the guide dog and the handler in cases in which they are turned down in public places is a good example of that. The offence taken by the handlers is related to the feeling of a violent tearing of a dividual unit into its individual constituent parts. The relationship with the handler, which determines the meaning of a guide dog, is overridden in these situations, and the meaning of the dog as a non-human and the handler as a disabled person with limited access to public places is accentuated.

4. Building of double perspectives

As was pointed out above, anthropological as well as biosemiotic accounts cover mainly transformations of perspectives which result either from the subject’s acquisition of novel attributes, his/her engagement in a different activity or his/

her encounters with a new environment. Yet an individual perspective can also be shifted via the adoption of the other's perspective as a counterpart to one's own. This appears to be essential for the cooperation of visually impaired persons and their guide dogs. The two members of the guide dog team have entered the partnership with their own systems of signs, stemming from their phylogenetic as well as ontogenetic histories. At the same time, they have been trained, and during their work they also develop new signs that are specific to the rationale of their cooperation. The perspective of the one is therefore shaped by the presence of the other's perspective. An individual *umwelt* is thereby "opened up" to environmental cues attainable with the help of the other team member.

Different principles might be at work in the binding of the perspectives of two individuals. In what follows, three possibilities and principles for building a paired perspective will be introduced. They will be called a mimetic double, a collaborative double and a comparative double, respectively. Each of them captures in its own way the differences between a coupled and an individual perspective. Those types of bonds should not be taken as alternatives, though, as they can easily serve as supplements to one another.

A mimetic double perspective is reached through the imitation of the other subject's habits and behaviour. Anthropologist Rane Willerslev has explored the phenomenon through his fieldwork among the Yukaghir hunters in North-Eastern Siberia (Willerslev 2007). Willerslev studies the shaping of two perspectives in the reciprocal imitations of a hunter and his prey animal (Willerslev 2007: 99). While trying to take on the appearance of an elk, the hunter imitates the animal's behaviour. At the same time, he sees in the elk's response a reflection of his own activity. Hence, it is as if the hunter moves back and forth between the viewpoint of a human and an elk. In semiotic terms, there are usually two senders (the model and the mimic) and a receiver in mimicry (Maran 2007: 224; Maran 2011: 244). However, in this instance the roles of the receiver and the model are embodied by the same person (an elk), and a mimic (hunter) mediates between the two roles. Whether the mimic will succeed depends on whether the receiver (the elk) can detect the Other (hunter) behind the image of an animal presented to it. The elk moreover has diametrically opposite options for reaction – to escape or to approach – depending on whether an enemy or a member of the same species is detected behind the activity of the mimic (cf. also Maran 2007: 231).

Although mimicking the game animal is characterized by a constant shifting of perspectives, it is at the same time important to preserve awareness of one's primary position as a human being (Willerslev 2007: 89–118). The human perspective is bracketed when the animal's perspective is adopted, but the hunter always has to retain and return to his initial position, lest his own perspective be won over by the one he is imitating. The multiplicity of perspectives in this instance is temporal

and involves, in a sense, handing over one's position as a subject to the other being. Nevertheless, the Other as a subject is still in the end subjugated to the Self as a subject.

What guarantees that the identity proper to the particular subject is not lost in such an oscillation between perspectives? Anthropologists Morten Pedersen and Rane Willerslev have explained the preservation of the self in the imitation of another being with the partiality of imitation (Willerslev 2007: 11; Pedersen 2001: 416). It is the difference between the imitator and the imitated that excludes the merging of the imitator with the one imitated and that keeps the imitator in the position of control (Willerslev 2007: 11). The difference between the imitator and imitated is instantiated for the sake of retaining the imitator's initial identity and it is instrumentally incorporated to the motivations of the imitator. Using Gregory Bateson's phrasing, the partial identification with the Other in imitation is based on a different ontological status of a statement and a metastatement (Bateson, Ruesch 1951: 194–196). This ontological hierarchy is captured in the hunter imagining (metastatement) that he is an elk (statement). However, the imagination, as it acquires a bodily form in imitation, is not merely fictive and to a certain sense it enables seeing reality from a standpoint of the animal (Willerslev 2007: 106). Remaining self-reflective throughout all the perspective shifting and not conflating the statement and metastatement are still crucial for the preservation of the hunter's selfhood.

Gregory Bateson has explicitly spelled out the necessity for a third term to explain how one perspective can influence another – it is my *awareness* of the other person perceiving me that helps to maintain the subjectivity in my position. Bateson thereafter differentiated between those beings who are defined by the awareness of being perceived by others (above all mammals), from beings that are determined by mutual irritability and responsiveness (Bateson, Ruesch 1951: 208).¹¹ Bateson also maintained that deception is possible only if such an awareness is present. Such a deceptive behaviour of the guide dog might be observed on occasions when the handler is inconspicuously taken to a place that is of interest to the dog. Although this might be related to the handler's inattentiveness, one cannot exclude the possibility that the dog has “deceived” the handler by heading for an object in a manner which keeps the handler ignorant about the change in the dog's behaviour. The dog in a sense carries out an imitation of its expected behaviour in those instances.

¹¹ He also suggests an observational method for telling whether the interaction of two entities is based on an awareness of the other's perception or not: “Operationally, to determine whether a group is of this higher order, it would be necessary at least to observe whether each participant modifies his emission of the signals in a self-corrective manner according to his knowledge of whether the signals are likely to be audible, visible, or intelligible to the other participants” (Bateson, Ruesch 1951: 209).

A collaborative principle underlies the building of a double perspective if a goal is to be reached through the cooperative interactions of two individuals. Several ethological studies have targeted the question of whether non-humans are also capable of building shared goals and intentions with other beings. Although the ability to provide non-rewarded instrumental help to humans as well as conspecifics has been demonstrated by non-human primates (Warneken, Tomasello 2009; Melis et al. 2011) and by dogs helping their owners (Bräuer et al. 2013), shared intentionality has still been discussed as tied to human cognition only (Tomasello et al. 2005). This implies that non-humans are capable of comprehending the goals of another being and they can provide help to achieve the goal, but despite the great variety of collaborative activities in the animal kingdom, they do not exhibit the motivation to share the psychological states of others (Tomasello et al. 2005; Call 2009). Despite the incongruence of human and non-human cognitive capacities to build shared intentions, the binding of perspectives for instrumental reasons (e.g. to carry out some task) might still rely on the inter-individual coordination and transformation of sign use.

Paul Patton has noted that in the training of horses, setting a goal is asymmetrical for the two subjects, as the task is formulated by the handler (Patton 2003: 90). The same holds true for the guide dog teams, but although the task and goal is formulated by one member of the team, it is done in a manner which makes it possible to reach the target via two participating subjects. In order to master the task, both subjects have to shift the individual system of values¹² by taking into account the other's difference from oneself. When planning a route from point A to point B, guide dog handlers make the choices with the dog's capacities in mind. So do dogs who interpret the handler's command in conjunction with the assessment of the possibilities for the team's movement in the environment. The latter also reveals that perspectives do not depend upon perception only. The actions and the possibilities for actions contribute to the shaping of a perspective just as much. This was already noted by Jakob von Uexküll in his claim that the *umwelt* of an animal is comprised of a world of perceptions as well as actions (*Merkwelt & Wirkwelt*) (Uexküll, Kriszat 1934).

Besides the consideration of the other's bodily presence when making choices for movement, taking into account the other's habitual preferences is especially important for the guide dog team's cooperation. Accepting or even planning a detour to places on the route that are of no use for the handler, but that serve the interests of the dog and thereby motivate it to work further, are important for reaching the

¹² The term "value system" is used here following the definition of Gregory Bateson: "The value system, as organized in terms of preference, constitutes a network in which certain items are selected and others passed over or rejected, and this network embraces everything in life" (Bateson, Ruesch 1951: 176).

final target place. In this regard, Sheila Hocken describes in her book, *Emma & I: The Beautiful Labrador Who Saved My Life*, how she used to plan her shopping tours with her guide dog as the dog “made the rules” for the shopping. A pet shop was to be visited first and a butcher’s never missed – if the handler accepted those few rules, she was also gladly taken to the other places that were of interest to her and not so much to the dog (Hocken 2011[1977]: 122–123).

A third possibility for the building of a double perspective lies in the comparison of two perspectives, termed a double description by Gregory Bateson (1988). If awareness of the other’s perspective of oneself belonged to only certain organisms, then double description is something much more fundamental. In this case, subject A does not shift its perspective due to the presence of subject B, but the two perspectives together yield a different perception of the environment than each would do individually. Bateson even claims that any relationship results from a double description (Bateson 1988: 142) and information is always produced in the comparison of two perspectives. This is so in case of binocular vision, where a new dimension of depth is added to the monocular perspective in the perception of the environment (Bateson 1988: 74). For the collaborative double, there is also something new attained via the co-existence of two perspectives. In contrast with the collaborative double, the “new” results from a comparison of two perspectives and is not necessarily itself the reason why another perspective was adopted. A double description and the comparative double perspective as its corollary is hence rather a prerequisite for the collaborative double perspective. The latter is reached when the parties are actively looking for a different dimension of information to face a task which cannot be mastered through individual perspectives only.

5. Trust, language and the maintenance of double perspectives

Once the individual perspectives have been tied in any of the above-mentioned manners, a question can be raised about the conditions of the maintenance of that bond. While focusing on the collaborative double perspective, the following sections explore the type of human and non-human relationships in which the maintenance of a bond between two individuals depends on trust. Relations that are characterized by trust entail a belief that another being makes choices and departs from meanings which do not undermine those of one’s own. In the interactions of a guide dog and a visually impaired person, the formation of human trust in the animal can be seen as based on the following premises: (1) a guide dog is an autonomous being with its own needs and perception of the world; (2) a guide dog is capable of learning to

take on duties and to carry those out while following human intentions. The premise of autonomy means that although dogs are bred with human society in mind, and thus their “natural” environment is already cultural and social, they still evince *umwelten* that are not fully human-determined. On the background of the premise of autonomy, the premise about their conforming to human intentions means that guide dogs are expected to behave differently and depart from different meanings when placed in the context of assistance work than they would do without it.

As an autonomous being, the dog is not expected to act under the total control of the handler, yet as a social being, it is expected to reciprocate the handler’s wishes and goals. If the first premise of trust were obliterated, the animal would acquire the meaning of a technical sensory aid and the cooperation would turn out to be a single (i.e. human) perspective undertaking. If the second premise were dropped, then the two subjects would continue as individual agents, each with its own singular perspectives and aims. In order to avoid falling back into individual perspectives in a task which needs their combination, both of those premises are to be upheld, even though they exhibit logical contradiction. Tim Ingold (1994: 13) has characterized such a paradoxical character of trust as resulting from a simultaneous need for autonomy and dependency:

To trust someone is to act with that person in mind, in hope and expectation that she will do likewise – responding in ways favourable to you – so long as you do nothing to curb her autonomy to act otherwise. Although you depend on a favourable response, that response comes entirely on the initiative and volition of the other party.[...] Trust, therefore, always involves an element of risk – the risk that the other on whose actions I depend, but which I cannot in any way control, may act contrary to my expectations [...].

Philippe Descola has further tied those reflections of Ingold to the anthropological discussions about the differences between giving/sharing and exchange (Descola 2013: 317), seeing the trust-based relationship as something which underlies giving. In the case of giving and sharing, the other is not addressed as someone who will have to return the gift or favour, whereas in the relationship of exchange, the return is already implied in the act of giving.

Different social as well as cognitive mechanisms might allow for the building of relationships that are based on trust – from shared identities to the capacity to hold negotiations. The idea that trust can be ultimately derived from a shared language as a device of understanding has been proposed and yet questioned by the writer, dog and horse trainer Vicki Hearne in her book *Adam’s Task: Calling Animals by Name*. While concentrating on the relations of humans and non-humans, Hearne touches upon the illusion of total and comprehensive understanding in a dialogue based on

language (Hearne 2000). It has to be noted, though, that Hearne does not consider the formal characteristics of language when she uses the concept and rather designates as language any system of signs that allows for understanding between individuals. Despite the vagueness of terms, Hearne's work gives an impetus to question the predictive properties of (shared) signs and their use for controlling or determining behaviour. The latter was proposed by Charles Morris as one of the primary functions of signs: "Signs in general serve to control behavior in the way something else would exercise control if it were present" (Morris 1971: 174).

Using examples of animals obeying the commands of humans, Hearne explicates how the misconception about the attachment of trust to language might be reached (Hearne 2000[1987]). Her rendition of the misplaced overlap of trust and language qua system of communication can be summed up with the following inductive line of thought. If the other is perceived to have really understood something that was communicated to him/her and to have thereby captured the other's intentions, (s)he is endowed with the capacity to command language and hence, to be an understanding being. Moreover, by responding adequately to one sign, the other is bestowed with the ability to access the whole sign system in which the sign was produced. Hearne tells of a frustration encountered in training if that appears not to be the case: "These come about because the ability to utter, "Joe, sit!" creates the illusion that Joe can know thereby exactly who we are, that we can penetrate his otherness, that he can through the phrase alone share our vision of the Sit exercise" (Hearne 2000[1987]: 31).

Hearne suggests that as a device of predicting the other's behaviour, language might create the foundation for trust. If trust is put under question due to some unexpected activities of the other, so is the authority of language as a device of understanding. In this connection, Hearne describes her visit to Gentle Jungle, a wild-animal training facility, to meet the chimpanzee Washoe – the first chimpanzee who was taught Ameslan, the American language for the deaf (Hearne 2000[1987]: 18–41). By observing the interactions between Washoe and her caretaker, Hearne concludes that Washoe is indeed making use of language and having a conversation with the caretaker. However, given the premise that language should allow for negotiations and the predictability of the other's behaviour, why is the chimpanzee held in a cage and why do the caretakers take along chains and sticks when they go to walk with her? The precautionary devices are used because the animal can attack her caretaker as well as those passing by, despite her ability to talk, listen, understand, and adequately respond. Hence, language does not appear to guarantee the kind of reciprocity assumed for trust. Hearne writes: "What is offended is the dog trainer's assumption that language or something like vocabulary gives mutual autonomy and trust. I grieve, but not for Washoe behind her bars. It is language I grieve for"

(Hearne 2000[1987]: 34). If language cannot serve as a foundation for trust, then it is deprived of a significant part of its power – to regulate the relationships between individuals and to assure the possibility for a shared way of living. In consequence, the reconciliatory function of language has been turned down – not everything is negotiable. In cases similar to what Hearne experienced at the training facility, it is thus easier to solve the conflict by denying the use of language by an animal than to acknowledge the limits of language. The conclusion can be therefore drawn that the animal's “[...] lack of common language, its silence, guarantees its distance, its distinctness, its exclusion, from and of man” (Berger 1991[1980]: 6).

The presumption about the possibility of total understanding is related to the expectations of the language system as a code. Language, when taken as a mediator of understanding, should virtually guarantee that everything expressed in it is comprehensible, and that each individual speech act metonymically instantiates the totality of the language system. This is a presumption that has been captured in the notion of enlogic understanding by the Estonian philosopher and semiotician Andres Luure. He explains enlogic understanding as an understanding by rules of language: “I understand you before you ever say anything – because I understand whatever you could say – provided you follow the rules of a language common to us” (Luure 2006: 68).¹³ At the same time, the subjugative use of enlogic understanding can lead to the loss of trust between two individuals. The presumption that the other makes use of a sign system that is fully compatible with one's own might be easily felt by the other as a deprivation of its autonomy. One of the two premises essential for trust is thereby eliminated.

In his autobiography written together with Betty White, Tom Sullivan gives a telling example of the consequences of treating the other as a means of enhancing one's own autonomy (White, Sullivan 1991). Sullivan describes how, having just received his first guide dog Dinah, he heads for a run on a bike path. Being ignorant of the dog's physical limits, he pushes her to the limits of her physical capabilities. After having a crash with a bicycle, Sullivan decides to head for home, without a faintest clue, where it might be. He feels that asking for help would take him from the independence that he thinks he has reached with the guide dog back to dependence. Therefore he asks the dog to find home without being able to give any directions to her: “And the Lady did. [...] She had no idea where she was taking me, but I was encouraging her to work, and she would go on until she dropped dead from exhaustion” (Sullivan, White 1991: 72–73). Following the trauma, the dog refuses to

¹³ Luure discusses enlogic understanding in opposition to another type of understanding – empathic understanding. Empathic understanding corresponds to “having significance” and is directed to obtaining something which is outside of oneself. It entails approaching the other with the image of what I want to become (Luure 2006: 68).

work for weeks and the intervention of the trainer is needed to get her back to work. Throughout the book, the theme of gaining and achieving independence and freedom is raised, and as seen from the instance above, the dog is thereby taken as a channel for achieving this. The lesson taught by the trainer and the experiences with the dog lead Sullivan to finally accept his state of interdependence, instead of pushing for ultimate and absolute independence (Sullivan, White 1991: 81). This acceptance of his state of interdependence also goes along with opening up to the signs of the dog, previously overridden by his own intentions. Only after that could the dog enhance the perception of the handler and provide accessibility to novel objects.

To sum up the arguments of the chapter, trust can be built on dialogue, but only if neither individuals are tied to an expectation of full reciprocity between them. Hence, unpredictability of the other's behaviour, arising from his/her autonomy, is just as essential and ineluctable for trust and communication, as is a dependence on the other's favourable response.

Conclusion

Scant contact between theories of *umwelt* and perspectivism have made the first steps toward bringing zoosemiotic and anthropological research into dialogue. However, this has been only episodic so far. Among other topics, their further integration might tackle the environments where humans and non-humans share the same objects while attributing the same or contrasting meanings to them; the diverse ways that people involved with animals in their daily lives (trainers, pet owners, farmers, hunters, etc.) address and communicate with their animals and vice versa; and the social contexts that frame the meaning of animals and the role of animals in defining the boundaries of human space and society. None of those research agendas really conforms to the models of naturalism, proposed as a dominant model of human-environment relations in the modern western world (cf. Descola 2013), as they presume semiotic activity from humans as well as non-humans. The phenomenon discussed in this paper – the cooperation of a guide dog and a visually impaired handler – is a case which in principle provides material for all those subtopics.

However, in this article, the guide dog team's cooperation was taken as a case that can supplement the existent descriptions of the change and transformation of *umwelten* (see e.g. Tønnessen 2011) and perspectives (see e.g. Kohn 2013; Willerslev 2007, Viveiros de Castro 1998) of different living beings. The perspectives of the members of the guide dog team are not moulded by individual meanings and perception only, but get their final form by incorporating and subsuming part of the other member's perspective. The materials of the current paper cannot lead to

grounding the arguments on detailed cognitive grounds. Yet such a bond between two perspectives can be detected through the environmental cues that the members of the team attend to, as well as the changes in individual behaviour which appear to result from the feedback received from the partner. Guide dog team's work is an instance of interspecific mutualism characterized by the following activities: (1) formulation of a task by one member of the team; (2) development of the means of fulfilling the task via reciprocal adaptation to each other's body plans as well as value systems (*sensu* Bateson, Ruesch 1951: 176); (3) the corresponding adjustment of the perspectives and *umwelten*, considering the task and environment, as well as the presence of the other subject; (4) dialogic interaction, which should ensure predictability of the other's behaviour and allow them to specify the plans of action.

The dialogic interactions, based on language or some other system of communication, can never guarantee a full overlap of the intentions of two counterparts. This also means that full confidence in the beneficial effect of the other's activities in respect with oneself cannot be reached via any form of communication. Therefore a component of risk that the other will respond in an unpredictable manner is immanent to dialogue. Although the deprivation of language from its ultimate reconciliatory function can lead to its disempowerment, the unpredictability of response also underlies the establishment of trust between individuals. This is so because the unexpected response is at the same time a token of the other's autonomy. Acknowledgement of the latter appears to be just as essential for the work of an assistance animal as are the expectations for the animal's compliance with the handler's wishes. By making detours and agreeing to approach objects that are of no interest to the handler, the dog is afforded places where its autonomy can be articulated. This appears to be a way to avoid its outburst as a dissentive self-assertion in situations where it might have an unfavourable effect for both members of the team. The guide dog team's work ultimately exhibits an entanglement of autonomy and dependence characteristic of any true cooperative interactions.¹⁴

References

- Århem, Kaj 1996. The cosmic food web: Human-nature relatedness in the Northwest Amazon
In: Descola, Philippe; Pálsson, Gisli (eds.), *Nature and Society: Anthropological Perspectives*.
London, New York: Routledge, 185–204.
- Bateson, Gregory 1988. *Mind and Nature: A Necessary Unity*. Toronto, New York: Bantam Books.

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- Bateson, Gregory; Ruesch, Jürgen 1951. *Communication: The Social Matrix of Psychiatry*. New York: Norton.
- Berger, John 1991[1980]. *About Looking*. New York: Vintage.
- Bird-David, Nurit 1999. "Animism" revisited: Personhood, environment, and relational epistemology. *Current Anthropology* 40: 67–91.
- 2008. Relational epistemology, immediacy, and conservation: Or, what do the Nayaka try to conserve? *Journal for the Study of Religion, Nature and Culture* 2(1): 55–73.
- 2010. Economies: A cultural-economic perspective. *International Social Science Journal* 49 (154): 463–475.
- Bräuer, Juliane; Schönefeld, Katja; Call, Josep 2013. When do dogs help humans? *Applied Animal Behaviour Science* 148: 138–149.
- Call, Josep 2009. Contrasting the social cognition of humans and nonhuman apes: The shared intentionality hypothesis. *Topics in Cognitive Science* 1: 368–379.
- Derrida, Jacques 2002. The animal that therefore I am (more to follow). *Critical Inquiry* 28: 369–418.
- Descola, Philippe 1996. Constructing natures: Symbolic ecology and social practice. In: Descola, Philippe; Pálsson, Gisli (eds.), *Nature and Society: Anthropological Perspectives*. London: Routledge, 82–102.
- 2013. *Beyond Nature and Culture*. Chicago and London: The University of Chicago Press.
- Fowler, Chris 2004. *The Archaeology of Personhood: An Anthropological Approach*. London, New York: Routledge.
- Frank, Morris 1957. *First Lady of the Seeing Eye*. New York: Holt.
- Fukuyama, Francis 1996. *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press.
- Giddens, Anthony 1990. *The Consequences of Modernity*. Cambridge: Polity Press.
- Halbmayer, Ernst 2012. Debating animism, perspectivism and the construction of ontologies. *Indiana* 29: 9–23.
- Hallowell, Irving A. 1960. Ojibwa ontology, behavior, and world view. In: Diamond, Stanley (ed.), *Culture in History: Essays in Honor of Paul Radin*. New York: Columbia University Press, 19–52.
- Haraway, Donna 2008. *When Species Meet*. Minneapolis: University of Minnesota Press.
- Harvey, Graham 2006. *Animism: Respecting the Living World*. New York: Columbia University Press.
- Hearne, Vicki 2000[1987]. *Adam's Task: Calling Animals by Name*. New York: Vintage.
- Hediger, Heini 1965. *Mensch und Tier im Zoo: Tiergarten Biologie*. Rüslikon-Zürich: A. Müller.
- 1979. *Beobachtungen zur Tierpsychologie im Zoo und im Zirkus*. Berlin: Henschelverlag Kunst und Gesellschaft.
- Hingson, King 2011. *Thunder Dog: The True Story of a Blind Man, His Guide Dog, and the Triumph of Trust at Ground Zero*. Nashville etc.: Thomas Nelson.
- Hocken, Sheila 2011[1977] *Emma & I: The Beautiful Labrador Who Saved My Life*. London: Ebury Press.
- Hornborg, Alf 2006. Knowledge of persons, knowledge of things: Animism, fetishism, and objectivism as strategies for knowing (or not knowing) the world. *Ethnos* 71(1): 21–32.

- Howell, Signe 1996. Nature in culture or culture in nature? Chewong ideas of 'humans' and other species: In: Descola, Philippe; Pálsson, Gisli (eds.), *Nature and Society: Anthropological perspectives*. London, New York: Routledge, 127–144.
- Ingold, Tim 1994. From trust to domination: An alternative history of human-animal relations. In: Manning, Aubrey; Serpell, James (eds.), *Animals and Human Society: Changing Perspective*. London: Routledge, 1–22.
- 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London/ New York: Routledge.
- Kohn, Eduardo 2007. How dogs dream: Amazonian natures and the politics of transspecies engagement. *American Ethnologist* 34(1): 3–24.
- 2013. *How Forests Think: Toward an Anthropology beyond the Human*. Berkeley etc.: University of California Press.
- Lima, Tânia Stolze 1999. The two and its many: Reflections on perspectivism in a Tupi cosmology. *Ethnos* 64(1): 107–31.
- Luhmann, Niklas 1988. Familiarity, confidence, trust: problems and alternatives. In: Gambetta, Diego (ed.) *Trust. Making and Breaking Cooperative Relations*. Oxford: Basil Blackwell; 94–107.
- Luure, Andres 2006. The duality of understanding and the understanding of duality in semiotics. *Sign Systems Studies* 34(1): 67–81.
- Maran, Timo 2007. Semiotic interpretations of biological mimicry. *Semiotica* 167(1/4): 223–248.
- 2011. Becoming a sign: The mimic's activity in biological mimicry. *Biosemiotics* 4: 243–257.
- Maran, Timo; Martinelli, Dario; Turovski, Aleksei 2011a. Readings in zoosemiotics. In: Maran, Timo; Martinelli, Dario; Turovski, Aleksei (eds.), *Readings in Zoosemiotics*. Berlin: De Gruyter Mouton, 1–20.
- Maran, Timo; Martinelli, Dario; Turovski, Aleksei (eds.) 2011b. *Readings in Zoosemiotics*. Berlin: De Gruyter Mouton.
- Martinelli, Dario 2010. *A Critical Companion to Zoosemiotics: People, Paths, Ideas*. New York: Springer.
- Marriott, McKim 1976. Hindu transactions: Diversity without dualism. In: Kapferer, Bruce (ed.), *Transactions and Meaning: Directions in the Anthropology of Exchange and Symbolic Behavior*. Philadelphia: Institute for the Study of Human Issues, 109–142.
- Melis, Alicia P.; Warneken, Felix; Jensen, Keith; Schneider, Anna-Claire; Call, Josep; Tomasello, Michael 2011. Chimpanzees help conspecifics obtain food and non-food items. *Proceedings of the Royal Society B* 278: 1405–1413.
- Morris, Charles 1971. *Writings on the General Theory of Signs*. The Hague, Paris: Mouton.
- Patton, Paul R. 2003 Language, power, and the training of horses. In: Wolfe, Cary (ed.) *Zoontologies: The Question of the Animal*. Minneapolis: University of Minnesota Press, 83–99.
- Pedersen, Morten A. 2001. Totemism, animism and North Asian indigenous ontologies. *Journal of the Royal Anthropological Institute* 7(3): 411–427.
- Praet, Istvan. 2009. Shamanism and ritual in South America: An inquiry into Amerindian shape-shifting. *Journal of the Royal Anthropological Society* 15: 737–54.
- Rival, Laura 2012. The materiality of life: Revisiting the anthropology of nature in Amazonia. *Indiana* 29: 127–43.

- Sebeok, Thomas 2011[1990]. "Talking" with animals: Zoosemiotics explained. In: Maran, Timo; Martinelli, Dario; Turovski, Aleksei (eds.), *Readings in Zoosemiotics*. Berlin: De Gruyter Mouton, 87–94.
- Sebeok, Thomas A.; Umiker-Sebeok, Jean 1980. Introduction: Questioning apes. In: Sebeok, Thomas A.; Umiker-Sebeok, Jean (eds.) *Speaking of Apes: A Critical Anthology of Two-way Communication with Man*. New York, London: Plenum Press, 1–59.
- Tomasello, Michael; Carpenter, Malinda; Call, Josep; Behne, Tanya; Moll, Henrike 2005. Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and brain sciences* 28: 675–735.
- Tønnessen, Morten 2011. *Umwelt Transition and Uexküllian Phenomenology. An Ecosemiotic Analysis of Norwegian Wolf Management. (= Dissertationes Semioticae Universitatis Tartuensis 16)*. Doctoral dissertation. Tartu: Tartu University Press.
- Turner, Terry S. 2009. The crisis of late structuralism. Perspectivism and animism: Rethinking culture, nature, spirit, and bodiliness. *Tipiti: Journal of the Society for the Anthropology of Lowland South America* 7(1): 3–42.
- Uexküll, Jakob von 1980. Der Beobachter In: Uexküll, Thure von (ed.) 1980. *Jakob von Uexküll. Kompositionslehre der Natur: Biologie als undogmatische Naturwissenschaft. Ausgewählte Schriften. Herausgegeben und eingeleitet von Thure von Uexküll*. Frankfurt am Main: Verlag Ullstein, 278–282.
- 1982[1940]. The theory of meaning. *Semiotica* 42(1): 25–82.
- Uexküll, Jakob von; Kriszat, Georg 1934. *Streifzüge durch die Umwelten von Tieren und Menschen: Ein Bilderbuch unsichtbarer Welten*. Berlin: J. Springer
- Uexküll, Jakob von.; Sarris, Emanuel Georg von 1931. Der Führhund der Blinden. *Die Umschau* 35(51): 1014–1016.
- Viveiros de Castro, Eduardo 1992. *From the Enemy's Point of View: Humanity and Divinity in an Amazonian Society*. Chicago: University Of Chicago Press.
- 1996. Images of nature and society in Amazonian ethnology. *Annual Review of Anthropology* 25: 179–200.
- 1998. Cosmological deixis and Amerindian perspectivism. *The Journal of the Royal Anthropological Institute* 4(3): 469–488.
- Warneken, Felix; Tomasello, Michael 2009. The roots of human altruism. *British Journal of Psychology* 100: 455–471.
- White, Betty; Sullivan, Tom 1991. *The Leading Lady: Dinah's Story*. New York: Bantam Books.
- Willerslev, Rane 2007. *Soul Hunters: Hunting, Animism, and Personhood among the Siberian Yukaghirs*. Berkeley etc.: University of California Press.

Роль доверия в связывании перспектив собак-поводырей и их незрячих хозяев

Взяв за основу антропологические подходы к перспективизму и (зоо)семиотические исследования об использовании знаков людьми и животными, автор статьи рассматривает сотрудничество собаки-поводыря и человека в зависимости от взаимной совместимости двух индивидуальных перспектив. Перспектива определяется как точка зрения, охватывающая как значения, так и формы объектов, которые субъект ощущает и, исходя из которых, действует. В некоторых случаях индивидуальные перспективы могут быть связаны между собой, в результате чего изменяются означивающие системы субъектов. В статье выделены три типа связей между индивидуальными перспективами: копирующие, связанные со сотрудничеством, а также основанные на сравнении двойные перспективы. Хотя все три типа важны, в статье подробнее рассматривается двойная перспектива, связанная со сотрудничеством. Исследуя условия создания доверия, автор ставит вопрос, может ли основой этих условий быть разделенная (*shared*) коммуникационная система.

Usalduse roll juhtkoerte ning nende nägemispuudega peremeeste perspektiivide sidumisel

Võttes aluseks antropoloogilised lähenemised perspektivismile ja (zoo)semiootilised käsitlused inimeste ja teiste loomade märgikasutusest, vaadeldakse käesolevas artiklis juhtkoera ja nägemispuudega inimese koostööd sõltuvana kahe individuaalse perspektiivi vastastikusest sobitumisest. Perspektiivi defineeritakse kui vaatepunkti, mis hõlmab nii objektide tähendusi kui ka vorme, mida subjekt tajub ja millest lähtudes toimib. Teatud juhtudel võivad individuaalsed perspektiivid olla üksteisega seotud, mille tulemuseks on subjektide tähenduslike maailmade teisenemine. Artiklis visandatakse kolme tüüpi seoseid individuaalsete perspektiivide vahel, mille tulemusena moodustuvad matkivad, koostööga seotud ning võrdlusel põhinevad kaksikperspektiivid. Kuigi kõik nad on juhtkoeratandemi koostegutsemise jaoks olulised, vaadeldakse lähemalt koostööga seotud kaksikperspektiivi. Koostööga seotud kaksikperspektiivi säilitamine sõltub usalduse loomisest kahe indiviidi vahel. Uurides usalduse loomise tingimusi, tõstatatakse küsimus, kas selle lõplikuks aluseks saab olla jagatud kommunikatsioonisüsteem.