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Gaze in interspecies human-pet interaction: some exploratory analyses

Chloé Mondémé^{a b}

^aCNRS, École normale supérieure, Lyon, France

^bCEFRES, Prague, Czech Republic

Address: 15 Parvis René Descartes, 69007 Lyon. Chloe.mondeme@cnrs.fr

Gaze in interspecies human-pet interaction: some exploratory analyses

This article examines video-recorded naturally occurring human-pet interactions during which the animal's gaze is treated as an allocational device by the human participant. Gaze exchange has been extensively studied as the social phenomenon *par excellence*, especially by scientific paradigms interested in defining sociality as mutual orientation (Simmel, 1921; Goodwin, 2006). Recently, studies in social cognition have shown the relevance of doing sequential analyses of gaze exchanges in animal interactions, providing important information on the "monitoring function" of gaze. However, less is known about the "regulatory function" (i.e., the effect of animal gaze on the sequential organization of action) in human-animal interspecies interactions. This article aims to fill this gap, by investigating the role of domestic dogs', cats', and horses' gazes on human conversation and courses of action. Findings demonstrate a systematic format: an animal-initiated gaze is followed by a verbal turn of the human participant, which evidences the turn-allocational function of the animal's gaze on human participation.

Keywords: gaze; interspecies sociality; animals; sequence organization; participation

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Gaze exchange is widely conceived as a social phenomenon of mutual orientation. There is relative consensus on this statement, emanating from the social sciences (Simmel, 1969 [1921]; Goffman, 1961) as well as from zoology (especially primatology; see, for instance, Whiten & Byrne, 1997) and psychology (Gibson & Pick, 1963; Argyle & Cook, 1976). It is a pervasive phenomenon in everyday interaction and fulfils a considerable number of functions in conversation. This explains why gaze and gaze exchange have been extensively studied by social psychology and have constituted the object *par excellence* of multimodal analysis of social interaction ever since the first in-depth investigations on the relationship between speech and embodied action (Kendon, 1967; Goodwin, 1981; Heath, 1984).

Kendon was one of the first to consider seriously the fact that gazing in conversation happens intermittently but not randomly. In his early work, he showed that addressed gaze occurs systematically at specific places in conversation and serves precise functions—namely the "monitoring function" (i.e., taking notice of others and objects in the environment) and the "regulatory function" (i.e., its relation to turn-taking and turn allocation). An exhaustive review of the abundant literature on gaze in human social interaction is beyond the scope of this paper (see Rossano, 2013, and Hoey, 2020, for a synthetic overview). The focus of this paper is on a much less-studied aspect of gaze in social interaction: it examines gaze exchanges occurring between a human and an animal—that is, gaze during interspecies interactions. For the purposes of the demonstration, the argument assumes that these interactions are *social* interactions (Goode, 2007) and does not question or dispute that point. But the extent to which gaze in interspecies interaction shares some similarities with inter-human social interaction still needs to be investigated further (Mondémé, 2022a). Although the monitoring function of gaze following in interspecies interaction has been documented in experimental studies (including in human-dog interactions), the regulatory function—i.e., the effect of animal gaze on the sequential organization of action—still needs to be investigated, especially in naturally occurring interactions. This article aims to fill this gap, by examining the role of domestic dogs', cats', and horses' gazes on the sequential organization of action and conversation.

The following short fragment exemplifies the focal phenomenon. In this excerpt, three friends (Dimitri and Eva, a couple, and Lisa, their friend) and the family dog (Hourra) are at home, sitting on the sofa. Dimitri and Lisa are watching the laptop, with Lisa having her hand on the dog's back (image 1). At the beginning of the excerpt, Lisa is talking to Dimitri and commenting upon an online forum where a girl they know has just posted something. Eva (on the left) has just arrived. She sits down next to them and wonders what her two friends are up to.

Excerpt 1_what are they doing?



Image 1



Of interest to us is what happens in line 3 onwards. By saying "what're they doing?" (line 4), Eva refers to the activity of the two other human participants, and selects the dog as her main recipient. The extent to which Eva's turn, line 4, has been elicited by the dog's look is precisely the phenomenon I would like to submit to scrutiny in this article. The fact that the two other human participants are referred to in the third-person plural, in their presence, can be understood in the first place as a direct address to the dog, although it is reminiscent of the typical devices (analyzed, *inter alia*, by Tannen, 2004) that use animals as "interactional resources" in order to indirectly address human participants (see also Bergmann, 1988; or Roberts, 2004). Whatever the pragmatic effect of Eva's turn, the fact remains that it is sequentially produced after the dog's look, and, in addition to the syntactical formatting, the low volume of the voice (almost whispering) and the postural behavior (bending over the dog) show that the turn is *de*

facto responsive to the dog.

In light of this short illustrative case, this article aims to investigate the following question: do human participants treat pet's gazes as being a turn-allocational device—as they typically do at specific places in human social interaction? The systematicity of this juxtaposition (animal gaze / animal addressed turn) in the data presented below reveals a pattern that deserves to be examined in greater detail in order to further our understanding of gazing behaviors in social interaction, and thus, of the rudimentary forms of sociality, including interspecies sociality.

1. Gazing in human-animal interaction

1.1 Gaze: a social phenomenon, or how to do things with gazes

Prior studies have largely investigated the role of gazing in ordinary face-to-face interaction. Simultaneous with the rise in interest in the "dynamics" (Duncan, 1972; Wiemann & Knapp, 1975; Duncan & Fiske, 1979) and the "mechanisms" (Sacks et al., 1974; Schegloff et al., 1977) of human conversational exchanges, other rule-governed behaviors in face-to-face interaction, such as gaze exchanges, began to be scrutinized first in the laboratory (Argyle & Dean, 1965; Argyle & Cook, 1976; Kendon, 1967) and later in naturally occurring interactions (Goodwin, 1981; Heath, 1984). Studies have focused especially on the role of gazing for managing specific conversational activities. It is this facet of the study of gaze that will retain my attention, in particular through the seminal distinction established in Kendon's early works.

While working in Oxford with Michael Argyle, Kendon developed a distinction between "monitoring functions" and "regulatory functions" of gaze behavior, which he explains in his 1967 article. Considering gaze direction under the aspect of the former, he referred to it as "an act of perception by which one interactant can *monitor the* *behavior of the other*," and, under the aspect of the latter, "as an expressive sign and regulatory signal by which he may *influence the behavior of the other*" (Kendon, 1967, p. 24). Although this distinction has since been debated (Goodwin, 1981; Rossano, 2013), it has remained useful to sort out the various functions and effects of gaze direction.

The *monitoring* aspect, understood as taking notice of objects and other individuals in the environment, has been largely investigated in animal-behavior sciences (in relation to the way conspecifics assess hierarchical relationships in herds or groups (see, e.g., Cheney and Seyfarth, 1990, in primatology). In human social collectives, too, the monitoring function of gaze is an object of continuous inquiry (Stukenbrock, 2020) and is considered a crucial component in the accomplishment of various ordinary collective actions: from the categorization of passers-by in public spaces (Lee & Watson, 1992; Sudnow, 1972) to social recognition, such as that sought by children checking whether and how they are being looked at by their caregivers in institutional contexts (Kidwell, 2015).

As mentioned, Kendon also outlines the role of gaze direction for mutually *regulating* behavior—a function of importance for the topic at hand. In contrast to ethnographers and anthropologists of communication, conversation analysts have focused not only on gazing behavior as a display of cultural traits, but also on the "constitutive aspects of gaze in conversation" (Kidwell, 2015) and on the systematicity of its sequential organization, including in relation to turn design and participation framework (Goodwin, 1981). In depth examination of the role of gazing in the selection of the next speaker has primarily been provided by Goodwin (1981), Heath (1982; 1984) and Lerner (2003). Particularly relevant for the topic at hand, several studies have analyzed gaze in natural conversation as a device to solicit the response of the recipient

(Bavelas et al., 2002; Goodwin & Goodwin, 2004; Stivers & Rossano, 2010). In particular, the role of gaze (exchange and avoidance) in the development and closure of sequences of actions has been documented in a variety of cultural contexts (Rossano et al., 2009), and detailed analyses of the alternation between addressing gaze and gazing away have demonstrated the participants' orientation to the recognition of sequence completion (Rossano et al., 2009). Rossano (2012; 2013) has expanded on these observations, demonstrating the complex and varied functions of gaze not only at the scale of turns-at-talk but in the overall sequential organization of action—even in extended courses of action (Rossano, 2012).

If participants obviously "do things with their gazes" in interhuman conversations, the question addressed by this study is the following: is there also an effect, in the distribution of speakership, of a gaze produced by an animal participant?

1.2 Gaze exchanges in animals

As Kendon himself acknowledges, "the power of the Look is not confined to human beings... The eye is recognized throughout the vertebrates as a feature which must be specifically taken into account" (1967, p. 58). Elaborating on this idea that gaze is consequential in most social species, studies in social cognition have recently carried out sequential analyses of gaze exchanges in animal (thus intraspecies) interactions, including in primates (Povinelli & Eddy, 1997; Whiten & Byrne, 1997; Rossano & Liebal, 2014), dogs (Miklosi, 2007), and in interactions between other domestic animals, like goats (Kaminski et al., 2005). These studies show phenomena of interest that reveal the rudimentary forms of sociality beyond the human species. This paradigm takes a cognitivist approach on social interaction: monitoring the other's gaze is somehow an inference making machine on the attentional states of the other (see, for

instance, Povinelli et al., 1999, where seeing is seen as a "referential act"). In other words, gaze monitoring, according to this paradigm, is a modality of knowing what the other knows (Hare et al., 2000), typically in object-choice tasks (Call et al., 1998) and in food-competition contexts (Whiten & Byrne, 1997). These experiments in social cognition raise classical epistemological issues as to how to relate a visible behavior (gaze direction) to an inner mental state (the will to grab, for instance)—that is, it raises questions about the link between a visible behavior and a putative intention ascription (see Fletcher & Carruthers, 2003, or Leudar & Costall, 2004, for stimulating contributions to the debate).

Much less is known about interspecies communication and specifically about the role played by gazing in these pervasive, although rarely examined, situations featuring animals, in particular domestic animals, and their caretakers. Again, some experimental studies have examined the monitoring function of gaze following in interspecies interaction—including in human-dog interaction (Call et al., 2003; Viranyi et al. 2004; see Miklosi, 2007, for an overview on dogs' social cognition). Dogs are indeed privileged models for investigating interspecies gaze (but see, for more recent studies on human-cat interactions, Pongracz et al., 2018). Through the process of domestication (Hare & al. 2002), dogs were shaped by human selection for specific uses (e.g., hunting, herding), and one of the suggested hypotheses is that domestication has specifically modified the way canids mobilize their gaze—by, for example, displaying a visible white sclera that enables others to see eye direction and which "facilitate[s] the perception of what others are looking at" (Rossano, 2013, p. 309). Studies in comparative psychology and animal behavior have argued that, unlike wolves, dogs do look at humans (Miklosi et al., 2003). These studies have demonstrated that gaze is used

as an attention-getting device, as well as a referential device. For instance, by gaze alternation, a dog can inform the human about the location of hidden food or call on the human to solve a problematic situation (Miklosi et al., 2000).

All in all, these studies have demonstrated that animals do things with their gazes—a claim also made by qualitative studies interested in describing human-animal relationships from a sociological standpoint: symbolic interactionists (Arluke & Sanders, 1996; Sanders, 1999, 2003) have greatly discussed gaze exchanges in relation to intimacy and affective relationships and "as central elements of the intersubjectivity that supports interspecies friendship" (Sanders, 2003, p. 407). In his auto-ethnographies, Sanders emphasize the role of mutual gaze and its local and emergent meaning:

When [the dogs] look at me they usually pay attention to my eyes....If on the walk I stop and look in a particular direction, they will stop, glance at me, and gaze off in the direction I am looking. This seems a fairly clear indication of their elemental ability to put themselves into my perspective. (2003, p. 415)

This case has also been made by ethnomethodologists in video-analysis of sequences of play (Goode, 2007) and walks in parks (Laurier et al., 2006), although ethnomethodologists do not necessarily assume the existence of a shared perspective to ground this co-orientation (see Goode, 2007, p. 137 et seq., for a comprehensive discussion on the difference between symbolic interactionist and EM approaches on that matter).

Yet, in their account for how humans and animals mutually "recognize directed gaze in each other" (Goode, 2007, p. 136), all these works somehow refer to the "monitoring" aspect of gaze. However, the regulatory functions, including the effect of animal gaze on the sequential organization of action (and, in certain cases, on the sequential organization of conversation), still need to be documented.

1.3 Sequential analysis and the challenges of interspecies interaction

This article is a contribution to a growing body of research that considers interspecies human-animal interaction, broadly speaking, to be a perspicuous locus for the study of traditional linguistic issues such as participation framework (Roberts, 2004; MacMartin et al., 2014; Llewellyn et al., 2022), phonetics and recipient design (Harjunpää, 2022; Szczepek-Reed, forth.), intersubjectivity in interaction (Mondémé, 2011; Simonen & Lohi, 2021), intention ascription (Deppermann, 2017; Camus, 2022; Mondémé, 2022b), sequential formatting and turn-taking (MacMartin et al., 2014; Mondémé, 2019; 2023), and haptic communication (Mondémé, 2020; Llewellyn et al., 2022). In previous work, I made the case that analyzing human-animal interaction through the lens of sequential analysis (inherited from conversation analysis [CA]) was not only empirically possible (Mondémé, 2023), but also theoretically fruitful (Mondémé, 2022a) to test the possible extension of social theory to other nonhuman social species.

Indeed, investigating gaze as an allocational device in interspecies interaction entails that there are relations of conditional relevance between certain actions (e.g., a gaze produced by an animal) and others (e.g., a verbal turn or an embodied manifestation produced by a human participant). While this claim might appear controversial, recent empirical works have successfully made sequential analyses of human-animal interactions (see Crist & Lynch (2022 [1990]) for programmatic intuitions; Harjunpää, 2022; Simonen & Lohi, 2021; Mondémé, 2019, 2022a), showing that, more than being the "interactional resources" to which they had been reduced until then (Bergmann, 1988; Tannen, 2004), animals are often treated as fully fledged participants whose actions are attended to and responded to (Harjunpää, 2022), and who also actively *initiate* sequences of action (Mondémé, 2019, 2023). This means that they are not just behavioristically responding to human stimuli.

2. Data and methods

The analyses presented below draw from different data sets involving mostly domestic dogs and human participants, but also horses and cats in routine (professional or domestic) activities.

A first set of data involves interactions with pets (cats and dogs) in two different French households: that of a couple owning a dog, a cat and two horses (recorded over one week in 2013) and that of a family comprising a couple and their 2-year-old child, owner of three cats and a dog (recorded in 2021 during the Covid19 pandemic lockdown). A second data set involves interactions in more institutional settings: interactions with service dogs—or, more precisely, guide dogs (or future guide dogs) were recorded in France between 2008 and 2012 while the dogs were on duty, either with their visually impaired owner or with their trainer. Lastly, interactions with horses during different sorts of equestrian activities (children's horse lessons, training sessions for future horse-assisted coaches) constitute the third data set, also recorded in France, but in 2022. All were recorded with the participants' informed consent and data are anonymized and/or pseudomyzed. The originality of the study presented here is that it relies on natural data recorded during routine activities and not in the constrained setting of the laboratory, which is still the dominant setting in animal-behavior research.

Although these data involve different species, with presumably different species-specific communicative (hence, gazing) behaviors, the aim of this article is not to develop ethological considerations, but only to see whether animals' gaze orientation has any kind of effect on the organization of the activity. For the sake of convenience, these animals might be referred to by using the vernacular term "pet," in so far as they are domesticated animals living in daily contact with humans and socialized during their ontogeny. A first, crucial, analytical assumption is that pets or domestic animals are fully fledged participants. This has several methodological consequences (already developed elsewhere; see Mondémé, 2020), among which is that the animal has to appear in the transcription on the same level as human participants, so that his or her actions are made visible and thus consequential for the actions and potential uptakes of the human participants. Acknowledging the fact that methodological artifacts like the layout and the font have strong analytical effects (Ochs, 1979; Mondada, 2018), I have reserved the bold type for nonverbal and multimodal actions in order to place human and nonhuman actions on the same footing—at least, analytically.

The second pitfall concerns the recognition of the phenomenon—namely, the pet's gaze. Just like in human social interaction—or maybe even more—we need to be cautious about what an "oriented gaze," whether towards an object or another individual, is exactly. Following the basic principles of CA, I argue that an addressed gaze is made analytically relevant only if it has been oriented to—something that is made visible via the "next turn proof procedure" (Schegloff, 2007, p. 16).

This leads us to the third apparent difficulty: is the animal really intending to elicit a turn or to beg for a stroke by directing his or her gaze toward a human participant? The analyses provided here remain agnostic on whether animals possess complex cognitive abilities (see Mondémé, 2023), but, in line with the spirit of conversation analysis (Sacks, 1992) and ethnomethodology (Goode, 2007), they restrict themselves to what matters to the participants, while trying to keep the "why that now?" question as a guiding principle (see Schegloff 1998, p. 414, on how to interpret this question as a member's concern, not as an inquiry on exogenous grounds). Therefore, instead of reasoning in terms of "intention ascription," the argument adopts a more

parsimonious attitude: it can assess only the extent to which a verbal or embodied turn produced after a specific action (namely, in our data, a gaze) aligns relevantly with the activity in some way (see Enfield & Sidnell, 2022, in their analyses of what it is to "act as a recipient" regardless of any forms of "action labeling"). In other words, participants do not need to "recognize" action to act appropriately. This deflationist take is particularly important when dealing with animal participants: in a way, it allows us to get rid of speculations on the nature of animal intentionality—granted that we also put them aside in interhuman interaction—and thus prevents any debate on the nature of animal "will" and "consciousness" (see Goode, 2007, or Laurier et al., 2006, for a comprehensive discussion on this topic).

In sum, in accordance with the most deflationist version of "mind in action" (Coulter, 1991; Laurier et al., 2006), I suggest sketching a very parsimonious description of social interaction: animal-gaze function as an allocational device for human participants regardless of the supposed wills or intentions of the animal. Participants may assume that the others have intentions—or act under the assumption that their co-participants' conducts are purposive (if not goal directed)—but it is not necessary to access the (human or non-human) participants' inner mental states to unravel the basic mechanisms of social interaction.

3. Sequential organization of gaze in interspecies interaction: the animal's gaze as an allocational device

After showing the mechanisms by which a dog's gaze has similar effects as human gaze in terms of "display of availability" (3.1), the analysis will examine specific sequential formats, including summons/answer sequences (3.2), assessment sequences (3.3), and sequence expansion (3.4)—each time confronting them with the existing literature on human social interaction.

3.1 A display of availability

First worked out by Heath in his seminal paper on the "display of recipiency," which he defined as "presentation of oneself through gaze and posture directly toward a cointeractant" (1984, p. 249), the display of availability refers to the diverse proxemic, postural, or facial behaviors that are recaptured as displays of readiness in interaction. It also echoes what has been primarily described as the display of "social accessibility" (Goffman, 1963; Kendon, 1967)—but here I will draw on Heath's detailed analysis of postural reorientation in relation to gaze shifts: "The display of availability is an action that creates, for its recipient, a range of undifferentiated opportunities in which to initiate action" (1982, p. 154).

While, in interhuman interaction, the directed gaze may provide an opportunity to respond with an action (for instance, in Heath's data, starting the medical consultation), let's see how a dog's gaze is recaptured as a display of availability and, in some cases, as a display of recipiency, by human interactants.

The following excerpt provides an illustration of this phenomenon, with the same participants as in the first excerpt. Eva and Dimitri (a couple) are engaged in a conversation with their friend Lisa, in the living room. Hourra, the dog, is sitting on the sofa, too, in between Lisa and Dimitri, while Eva is standing in front of them.

Eva and Dimitri also own a horse, and Lisa asks a question regarding the possibility of going for a morning walk with both the dog and the horse—an option that is soon rejected by Eva: she answers Lisa while engaging in a close interaction with the dog, who has just gazed at her.

Excerpt 2_One excites the other

- 1 DIM j` voulais l` sortir notamment pour euh I wanted to walk her in order to uh
- au pire on l` fait marcher dans la rue là/ dimi/ 2 EVA otherwise we can walk her down the street here dimi
- pour voir si/ .h ((kisses the dog)) 3 DIM in order to see if
- EVA comment [il est boiteux quoi] 4 see how lame she is
- [s'il est boiteux] ou pas [mais: ((kisses HOU)) 5 DIM if she is lame or not but
- 6 LIS [ouais veah
- EVA ben l'appareil photo y'a tout d`dans/ (.) qu'est: prêt/ 7 well the camera is ready with everything inside
- 8 LIS mais tu prends +pas les deux fistons en même temps/ #im2.1 but don't you take the two guys at the same time +looks at EVA

HOU



Image 2.1

- 9 DIM n[an\] no
- [ouh:] nan *+parce que <u>une</u> (0.3) exc(h) *ite l'au:tre+* 10 EVA because one excites the other one oh no *goes to HOU *....* HOU +wagging tail
- #im2.2 et l'autre/ (.) s'(h)éner*ve et s(h)aute dans tous 11 les and the other gets nervous and jumps up and hands around muzzle *mouth to muzzle->
- 12 s(h)ens ((kiss))* #im2.3 down

->*



Image 2.3

Image 2.4

Our attention is drawn to lines 8 to 10. Lisa asks a question, "Don't you take the two guys with you at the same time?," referring to going for a walk with the two companion animals, the horse and the dog. Lisa's gaze is directed at Dimitri, who immediately answers negatively. Eva, who is also somehow a candidate recipient (for she is the owner of the animals as well) provides an answer, too, starting at line 10, and expands on the reasons why it is not reasonable to go for a walk with both animals. But, while semantically, as well as syntactically, her response is oriented to Lisa (e.g., by the use of the feminine pronoun "l'une" to designate the dog), bodily as well as phonetically, the design of the turn clearly involves the dog. Indeed, while uttering her turn, Eva approaches Hourra, puts her hands on the dog's muzzle while looking into its eyes, and punctuates her sentence with a direct kiss on the dog's nose. The verbal turn, although in response to Lisa's question, reveals phonetical peculiarities, such as the addition of an unexpected puff of air (transcribed "(h)" in an adaptation of Jefferson's convention for the transcription of outbreath sounds), which results in the pronunciation of a [[]sound instead of [s]-sound in the two verbs "s'énerve" (gets nervous) and "saute" (jumps), hinting at some forms of animal-directed talk (see Jeannin et al., 2017, for French phonetics). How to understand this? One aspect of the answer can be found in what happens just before Eva takes the floor: at line 8, Hourra turns her head around and gazes at Eva (visible in image 2.1). Although the video footage does not provide a clear view of Eva's eye direction, we can argue that this gaze triggers Eva's movement towards Hourra, and reflexively, is practically treated as a display of availability (Heath,

1982; 1984).

The analysis gets more complex if we consider the fact that there is not just one modality directed at each participant (roughly, verbal for the humans and embodied for the animal): even the verbal utterance, although designed for the human audience, is infiltrated with animal-directed talk features. Though the content of the turn is not elicited by the dog's gaze, the dog's gaze occasions her inclusion as a recipient during the delivery of the verbal turn in which she is being talked about. In other words, while Eva is verbally responding to Lisa, her intonation contours and phonetic choices, as well as her embodied behavior (approaching the dog and grasping her muzzle), show that the turn is jointly recipient designed to two different co-present audiences: the human participant and the dog. We thereby see the entanglement of different participation frameworks already documented in previous research involving interaction with nonhuman animals (Harjunpää, 2022; Szczepek-Reed, 2023). But, in addition, we can observe here the crucial role of the dog's gaze on the organization of speakership and participation.

Sequentially, the directed gaze is not strictly speaking a first-pair part, because Eva's turn is a response to Lisa's question, but it nonetheless shares its features with the display of recipiency, in that it "is sequentially implicative for an action by a coparticipant; it breaks the environment of continuous opportunity, and declares an interest in having some particular action occur in immediate juxtaposition with the display" (Heath, 1982, p. 154).

In the following, third excerpt, a little girl (8-year-old) is attending an equestrian riding lesson. The participants are waiting in the riding arena for the entire group to be ready. During this wait time, Line engages in an affectionate exchange with her pony.

Before the beginning of the excerpt, Line was readjusting the pony's halter—a gesture that fluidly transformes into a smooth stroke of the pony's forehead. It is where this quick excerpt begins:

Excerpt 3_Line



Image 3.1 ((Line and the pony waiting for the rest of the group))

00'00'02

00'00'04





00'00'06



80'00'08



Image 3.5

Given the fact that the sequence is very short and absolutely nonverbal, I reproduced drawings from screen grabs of the video, trying to outline the relevant phases in this short gaze exchange. First, Line bends (image 3.2) and stares into the eyes of the pony for a few seconds (image 3.3). At this precise moment, the pony, who was previously completely static, reorients her gaze and quickly looks at Line. This quick look (reproduced in image 3.4) elicits a set of embodied actions: Line will smile (also visible in image 3.4), approach, and kiss her pony (image 3.5). A state of mutual orientation is achieved, and the pony slightly closes her eyes as she is being kissed.

While in the prior examples the animal's look was initiative, here we have a three-part sequence, in which the animal's gaze is somehow produced in response to Line's embodied solicitation (standing and staring into the pony's eyes). However, as it projects (i) a move towards the animal and (ii) an affectionate tactile sequence, it exhibits the same feature as in the two previous excerpts.

This short excerpt evidences the links between mutual gaze, affective matters, and intimacy (see also Kidwell, 2015). The quick gaze exchange somehow allows the girl to deepen the interactional engagement (as a device of consent) and provides a resource for going further in the tactile interaction. We cannot state for sure that a kiss would not have happened if there had not been any gaze exchange. But, by virtue of the recurrence of this phenomenon, the animal gaze shift is arguably interpreted a display of readiness—or consent. The quick eye contact is, rightly or wrongly, perceived as a "shift of involvement," to borrow Heath's words.

In both cases (excerpts 2 and 3), the animal's gaze is not strictly speaking "allocational," in that it does not distribute speakership, but at least it projects an action—namely, a tactile contact. In those two previous cases, the animal was not (directly) verbally addressed—contrary to the instances I now turn to.

3.2 The pet's look as a summons

The next excerpt takes place at a family household. The father (PER) is getting the dinner ready for his 2-year-old son (BEN), who is seated at the table. One of the family cats is walking around and approaches his food bowl.

Excerpt 4_What's up kitty?

	PER	*drinks water * puts glass on table looking at cat->>		
5		*(2.0) *(1.0)		
4	BEN	a:hen:		
3		(0.6)		
3	PER	bah oui j't'en ai mis un p`tit peu yes I poured a little bit for you		
1	BEN	tu veux remplir de l'eau pour moi::/ would you fill water for me		

6 %(2.3) #im4.1 CAT %gazes at PER->8

#im4.2 (0.5) % #im4.3 (1.5)

->%approaches PER->>

7 PER qu'est c`qu'il y a minou/ what's up kitty

8

9

10

CAT

BEN

PER

11 BEN



Image 4.1

yes

il veut des boules he wants kibbles

do you think so

tu crois/

oui∖



Image 4.2

Image 4.3

At the beginning of the excerpt, while the cat is not yet in sight, Per and Ben are talking about things related to the meal: the boy asks for some water and the father answers positively and drinks, too, while discreetly monitoring the cat approaching its food bowl. At line 5, the cat directs his gaze straight at his human caretaker (image 4.1). This receives the immediate response of "what's up kitty," in line 6, a question that is treated in a quite literal manner by the boy, who acts as a spokesperson and formulates "he wants kibbles" (line 8). Although both human participants orient to the fact that the cat is heading for its food, the pet's gaze has no clear-cut propositional content, like, for instance, "I am hungry" or "I want my food." However, it has a practical and pragmatical effect: it is oriented to as a significant behavior that deserves attention. It also launches an extended sequence in which the father will finally put some food in the bowl—in that respect, it is arguably analyzable as a short summons/answer sequence, as a minimal generic adjacency pair that projects a relevant next (Schegloff, 2007, p. 49 – see also Mondémé, 2023 for instances of this canonical sequence type in human-animal interactions.

Again, without making any assumptions about the cat's true intention to beg for food by looking at his caretaker, one can only identify (recurrent) formats—which does not mean that the participants themselves do not attribute intentions to their fellow companion animals (see, for instance, the boy presuming that "he wants kibbles"). As Enfield and Sidnell put it:

For a theory of action to be built...we need to acknowledge that participants work on the assumption that [others] are pursuing goals, and they seek to ascribe reasons behind other's behaviors that make sense in terms of those likely goals. (Enfield & Sidnell, 2022, p. 293)

What is true for human participants is evidenced here with pet animals as well.

The next excerpt also displays a pet gaze that acts as a summons in that it initiates an extended sequence of action. In this case, Martin, a horse instructor, is finishing a speech designated for an audience of approximately ten trainees (on the left of the fences, but out of the frame). The excerpt starts with an activity-closing token, "is it okay?," by which Martin ensures that the participants have all understood the aim of the prior exercise, and which thus concludes the debriefing sequence.

Excerpt 5_my crouchy





Image 5.5

Queen, the pony, is about five meters away from Martin, who is in the foreground. As Martin ends his speech, he monitors all the members of the audience, standing still and waiting for a possible reaction (image 5.1). He then adjusts his body posture and takes a step forward (line 2), thereby making the closing of the activity "publicly projectable and recognizable" (Broth & Mondada, 2013). This movement is oriented to by the pony (image 5.2). As Martin gazes at her, too, Queen turns her head in Martin's direction more distinctly with a clear addressed gaze (image 5.3). Martin immediately addresses her with a positive assessment, "you're a good girl," calling her by the nickname "Crouchy." From line 4 to 5, he is walking in her direction, slightly bowing at her (image 5.4) in order to supplement his evaluation with embodied praise (image 5.5, a stroke on the pony's nose). In this excerpt, although the pony's gaze might perhaps be totally contingent and accidental, it is recaptured as an eliciting device to generate praise and extends the evaluation of the activity to all participants of the scene, human and nonhuman.

These two last excerpts have highlighted a recurrent pattern, where an animaladdressed gaze is immediately followed by a human verbal turn, either an interrogative (excerpt 4) or an assessment (excerpt 5). In institutional data, especially during training, this last evaluative format is frequent. The next section explores the details of its accomplishment.

3.3 The pet's gaze as an allocational device for assessment turns

We now turn to cases where the pet's gaze is clearly allocational, in that it projects a prototypical action: just after the accomplishment of a task, the service dog's look elicits verbal (and sometimes embodied) praise, which suggests a systematic relationship between the two actions.

In the next excerpt, a future guide dog (Calypso) is being trained to put her harness on. Steve, the trainer, has just provided the verbal command, after having called the dog by name:

Excerpt 6_Harness

```
caly*pso/ *le har+nais/ im6.1*
   STE
1
         calypso
                   the harness
             *....*presents harness
   CAL
                        +dives head--->
         (1.0) + im6.2 + (0.7) im6.3
2
   CAL
          3
   STE
        c'est bien:+
         good girl
                                              Image 6.1
   CAL
               --->+
```

Image 6.2

Image 6.3

In this short excerpt, Steve presents the harness to the dog, who cooperatively plunges her head into it (image 6.1). Indeed, it is generally best that the dog be active in putting on the harness, thereby displaying her commitment in the task. Having cooperated in this way, Calypso turns her head toward Steve (image 6.2), clearly gazing at him (image 6.3). Steve compliments her with verbal praise ("good girl" line 3). The presence of an assessment in the position of a "sequence closing third" (Schegloff, 2007) is no surprise here, in that this kind of sequence is prototypical of training contexts: the dog has to be reinforced in her learning of a task. However, if we observe in detail how this routine maneuver is carried out, paying particular attention to its multimodal aspects, it is worth noting that the trainer's assessment is preceded by an addressed look from the dog. This hypothesis of the dog's gaze somehow eliciting an assessment needs to be confirmed with more cases.

Excerpt 7_your left



Image 7.1

In this short excerpt, a pair consisting of the future guide dog and her trainer has just come out of the metro. They need to leave the station, and the trainer gives the verbal command to go to the left, a task relatively difficult in this busy environment where several possible routes can be taken. Calypso successfully complies with the command and is assessed by Steve with the verbal turn "that's it!" (line 3). Interestingly, as soon as this apparently positive assessment has been produced, Steve utters a second one, line 5 ("good girl"). Again, a careful examination of the multimodal details that immediately precede this turn allows us to see that this second "assessment" is produced in response to an obvious addressed gaze, taking place line 4 and instantiated in image 7.1.

In this excerpt, it is striking to note that the assessment is produced not only after the execution of the command, as we might expect in prototypical "Initation-Response-Evaluation" format (Mehan, 1979), but it is repeated after the dog has directed her gaze toward her human partner. This shows that the successful realization of the task is not the only parameter in the production of an evaluative turn in this particular institutional activity—and it demonstrates the existence of a pattern (outlined in domestic contexts, too): the allocational dimension of the animal's gaze.

In order to explore the finding further, the following section will demonstrate that a dog's gaze can even have a "fishing" dimension. By gazing at its caretaker or trainer after a potentially complete sequence, the dog's gaze has the property of expanding it.

3.4 Fishing devices and expanding sequences

The two following excerpts further examine the idea that the animal's gaze, when positioned after a potentially completed evaluative sequence, has the potential to expand it.

Excerpt 8 infra is taken from the same data set, involving a trainer (Marc) and a guide dog, (Chey), except that, this time, the training is complete and the dog has been handed over to a visually impaired person (Caty). The visually impaired woman and her dog are walking together for the first time. Marc provides numerous tips on the techniques and behaviors Caty should adopt with her new dog. In other words, he is there to ensure that the pair is well matched and able to perform all expected tasks safely.

Excerpt 8 Perfect

1	CAT	at* <u>tend</u> * wait *pulls the leash*	
2	MAR	<u>bIEn</u> \ ouh:: superbe\ well done superb	
3	CHEY MAR	¤(0.5) +(0.4)¤ im8.1 ¤looks Mar ¤ +looks Chey->>	
4	MAR	+impe+ccable\ perfect +nods+	Image 2



Image 8.1

Just before the beginning of the excerpt, the pair encountered a difficulty, and Caty managed to deal with it adequately (giving the adequate verbal command and pulling on the leash as expected). Marc thus positively assesses Caty's reaction (her command, her intonation, and her gesture): "well done, superb" (line 2). The sequence could have ended here, but, interestingly, Cheyenne glances at Marc, who gazes back at her a few tenths of a second later (image 8.1) before producing another assessment, this time admittedly designed for the dog. It can be argued that the dog's gaze prompts Marc to produce an extension of his evaluation, which is now no longer addressed solely to Caty, but also to the dog.

A last excerpt displays the same phenomenon of sequence extension. This time, Violette, a visually impaired person, and her dog Cookie are at a crossroad:

Excerpt 9_good boy



Arriving at the crosswalk, the dog sits down on the edge of the sidewalk to mark the upcoming obstacle and to indicate where exactly to cross the street. This action is performed correctly, so Violette engages in a sequence of praise, both verbal ("good" line 1) and gestural (she strokes his head, lines 1 to 3). In line 3, however, Violette produces other evaluative statements: she repeats "good" and reinforces it by adding "you're a good boy" (line 3). Noticeably, the dog had pointed his head towards Violette

a few moments earlier (image 9.1), before the production of her second evaluative turn.

It could be argued that the directed gaze is irrelevant with a visually impaired co-participant; however, the dog's head movement is made haptically palpable: the dog turns his head while Violette's hand is on him. The addressed "gaze" or, at least, the head movement, results in a relaunch of the evaluation activity and seems to function again as a solicitation that projects typical expectancies, to which the blind person *de facto* orients. As already observed by Rossano (2013), mutual gaze at possible sequence completion might result in sequence expansion. What has been described in interhuman interaction is also at stake in human-pet interactions.

Conclusion: "interspecies sociality as mutual orientation"?

This study contributes to the literature on gazing behavior in social interaction. It raises crucial issues for our understanding of rudimentary forms of sociality, including interspecies sociality. Previous studies have extensively described the various roles of gazing in human face-to-face interaction. In particular, they have shown how gazing is a resource to manage conversational activities: either to display one's availability, to distribute speakership in multi-party interactions, or to accomplish different interactional jobs (closing an activity, expanding it, etc.). This article aimed to examine the effect of an animal's gaze on human social interaction and to assess how similar it is to the identified functions of human gazing behavior. More precisely, it has addressed the question of whether pets' gazes function as turn-allocational devices—what has sometimes been referred to as the "regulatory function" of gaze.

Findings demonstrate a systematic format: an animal-initiated gaze is followed by the human participant's uptake (mostly verbal, but sometimes solely embodied), evidencing the turn-allocational function of the animal's gaze on human participation.

Even when looking in each other's eyes cannot strictly be achieved (as in the cases of visually impaired human coparticipants), a head turn or a body torque may also carry out the "orientation to" the other coparticipant and bear this interlocutive dimension. Just like in human interaction, one of the most basic forms of co-orientation is not only conducted by vocal means, but also by visual and postural means.

From the most basic form of co-orientation (by gazing at a human, the animal might become a potential recipient) to a resource that projects a next action (a stroke on the head, for instance) to a resource that initiates the production of a verbal recipient-designed turn to a resource that elicits and projects specific institutionally oriented actions (e.g., assessments), the analysis of instances of ordinary interspecies interaction has shown a *continuum* in the various ways in which pets' gazes can elicit an action. The different cases, involving different species in different activities, demonstrate that the phenomenon goes beyond the specificities of a setting (domestic or institutional) and is not reducible to species-related patterns of behavior.

This article does not deal with animal behavior and takes a rather agnostic stance toward all the questions revolving around intention ascription (in general) and animal consciousness (in particular). Contrary to the vast majority of research on animal gaze, this contribution does not study animal gaze as the cue to investigate phenomena of mindreading. It relies only on the human coparticipant's *in situ* interpretation and uptake—the ultimate "proof-criterion" for the analyst (Sacks et al., 1974, p. 729)—to qualify animal gazes as local and emergent turn-allocational devices.

Although this article has shed light on a recurrent pattern, the primary goal of this study was not to identify probabilistic sequences of actions, as psychologists and primatologists did in the early 1960s (Altmann, 1965). On the contrary, I would like to

push the argument a little bit further in order to ask how (and on which grounds) those addressed gazes function as allocational devices or displays of availability and recipiency. One element of an answer can be found in the phenomenological tradition, which has famously addressed the power of the Look in relation to intersubjectivity (Merleau-Ponty,1962; Sartre, 1969; *inter alia*). Relying on that body of knowledge allows one to hypothesize that one possible reason why humans feel interlocuted when they are gazed at by pet animals is that their gazes are perceived as the gazes of subjects looking at other subjects. Stated as such, this hypothesis may have profound ethical and political implications.

Complementing perspectives that define "sociality as mutual orientation" (Goodwin 2006), this contribution shows the comparative interest of considering not only other (nonhuman) species, but also *interspecies* communicational practices, whether for the sake of their empirical examination, or for the theoretical conceptualization of social order.

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