Cat-Human Intersubjectivity and Joint Meaning-Making within Multispecies Families and Communities

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Abstract: This paper examines unstructured interview transcripts from case-studies of cat-human relationships, using the framework of interspecies intersubjectivity. Adopting a qualitative thematic approach, this study explores how interspecies relationships are formed and performed within the context of multispecies families and communities. Themes emerged relating to how the cats in this study became integrated into multispecies families and communities, through mutual trust-building, interspecies communication, and joint meaning-making. Examples of co-creation of meaning within the cat-human relationships included special vocalizations or signals with shared meaning that were co-developed over time. All the cats exerted their agency in some manner that influenced human behaviour. Most notably, by convincing their guardian to let them out to roam and to trust them. Although undoubtably influenced by their kittenhood experiences, individual personalities rendered some cats inherently more eager to roam and others more content to stay home. This study highlights several friendships formed between cats and nonguardian humans and provides insight into how cats integrate themselves into their communities. Furthermore, it demonstrates how cats are proactive in the process of becoming members of multispecies families.

Keywords: Intersubjectivity; Felis catus; sociality; cat–human relationships; multispecies families; hybrid communities

Bio: Kristine Hill earned her PhD in Anthrozoology from the University of Exeter in 2023. Her doctoral research focused on discourses surrounding roaming cats (*Felis catus*) and cat–human relations. Other academic areas of interest include more-than-human families, griefwork, animal representations, animals and tourism, and cat–human cultures. Kris is a trustee of the Society for Companion Animal Studies (SCAS), and co-founder of Anthrozoology as International Practice (AIP), and the Cat Academic Think Tank (eCATT). Visit Kris's website to learn more about her projects and interests: https://academiccatlady.com/

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he ability to communicate with others is paramount to the survival of a social species such as humans (*Homo sapiens*) and wolves (*Canis lupus*). Sociality can be broadly defined as the inherent ability of individuals to function within social groups, either with conspecifics or other species. Unlike the ancestral wolves from which dogs (*Canis familiaris*) evolved, the progenitor species of domestic cats (*Felis catus*) did not have complex social organizations and lived predominantly solitary lives.¹ Brown and Bradshaw suggest that, given the solitary nature of the progenitor species and the relatively short time since the cat became domesticated, it is likely that traits surrounding sociability and communicative capabilities are far from a state of evolutionary equilibrium.² Given the multitude of recently evolved behavioural traits in domestic cats, signals, both intra- and interspecific, may still be evolving biologically as well as culturally within cat and cat–human communities.³

Research into expressions of feline emotion supports the notion that guardians may be best placed to receive and interpret communication signals from their cats.⁴ But what are some of the ways in which a mutual understanding is achieved by individual cats and their humans? Here I attempt to answer this question and gain an understanding of how meanings are made and communicated within the cat–human dyad. I examine how relationships and meanings are formed across species by focusing on cases of cats and humans who have an established relationship. Intersubjectivity refers to the shared space between conscious (subjective) minds where shared meaning can be made. The recognition that other-than-human animals also possess subjective minds led scholars to develop a concept of interspecies intersubjectivity.⁵ In their ethnographic study of a cat shelter, Janet and Steven Alger found cats would learn what volunteers were trying to communicate (such as "come over here")

- 1 Driscoll et al., "The Taming of the Cat", 71–72; Turner, "Social Organisation", 64.
- 2 Brown and Bradshaw, "Communication", 38.
- 3 Natoli et al., "Coexistence".
- 4 Quaranta et al., "Emotion Recognition".
- 5 E.g., Aaltola, "Empathy, Intersubjectivity"; Alger and Alger, "Beyond Mead"; Hurn, "Intersubjectivity"; Irvine, "Animal Selfhood"; Smuts, "Between Species".

and developed their own signals to communicate with volunteers.⁶ The Algers' examples included cats indicating where on their body they wanted to be scratched or modifying vocalizations to solicit food, and these behaviours were adjusted in accordance with how particular humans responded.⁷ The potential intersubjective nature of feline-human relationships is further evidenced by behavioural and psychology studies. One study found that human guardians could identify the context of a given vocalization for their own cats, but not of an unfamiliar cat.⁸ From the feline side, it has been demonstrated that many cats learn their own names and can discriminate the names given to cohabiting cats from random words.9 Although humans and cats are subject to the cognitive and behavioural characteristics of their respective species, as individuals their capacity to co-create meaning are not limited to conspecifics. Cats and humans might not always understand what the other is trying to communicate, but the literature supports the assertion that the potential exists for both species to develop signals with shared meaning. This paper examines how cats relate to their humans and other animals through the lens of interspecies intersubjectivity and joint meaning-making. I performed a qualitative thematic analysis of case studies of cat-human relationships situated within multispecies homes and communities (shared spaces). I explore how interspecies relationships are formed and performed within the context of multispecies families and hybrid communities, concepts that recognize interspecies relationality, other-than-human animal agency, and attempt to decentralize the human.¹⁰

Methods

Ethical approval for this study was granted by the University of Exeter's department of Sociology, Philosophy, and Anthropology (SPA) Ethics Committee on 01/08/2019. All participants provided informed

- 6 Alger and Alger, "Cat Culture, Human Culture", 201–2.
- 7 Alger and Alger, "Cat Culture, Human Culture", 209–10.
- 8 Ellis et al., "Human Classification", 629–31.
- 9 Saito et al., "Domestic Cats". Takagi et al., "Cats Learn".
- 10 Charles, "Post-human Families?"; Fox, "Animal Behaviours"; Irvine and Cilia, "More-than-Human Families"; Lestel, "Hybrid Communities"; Panelli, "More-than-Human".

consent and were given the opportunity to read the manuscript and request further amendments to protect their identity.

The Cat-Human Case Studies

The case study approach sought to examine cat-human intersubjectivity (joint meaning-making) and the different types of relationships that are formed between cats and non-cat animals (including human guardians and friends), both inside and outside their home. Insights into multispecies cohabitation, meaning-making, and social interactions between community members of different species arose from preliminary analysis undertaken concurrent with recruitment and data collecting. Participants were recruited via a saturation sampling method, characterized as an ongoing process of collecting and analysing case studies until data is repeated and nothing new is emerging." These formed the basis of the thematic analysis adopted here. Potential participants were sought via distribution of a flyer shared via Twitter and (with permission) on cat-related Facebook groups. Recruitment began in May 2020 and ran concurrently alongside data collection and preliminary analysis, with the final interviews taking place in July 2021. I originally sought cat-human dyads where the cat regularly roamed, or where a formerly outdoor cat adjusted to living indoors. The relationship criterion was that it should have existed for several years. However, a couple of participants described how their cats would befriend and visit human neighbours. Because my approach to recruitment and analysis overlapped, I was able to explore this further by recruiting additional participants who had formed lasting relationships with neighbourhood cats. This allowed me to explore a newly emerging theme (cat-human friendships outside the family) from the perspective of the befriended human. Thus, the case studies represent two distinct but sometimes overlapping types of cat-human relationships: 1) cats and their human guardians, and 2) felines who visit a human who is fond of them, but who does not assume responsibility ("Friend" in Table 1). The first category includes former free-living (unowned) cats who became part of a human household. Cats' names were not

11 Saunders et al., "Saturation", 1901.

anonymized because their given names were often integral to the narratives. All human participants gave consent for their cat's name to remain unchanged, but the human participants and identifying place names are anonymized.

Human participants are referred to by their cats' names followed by "human" (for guardians) or "friend" (for non-guardians). For example, Mimi's guardian (abbreviated to MiH) and Sam's friend (SF) (Table 1). Relationships between the human and their cats ranged from just over one year to nearly fifteen years. One participant lived in Italy and the rest were resident in the UK. MH had spent time in Kenya with her cats. Participants all spoke English as a first language. One participant was Asian-American, and the rest were Caucasian. All participants except PH were female, and none were living alone with their cat(s). The impact of changing family dynamics on individual cat-human relationships were a prominent topic of discussion, and at the time of the interview MH and FKH each had a young child and PALH two teenagers living at home. MiH, CH, PH, MH, SF, and MF indicated they were university educated, and MiH holds a PhD with a focus on human-animal studies. Furthermore, MH trained and practiced as a small-animal veterinarian for several years before moving into a more research-orientated career. Also of relevance is that CH has studied feline behaviour and is a volunteer within a cat welfare organization.

Case studies were comprised of an unstructured interview (25–80 minutes in length) conducted via video chat, ongoing electronic exchanges (email or text), and shared photos and videos. Footage of cats appearing on the video chat recordings, together with shared photos and videos provided additional context and limited visual assessment of feline body language. However, I remained cognizant of the fact that there was insufficient information for a meaningful ethological analysis. Interviews were transcribed from eight case-study interviews and annotated with notes related to mannerisms and any interactions between cat and human participants captured on camera. Transcripts were copied to an Excel worksheet and divided into rows of "time bites" consisting of ~2–6 sentences, identifiable by a

timestamp corresponding to the recording. Columns were added into the Excel worksheet to link chunks of timestamped text to the speaker (interviewer or interviewee initials), any annotations (laughing, cat appearing on camera, etc.), and initial coding themes. This first round of coding entailed making notes in the Excel worksheet columns, concurrent with rewatching the recording.¹²

Thematic Analysis

I applied a thematic analysis approach that borrows from phenomenological inquiry, in that it attempts to understand lived experiences and interspecies intersubjectivity, or joint meaning-making. The primary concern is with how to appropriately visualize and describe the newly discovered phenomena, rather than explain the underlying causal mechanisms.¹³ However, subjective and objective knowledge are intertwined, and all knowledge ultimately rests on inner evidence — the individual's intuition and lived experience.¹⁴ The thematic approach allows meaning to be derived from the diverse and rich datasets that arise from unstructured interviews. During analysis I paid particular attention to how the humans described their cats' behaviour and personality, and the relationships they developed with these cats. My primary goal is to describe these within the context of three thematic groups related to, 1) the integration of cats into multispecies families, 2) how cats and their guardians communicated and built relationships, and 3) how cats interacted with their more-than-human neighbours. These themes enable a systematic approach to understanding how participants think about family, relationships, and responsibilities towards cats who are bought into homes or roam neighbourhoods. They enable examination of relationships from which multispecies families are formed, while recognizing not all cat-guardian relations are inherently kinship bonds. Furthermore, they seek insight into feline agency and the active role cats play in the development of interspecies intersubjectivity with humans.

- 12 For more details of how this was performed, see Hill, "A Right to Roam?", 71–77, 236–42.
- 13 Staiti, "The Pedagogic Impulse", 40.
- 14 Neubauer et al., "How Phenomenology Can Help", 92.

Table 1: Overview of Case Studies

Relation- ship to Cat(s)	Main Cat Name(s)	Notes	Location
Guardian	Mimi	Former feral (first called Gollum, then Sméagol, abbreviated to Smeemi, and then Mimi).	UK (rural)
Guardian	Fantastic, Kapow	Former feral cats, roaming	UK (urban)
Guardian	Conkey	Former street cat/stray, roaming (other cats stay inside)	Italy (urban)
Guardian	Prr, Apollo, Luka	Luka was a stray who moved himself in	UK (urban)
Guardian	Phoebe	Roaming	UK (urban)
Guardian	Memphis, Tambo	Roaming	UK (urban)
Friend	Sam	Neighbourhood cat	UK (urban)
Friend	Morgen	Neighbourhood cat	UK (rural)
	ship to Cat(s) Guardian Guardian Guardian Guardian Guardian Friend	ship to Cat(s)Main Cat Name(s)GuardianMimiGuardianFantastic, KapowGuardianConkeyGuardianPrr, Apollo, LukaGuardianPhoebeGuardianMemphis, TamboFriendSam	ship to Cat(s)Main Cat Name(s)NotesGuardianMimiFormer feral (first called Gollum, then Sméagol, abbreviated to Smeemi, and then Mimi).GuardianFantastic, KapowFormer feral cats, roamingGuardianConkeyFormer street cat/stray, roaming (other cats stay inside)GuardianPrr, Apollo, LukaLuka was a stray who moved himself inGuardianPhoebeRoamingGuardianMemphis, TamboRoamingFriendSamNeighbourhood cat

Results & Discussion

1. Integration into Multispecies Families

The case studies reveal how cats became integrated into multispecies families through mutual trust-building and interspecies communication. My analysis began by looking at the various ways the cats in this study joined multispecies homes, and how both felines and humans navigated the process. Examples ranged from human-led adoption to cat-led integration (Table 1). PH and his wife actively sought out a cat to join the family and adopted their cat, Phoebe, from a local animal shelter. PALH and her partner adopted Prr as an adult cat needing rehoming, and a year later decided to adopt a kitten (Apollo) when a friend's cat became pregnant. Conversely, Luka showed up one day and endeared himself to PALH and the family. Conkey was a "foster fail" and remained a permanent member of CH's multispecies family.¹⁵ Fantastic and Kapow

15 A "foster fail" is term used by animal shelter staff, volunteers, and fosterers to describe

Humanimalia 15.1 (2024)

were taken in by FKH as young "feral" cats who required time and patience to build trust with their human.¹⁶ Although Mimi eventually became a house cat, in the beginning he kept his distance and resisted attempts to help him. Most likely Mimi had never previously interacted much with humans, but he was older and in need of veterinary attention when MiH first started to provide food for him.

Luka was an example of a cat who arguably first initiated integration into his now family. Based on how PALH described him as emaciated and in poor condition when he first showed up, Luka was likely on the streets for guite some time. Despite appearance and behaviours that indicated a stray or abandoned former companion cat, Luka had not been neutered or microchipped and no one came forward to claim him.¹⁷ PALH said she first noticed Luka sitting on the windowsill interacting with Apollo (a cat who had been part of the family since kittenhood). Soon after, Luka came into their home and made himself part of the family. Because Luka was so comfortable indoors and around people, and because he used the litter tray immediately, PALH ascertained that he must have been "somebody's cat" at some point.¹⁸ Likewise, although Conkey was bought in off the streets as a cat who had not been microchipped or neutered, he was immediately at ease around people. Because of this, the volunteers in the rescue centre decided not to release him to their colony of free-living cats. Conkey and Luka's instant trust of their new human family members can be contrasted to that of Fantastic and Kapow, and of Mimi, who took much longer.

Trust Building and Adult Socialization

The reason Fantastic, Kapow, and Mimi took longer to trust their humans and integrate into a human household may be because they were not fully socialized to humans during kittenhood. Early research demonstrated a window for socialization of cats to humans

a companion animal who endeared themselves such that their temporary caregiver adopted them permanently.

- 16 Free-living ("unowned") who were never socialized to humans as kittens.
- 17 Desexing and microchipping are generally considered practices of "responsible pet ownership" in the UK. Fox and Gee, "Great Expectations", 51–52.
- 18 Interview with PALH, 13:59.

closes around three months of age, and suggested adult cats rarely adjust well to a life with humans if they do not experience positive interactions with humans as kittens.¹⁹ However, these early socialization studies were controlled over relatively short timeframes and given more time (and need) cats may be socialized as adults.²⁰ Fantastic and Kapow were not handled and probably had minimal human contact prior to being adopted by FKH at around 9 months of age. FKH said the vet even warned her they were "feral cats", implying they would not make good companion cats.²¹ Despite being from the same litter, Fantastic became socialized fairly rapidly whereas Kapow took longer and never entirely became at ease with other people, FKH said. With Kapow, FKH said she would go into the room he was hiding in and just lie on the floor a few times each day. This went on for several weeks, until, she said, "Eventually he came out and just sort of sat next to me and just looked at me".²² FKH said at first Kapow backed away when she stretched her hand out, but eventually came up and sniffed her fingers and let her tickle under his chin. This he seemed to like and from then on accepted her presence but remained very aloof for quite a while. FKH believed Fantastic, who more-or-less accepted being handled right away, influenced Kapow's more gradual acceptance. Fantastic opened up to other people relatively quickly too. FKH described how he would sit beside her and use her as a buffer when people visited. She said, "he trusted I'd keep him safe".²³ Eight years later (during the interview), FKH called them "a pair of pampered moggies" who were "pretty cuddly really considering how they were to start with".²⁴ However, FKH explained that both cats would still hide if a stranger came into the house, and they would not allow anyone to approach them on the street. She said that Fantastic will generally warm up to most people who visit regularly, but Kapow will only trust a select few

- 21 Interview with FKH, 9:49.
- 22 Interview with FKH, 15:23.
- 23 Interview with FKH, 16:12.
- 24 Interview with FKH, 16:12. "Moggie" is a British term of endearment for a generic cat who does not have a pedigree nor pedigree-like traits.

¹⁹ Turner, "The Human–Cat Relationship", 194–95. Slater and Shain, "Feral Cats", 47.

²⁰ Hill, "A Right to Roam?", 164–66. Vojtkovská et al., "Changes in Sociability", 22–23.

friends and family members. Fantastic and Kapow were born and raised by a mother who was socialized to humans. Although they were apparently left alone by their mother's guardian, and would have missed the four-month window of socialization to humans, as kittens they likely would not have learned from their mother to be overly fearful of humans (as their mother was apparently socialized). Some cats may be born with a genetic disposition to adjust to changing circumstances, despite not having been fully socialized as kittens. Salonen et al., looked at ten feline behavioural traits across seventeen breeds and detected breed differences for both social and non-social behaviour, which were independent from circumstantial variables.²⁵ Furthermore, the friendliness of the father was previously shown to be an important determinant of kitten personality, and because the father rarely plays a role in kitten rearing, this is likely genetic.²⁶ Therefore, Fantastic, and to a lesser extent Kapow, could have inherited behaviour traits from either or both parents that enabled them to better socialize as adults. Although both cats looked very much the same and were from the same litter, it is possible that they had different fathers, which could also explain their different personalities.²⁷ Alternatively, Kapow may have experienced trauma prior to being adopted that FKH was unaware of. Either way, the difference in sociability of these two littermates emphasizes how cats are individuals whose potential to become socialized to humans as adults will vary based on circumstances, experiences, and inherited personality traits (nature and nurture).

Mimi likely lived most of his life apart from humans, and when he was older and in need of medical attention took much longer and even more patience from his human to build up enough trust to receive the care he needed. When MiH first moved to a remote location in a rural area of the UK, she would notice various free-living cats would come and go. When she first started putting food out for Mimi, whom she originally named Gollum, he would "hiss and snarl

²⁵ Salonen et al., "Breed Differences".

²⁶ McCune, "The Impact of Paternity", 114–19.

²⁷ Natoli et al., "Mate Choice", 463.

and back away flattened to the floor".²⁸ These are behaviours associated with unsocialized cats, and especially when such reactions continue during subsequent interactions, they are less likely to simply be expressions of fear induced by a change of circumstances.²⁹ In their study of sociability of cats brought into a shelter, Vojtkovská et al., reported that cats who were initially rated with unfriendly or neutral scores often improved significantly over a one-year period.³⁰ This suggested that adult socialization can occur to some degree, as appears to be the case with Mimi, Fantastic, and Kapow.

Injury, sickness, or a recognition that they need help may underpin a cat's decision to take the risk of trusting a human and/or facilitate adult socialization. MiH said that after about six months of providing food for Mimi every day she noticed how his eye looked badly infected and set up a trap to catch him. The fact that MiH said it took several weeks before she was able to get him into the cat box, strongly suggested he really had never been socialized to humans. A former companion animal, even after many years surviving without human intervention would likely take much less time to build trust or be at ease around an unfamiliar human. In the study conducted by Vojtkovská et al., all unsocialized cats were confined to a shelter and treated the same, but not all the cats improved their sociability score and those that did progressed slowly.³¹ Conversely, Mimi was not confined and had agency in how he responded to MiH's presence. Once captured and taken to the veterinary practice, Mimi was operated on to remove an in-grown eyelash that had become infected. Because he needed a course of antibiotics, MiH said she had to keep him in a crate for about ten days. MiH recalled how he was extremely angry about this and would hiss and snarl and try and attack her, even when she was offering food. After the course of antibiotics MiH said Mimi, who was still called Gollum at the time, looked in much better health. He was also keen to get away from his human caretaker. After releasing him, MiH recalls how he ran off into

- 28 Interview with MiH, 02:02
- 29 Slater et al., "Physical and Behavioral Measures", 1221–24.
- 30 Vojtkovská et al., "Changes in Sociability", 22–23.
- 31 Vojtkovská et al., "Changes in Sociability", 22–23.

the fields rather than head to the outbuildings where he had previously hung out. He disappeared for several days and MiH remembered thinking they would probably never see him again.

However, that was not the case and when he returned several days later. Mimi seemed to have decided to trust the human who had taken care of him. MiH shared the story of how one morning she let Max (her beloved canine friend) out and watched as he went running over to the outbuildings to meet Gollum [now Sméagol, which eventually became abbreviated to Smeemi and then Mimi], who came out of the outbuildings to meet. He let Max lick his face and groom him, and when MiH went out and put more food down for Mimi, he let her sit down next to him. Recalling how she sat next to Mimi while Max continued to groom him, MiH muses whether he saw that Max trusted her and so therefore concluded she must be trustworthy. Alternatively, MiH wondered if maybe it was because Mimi was feeling physically better after his course of antibiotics. "I don't know but it was like there was a real personality change in him, and he let me put the food down, and he still growled and hissed but he didn't try and hurt me or attack me".32 Mimi went on to become a loving housecat in his later years, and this "personality change" likely reflects a case of adult socialization.

Nonhuman Mediators

Examples emerged from the case studies whereby established other-than-human members of a multispecies household were integral to the integration of a new feline family member. Prior to his adoption by CH, Leo and his previous human were regularly visited by Conkey. When Leo joined the family, it was Conkey who CH said helped him and another cat, Leon, adjust to each other's presence. FKH explained that it was Apollo who first started interacting with Luka who had turned up one day (two months prior to the interview) at the window where Apollo liked to sit. When Luka became part of the household both Apollo and Prr immediately accepted him. Max, MiH's beloved German Shepherd was integral to Mimi's socialization and integration into a multispecies household. However, unlike with

32 Interview with MiH, 05:55.

Luka, Apollo, and Prr, the bonding was not immediate. MiH said Max was quite respectful of the personal spaces of cats, and a bit wary of them. However, MiH noticed that when she let Max out, he would gravitate more and more towards the outbuildings and that Gollum [Mimi] would come out of the shed to meet Max. She explained how Max would sit a little apart while Mimi ate until they gradually became more and more comfortable in each other's company.

After Mimi had returned from wherever he disappeared to upon being released following treatment for his ingrown eyelash and infection, MiH said she would sit next to Max while he groomed Mimi. Eventually Mimi started initiating physical contact whenever MiH put out food, namely pushing his head against her hand. This is a classic example of affiliative behaviour occurring between a socialized cat and a human they feel bonded too.³³ Then MiH recalled how one morning Mimi was sat on the doorstep, so she left the door open and put the food just inside the house. From then on, if the door was open, Mimi would come into the house and even get up on the sofa. MiH remembered he was smelly and would spray urine in the house. However, they put a litter tray down for him and "he did start using it in the end for the most part".³⁴ From this point on, Mimi seemed to progress rapidly to become human-friendly in a relatively short space of time. This can be contrasted to the slow progress in the beginning, when he resisted attempts to persuade him that humans could be trusted.

2. Relationship-Building and Communication

Prominent themes related to relationship building and communications were a recognition of the need to respect feline agency, which often conflicted with concern and anxiety over the cat's safety. However, mutual trust-building and various forms of cat-human communication were key to navigating conflicting interests.

How do cats communicate with humans, and vice versa? It is well documented that free-living cats who are raised in colonies do not

34 Interview with MiH, 07:49.

³³ Finka, "Conspecific and Human Sociality", 298. Vitale and Udell, "The Quality of Being Sociable", 15–16.

have the same level or diversity of vocalizations as those raised in human households. Cats develop auditory communications intended specifically for their humans and use vocalizations more frequently when communicating with humans than with other cats.³⁵ Cats can recognize the names given by humans to other feline family members, and possibly to other human family members too, and conversely cats develop distinct calls that their humans can often recognize.³⁶ In the context of a cat-human relationship, a cat will learn what signals their humans respond to. Ellis et al., measured the ability of ten guardians to recognize the context of their cat's vocalizations versus those of random cats. Contexts in which the vocalizations were exhibited were during food preparation, when food was being withheld, cats negotiating a barrier (trapped in a room), and attention solicitation. Although a relatively small sample size, forty percent of participants in the study were able to correctly identify the vocalizations that belonged to their own cats, but none of the participants scored higher than would be expected by random chance when vocalizations belonged to an unfamiliar cat.³⁷ The study suggested that cats created communications that their own humans are able to interpret, even if it did not happen in the majority of cases. Furthermore, familiarity with the cats seemed to be prerequisite to the ability to understand what a cat is attempting to communicate.

CH described how Conkey communicated his desire to roam outside, and this understanding led to her accommodate what she perceived to be his wishes (and there is no indication these were not Conkey's wishes). When CH first accompanied Conkey on his ventures outdoors they would come back in together and take the stairs. However, according to CH, it was Conkey who first decided and communicated that they should take the elevator instead. CH explained how in the early days she would sit on the step and wait for Conkey, but one day he just sauntered passed and walked through the open elevator door and sat there looking at her. Surprised by this, CH decided

37 Ellis et al., "Human Classification", 631–32.

³⁵ Reviewed by Turner, "The Mechanics of Social Interactions".

³⁶ Ellis et al., "Human Classification", 629–31. Takagi et al., "Cats Learn".

to let him ride the elevator with her to see how he would react. Since then, he regularly took the elevator and amused the neighbours by sitting outside the elevator door waiting for them to open it so he could ride with them.

Talking about how Memphis learned to come to a whistle, MH said she "trained him" and "could go out and stand in the street and whistle and he would generally turn up within five minutes".³⁸ MH said her daughter (aged 3) tried to whistle because she observed how her mother used this signal to call Memphis and Tambo. Memphis would walk alongside MH to the local shops and back, something she said just happened — Memphis decided to follow her, and it became a habit. CH said she also sometimes accompanied Conkey on walks, but this shared activity started off as something more intentional. With Conkey, the walking together was part of the process of Conkey transitioning from an indoor-only cat to one who goes out to roam. CH has studied feline behaviour and was reluctant to use the term "training". She said she preferred to answer questions such as "Are you training him?" with "No, we're doing a programme" or "I'm just accompanying him [on a walk]".³⁹

Although some might describe the learning process that led to Conkey understanding the "come home" call (key-jangling) as training, CH preferred to think of it in terms of the co-creation of mutually understood signals. She said, "he taught me things" and "we developed, or I developed with him, certain signals and clicks".⁴⁰ CH said that most of the time Conkey comes when she calls him, and other times he will answer back with his distinct "meow" as if to say, "I'm over here, wait for me".⁴¹ CH shared a video clip of Conkey coming home in response to her jangling keys and calling his name. In the clip, CH can be seen shaking keys with Conkey casually walking towards her. As he approached CH his tail was erect and slightly bent at the end. At the end of the clip, Conkey walks right up to CH and

- 38 Interview with MH, 53:08.
- 39 Interview with CH, 18:01.
- 40 Interview with CH, 16:44.
- 41 Interview with CH, 17:07.

head bops her hand and enjoys a chin rub, which, combined with the "tail up-bent tip" posture, is indicative of affiliative behaviour.⁴² The video concluded with Conkey leading the way back home.

Learning results from experiences, which may or may not be construed. Training is an active process whereby behaviour is manipulated and modified until an individual has learned how to perform a specific activity or fulfil a specified role. Donna Haraway refers to "multidirectional relationships in which always more than one responsive entity is in the process of becoming".⁴³ This is essentially the seat of intersubjectivity, with the contact zone providing a space to develop a "response-able" relationship. Haraway asserts that "Partners do not preexist their relating; the partners are precisely what come out of the inter- and intra-relating of fleshly, significant, semiotic-material being".⁴⁴ It is worth noting that Haraway is a dog trainer who participated with her canine partners in dog agility competitions.⁴⁵ And while Haraway's approach might be more enlightened than traditional dog training methods such as adverse stimuli or negative reinforcement, they are nonetheless driven by a human desire for the dog to cooperate in a certain way.46 In other-than-human animal training there is invariably a power imbalance with the human trainer assuming the superior role. Companion animals, and especially dogs, are "trained to meet human cultural expectations".⁴⁷ In this respect, cats may have benefited from the widespread assumption that they are not as "trainable" as dogs.⁴⁸ However, with an increasing trend of "adventure cats" and leash walking, especially in the United States, this might be cause for concern for more introverted felines whose guardians are not sensitive to their needs and desires.⁴⁹ Rather than broad generalizations about cats, those concerned with feline welfare should promote the recognition of cats as

- 42 Cafazzo and Natoli, "The Social Function of Tail Up", 61–64.
- 43 Haraway, When Species Meet, 71.
- 44 Haraway, When Species Meet, 165.
- 45 Haraway, Companion Species Manifesto, 11.
- 46 Vieira de Castro et al., "Dog Training Methods".
- 47 Lewis, "A Biosemiotic Perspective", 771.
- 48 Bradshaw, "Normal Feline Behaviour", 417.
- 49 Moss, Adventure Cats. Also see https://www.adventurecats.org/.

individuals and encourage guardians to seek a mutual understanding with their cats.

Amelia Lewis asserts a paradigm shift towards dynamic semiosis and mutual understanding would "lead toward an acceptance that training is not the most enlightened way of communicating with other species".⁵⁰ Essentially, rather than "communicating to", we should endeavour to "communicate with" other animals. Biosemiotics is the study of prelinguistic meaning-making, and involves body language and vocalizations that express desires, moods, or ideas that can be decoded by the recipient. All animals with subjective minds, including humans, use body language and symbolic actions to communicate within, and between species, and to develop mutual understanding. This pre-linguistic signalling is often considered a secondary or supplemental form of communication between adult humans.⁵¹ However, for infants, humans with mental or physical impairments, and those who have not learned a shared linguistic language, non-linguistic communication becomes primary. Thus, while the development of complex linguistic systems increases the capacity for intersubjective communication, these are not essential.

The Algers assumed a theoretical perspective of symbolic interactionism to study both feline–feline and human–feline relationships.⁵² Symbolic interactionism explains the negotiation of meaning as an interactive social process that is in constant flux, with meaning being created, reproduced, and modified via social interaction.⁵³ Language can be defined as a system of symbols that "provides a means to negotiate meaning, to assign names, to engage in discourse, and to build systems of knowledge".⁵⁴ Symbolic interactionism requires a sense of self, and a system of symbols that can be interpreted and is more than simply being a response to a stimulus. Furthermore, the sense of self emerges from a series of social interactions that

- 50 Lewis, "A Biosemiotic Perspective", 778.
- 51 Cartmill, "Overcoming Bias".
- 52 Alger and Alger, "Cat Culture, Human Culture", 200; *Cat Culture*, 10–11.
- 53 See Aksan et al., "Symbolic Interaction Theory", 902-4; Alger and Alger, "Beyond Mead",67; Blumer, "Symbolic Interactionism".
- 54 Irvine, "Sociology and Anthrozoology", 124.

were originally defined as being exclusive to human linguistic communications.⁵⁵ However, we communicate differently with different humans, depending on age (baby versus adult), senses (using visual signals to communicate with hearing impaired individuals), level of shared spoken language, etc. Furthermore, a complex human language is not necessary to produce shared meaning, and sign processes are not exclusive to humans. Eduardo Kohn writes that "the transspecies semiosis that emerges in human–animal interactions exhibits characteristics that go beyond what we would traditionally identify as human forms of representation."⁵⁶ Likewise, cats arguably use different forms of expressions to communicate to a human than they might with another cat. We do not communicate with a cat the same way we might communicate with a human, and vice versa. Neither do we communicate in a "cat language" but co-create a transspecies form of communication.

A classic way of developing joint signals involves food, which is something that various training methods have built upon. If a cat asks for food and receives a treat, they will repeat that same signal.⁵⁷ Cats in this study also developed different strategies to get their human's attention. For example, PALH said Apollo likes to ask for treats by standing on his hind legs and reaching up with a front paw. FKH said if one of her cats was in trouble the other would come and get her. She referred to this action as "to Lassie" meaning they behaved like the TV dog Lassie, namely by alerting a human and leading them to a person in trouble.⁵⁸ The first time this happened FKH said she took a while to understand what was going on. Someone staying in the house had inadvertently shut a sleeping Fantastic in her wardrobe before leaving that morning. FKH described how later that day Kapow was meowing, walking away, stopping, and meowing at her again like he wanted her to follow him, which she eventually

- 55 Mead, "Individualistic and Social Theories", 144–52.
- 56 Kohn, "How Dogs Dream", 7.
- 57 Bradshaw and Ellis, The Trainable Cat, 25–40.
- 58 *Lassie* was an American television series that followed the adventures of a female Collie dog named Lassie and her companions, both human and other-than-human. The original show ran from 1953 to 1973, and a Canadian remake aired from 1997 to 1999.

did. Then she said when he got to the guest room door he stopped and started meowing and standing up with his paws on the door. It was at that point that FKH said she heard a faint "meow" and realized Fantastic was in there and found him in the wardrobe. Apparently both cats have now done this a few times. Another time was when Kapow got stuck under the bed and Fantastic started dancing around FKH's feet until she followed him upstairs to the bedroom. At the time, Kapow was recovering from an injury and had stiches and was on medication, meaning he was probably more distressed about being trapped than he otherwise would have been. These are all examples of cats using biosemiotics signals to communicate with their humans, who were ultimately able to decode the meaning (or at least they believed they understood correctly).

3. Multispecies Neighbourhoods as Hybrid Communities

The notion of more-than-human communities attempts to decentralize the human within a post-humanist framework of multispecies interactions.⁵⁹ This aligns with theories of more-than-human families, where the boundaries between human and nonhuman members are blurred but not erased.⁶⁰ However, multispecies households and communities are simply spaces occupied by more than one species, and the relationship between a guardian and their companion animal need not by necessity be a familial bond. Dominique Lestel proposes the concept of "hybrid communities" to understand the relationship between humans and other animals that coinhabit the same space.⁶¹ These hybrid communities share common interests, attempt to reconcile conflicting interests, and in doing so co-create shared meanings. Nathalie Blanc describes a hybrid community as one "in which living beings (subjects, individual persons in varying degrees), live together, and share: meanings (semiotics), interests (conflicting spaces), affects (emotional and psychological dimension)".62

- 59 Panelli, "More-than-Human", 82.
- 60 Charles, "Post-human Families?"; Fox, "Animal Behaviours"; Irvine and Cilia, "More-than-Human Families".
- 61 Lestel, "Hybrid Communities" 67.
- 62 Blanc, "Animals in the Midst", 413.

Roaming companion cats become part of a larger, multispecies community, interacting with human neighbours, other domesticated animals, and wildlife. Many cats have social lives independent of their guardians. Cats in the case studies who roamed outside unaccompanied were Memphis and Tambo (MH), Fantastic and Kapow (FKH), Phoebe (PH), Conkey (CH), Sam (SF), and Morgan (MF). SF and MF were human neighbours who Sam and Morgan had befriended, respectively, and whose company they enjoyed. These cats are not only members of multispecies families, but also part of a larger hybrid community.

Strife with and Dangers from Human Neighbours

Examples of cats being welcomed visitors by their human neighbours included accounts from MH, CH, SF, and MF. However, not everyone appreciates feline visitors. Aside from the potential ecological impact of cats on many ecosystems, hunting habits are points of contention amongst bird-enthusiasts and a cause of disgruntlement or outrage amongst neighbours.⁶³ MH said she sometimes came across threads on social media about how cats should be kept inside, and that these can get quite heated. Emotive and sometimes cruel comments targeted at guardians who allow their cats to roam were prominent throughout my analysis of user comments responding to media related to roaming cats.⁶⁴ The anonymous commenting function facilitates this type of bullying or threatening behaviour, but MH said she experienced it once in the form of a handwritten note pinned to her door. She explained the gist of it was "look after your cat better otherwise we'll call the RSPCA on you".⁶⁵ MH found this very upsetting, and suspected Memphis was probably going into someone's house and stealing food or making himself comfortable. Although nothing more transpired, MH said that after that incident she was somewhat unsettled. Another time MH remembered feeling her cats' safety was being threatened was a few months prior to our interview. The incident involved a man with a greyhound who was using the carpark behind their house to walk the dog. She said,

- 63 Hill, "Feral and Out of Control", 145–46.
- 64 Hill, "A Right to Roam?", 80–229.
- 65 Interview with MH, 46:17.

"Although the dog was on a lead, he would stand there and let it bark".⁶⁶ MH said she felt like "he was coming and deliberately using her cats for the dog's entertainment".⁶⁷ MH recognizes this fear likely stemmed from when she first worked as an inner-city vet and had to treat several cats who were victims of a gang of teenagers intentionally setting dogs on them. These stories shared similarities to the discourses examined regarding the fears of the possible dangers posed to roaming cats, which are not always unfounded.⁶⁸ It is not that guardians in this study are unaware of the risks posed to their roaming cats or that they do not care enough. As illustrated by the narratives of CH and MH, the decision to allow their cats to roam was not taken lightly. However, the guardians ultimately believed it to be in the cats' best interests to have their choices and agency respected.

Multispecies Community Belonging

A big part of roaming for some cats appears to be socializing and exploring the human world, and engaging with the humans who inhabit it. While, Mimi, Phoebe, Fantastic, and Kapow are mostly socially exclusive to the humans they have bonded too, Memphis, Sam, Morgan, and Conkey enjoy human company and will readily befriend humans outside of their home. Soon after he was permitted to go off by himself, CH tells how Conkey started frequenting and visiting neighbours' apartments. Conkey got to know most of the neighbours and they him. If they are around, one of the apartment block neighbours will ring the doorbell for Conkey when he gets out of the elevator. Sometimes CH will accompany Conkey on short walks, and several people who CH does not know will come up and say hi to Conkey.

Since he was a kitten, Memphis has sought human company and befriended the neighbours wherever they have lived. MH first found out about this aspect of his social life after returning from vacation, when the friends who were feeding him informed her Memphis had

- 67 Interview with MH, 56:50
- 68 Elliott et al., "Responsible Cat Ownership", 703; van Eeden et al., "Putting the Cat".

⁶⁶ Interview with MH, 56:40.

gone missing. They put out "missing cat" flyers, and the neighbour Memphis had chosen to stay with contacted them. This man knew Memphis as the cat who came around every day at around 11 a.m. for fish. In MH's absence Memphis spent more and more time with the fish-providing man and decided to stay over until MH returned. Cats are often perceived as aloof and independent companion animals, and free-living, unsocialized cats are often assumed not to want or need human company.⁶⁹ However, cats are often misunderstood as both a species and as individuals. Eriksson et al., reported that, although cats appear unaffected by being left home alone, they initiated greater contact-seeking behaviour following a prolonged separation from their person, implying that the human is an important part of their social environment.⁷⁰ Rather than get distressed about his human's absence, it would seem Memphis just went off and found company elsewhere.

After the family moved to a village when he was around age three, Memphis continued to befriend humans, acquiring names such as Fluffy and Misha. For example, the couple who called him Misha he visited regularly over a period of several years. Their current home is close to the centre of town, and MH said both cats now interact regularly with many of the same people. They live near a cathedral and the groundsman knows both Memphis and Tambo. Not long after they had moved in, Memphis started wandering over to the groundsman for a stroke, or to get his tummy tickled. The groundsman became endeared by both cats and started growing catnip especially for them. A week prior to our interview, MH was in a Zoom meeting with a colleague who recognized Memphis on camera. This was another example of how much MH is unaware of Memphis's social life. During the conversation she learned how her colleague would drop his wife and daughter off in the cathedral carpark, and the daughter looked forward to seeing the "Cathedral Kitty" (aka Memphis). Memphis enjoys the attention and will often just sit on a local war memorial while being photographed by tourists. Sometimes they will share their food with him, which he likes even more.

69 Finka, "Conspecific and Human Sociality", 298.

70 Eriksson et al. "Cats and Owners Interact".

Humanimalia 15.1 (2024)

MF does not know who Morgan's people are, or even if he has a home. However, he is healthy and well fed, but not by MF, who claims to have never given him food. His other humans likely do not call him Morgan, which is a name that MF and her partner gave him. MF and her partner had very little experience of cats, but found Morgan's bold but friendly disposition endearing. At first, MF said she was concerned Morgan might be a stray so she sent some photos to a friend who apparently knew about cats. This friend reassured MF that Morgan looked well fed, healthy, and likely had a home. He does not visit every day and will sometimes go for a week without visiting. Morgan enjoys sitting on the sofa with the young couple, or keeping them company while they work at the computer. Unlike MF, SF does know Sam's family, who live a few houses down. Sam's humans even made a special cat door in the fence so he can continue to visit now his arthritis makes climbing the fence challenging. Sam has been visiting SF and her mother since he and his family moved in around ten years ago. Sam continued visiting after they got a new kitten, Bella, and the two cats would play together. When they first met, Bella was a kitten and Sam seemed to know to play gently with her. Bella sadly died aged only six, but Sam continued to visit, and was a big comfort to both SF and her mother.

Roaming cats also interact with other species in ways that are not hunting and killing them. MH recants how, when he was younger, Memphis could sometimes be seen trotting behind, or walking companionably alongside a fox. She said neither fox nor cat seemed afraid nor overly excited, and just accepted each other's presence. However, Memphis was less sure of the rabbit who lived in the garden they later shared with a neighbour just after they had returned to the UK (with Tambo in tow). This companion rabbit had run of the garden and would try and chase both Memphis and Tambo, but only Tambo had any interest in playing. Memphis would just run off.

The cats in the case studies are also different in their affinity towards other cats. Memphis is wary of other cats and does not seek out feline company. Phoebe keeps her distance more out of fear, which can be attributed to her having been traumatized by a cat bite she had received prior to adoption. Because there are a lot of cats where they live, this is a bit of an issue. Sometimes she will start hissing and shaking and gets distressed if there is another cat around or has been in their garden. Conversely, Sam and Conkey are confident and sociable around members of the same species. Conkey befriended Leo during his regular visits to one of the neighbours (where Leo lived at the time) and the two got along well. This pre-existing friendship with Conkey helped Leo adjust to a multi-cat household. Likewise, Apollo befriended Luka prior to him becoming part of the family, which may have helped with his integration.

Conclusions

This study demonstrated how different cats functioned within multispecies households and navigated relationships with both cat and non-cat animals, including guardians and other humans. Differences in adaptability to changing circumstances, such as the arrival of new family members, moving house, etc., could in part be explained by what the cats were reported to have experienced in their lifetime, but also brought to the forefront the importance of recognizing cats as individuals. As Barbara Smuts laments, "We humans relinquish personhood over and over due to our failure to recognize the subjectivity and individuality of members of other species."71 Likewise, cats cannot be understood by simply reducing them to genes, biology, and environmental input. Like humans, cats are beings who are more than the sum of their parts. This study provides insight into how relationships are formed between cats and humans, and how individuals of each species engage with transspecies communication within and beyond their homes. All case studies demonstrated the intersubjectivity of cat-human relationship-building as both species attempted to understand and trust each other.

Several limitations were inherent to my case study analysis. Primarily, in accessing the feline perspective. Any interpretations of feline behaviours were derived from second-hand accounts, to which the interviewee had invariably pre-assigned meaning. This

71 Smuts, "Between Species", 125.

Humanimalia 15.1 (2024)

is problematic because it relies on the assumption that cat guardians know their cats well enough to understand what they were feeling or thinking. Furthermore, cats who may not be genetically predisposed to sociality will be less likely to engage in interspecies intersubjectivity, especially if not fully socialized to humans during kittenhood. Therefore, the recruitment phase was inherently bias towards cases involving cats who are more social. Another aspect to note is that participants were influenced by cultural constructions of "responsible pet ownership" promoted in the UK, such as desexing, and the notion that cats need to roam outside to live happy and healthy lives.⁷² The examples of cat-human intersubjectivity described here are embedded within that culture, and interspecies intersubjectivity may manifest differently in places where free-living (unowned) cats are more common, and are either cared for or persecuted. Furthermore, my thematic approach guided the analysis of multispecies families and communities towards preconceived concepts. Nonetheless, this provided a framework to examine facets of interspecies intersubjectivity within the contexts of cathuman relationships and multispecies families.

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