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The Importance of Language in the Relationships between Humans and Non-Humans

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STUDIES AND RESEARCH CONTRIBUTIONS

COMMENTS, DEBATES, REPORTS AND INTERVIEWS

Language as Gesture and Giggling Rats

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Abstract

The use of language is frequently cited as a metric for moral consideration. This metric is typically a tool to exclude animal being from the realm of ethics or to promote human exceptionalism. Maurice Merleau-Ponty claims language is a gesture with varying degrees of complexity. Many animal beings use gesture to convey meaning complex and abstract enough to qualify as language according to Merleau-Ponty's parameters. Rats, despite being thought of as vermin and of a lower order, are some of the beings that convey abstract and complex meaning through gesture. Rats play, work, socialize, communicate meaning, and even laugh. Rats, along with human and many other animal beings use language and should be usured into the realm of moral consideration with any and all language using beings. If not, some other metric for exclusion would have to be adopted.

Keywords: companion animals; embodiment; gesture; language; laughter; Maurice Merleau-Ponty; moral consideration; rats; speech; working animals.

By teaching us how to read, they had taught us how to get away.
Robert C. O'Brien, *Mrs. Frisby and the Rats of NIMH*

1. Unpopular companion animals

My partner Katie and my daughter Addison love rats. They keep them as companion animals, feed them, play with them, take them to the veterinarian, give them antibiotics, and snuggle with them. They love these strange little creatures the way many people love their dogs, cats, and horses. The rats Katie and Addie rescue inspire them to learn and understand the rats more thoroughly. Katie sends me articles she has read about rats giggling while tickled (Panksepp and Burgdorf 2003), or ones about rats that help clear minefields (DeAngelo 2020). Katie and Addison notice the proclivi-

ties, demeanors, and personalities of their companion rats. Someone less astute might accuse them of anthropomorphizing the rats. I believe that is a mistake. Social mammals, like the human-animal, do social things and have social identities. Social lives are clearly not exceptional to human-animals. My family would attest to what Bernard Rollin might call common sense knowledge of the animal and its needs (Rollin 2017, 200-201). If you are going to care for an animal, like a rat, you should know something about them, and they do know a thing or two about rats. I, on the other hand, have spent twenty-two years working in bars and restaurants and I struggle with the idea of having rats living in the house with us. Our rats love to play hide-and-seek on Katie's kitchen counter. I remind her that this is a Washington State health code violation and almost certainly a violation in other states as well. I have increasingly softened to each new mischief, but I remain less enamored by them than my partner or my daughter. Why is it that I have this resistance? Why is it much easier to make a claim that whales, elephants, or other "higher mammals" have language and should be considered morally? Katie and Addie actively argue for the moral consideration of their companion rats. But rats? Several of my friends and colleagues would shudder at the thought.

Rats have been and continue to be associated with disease and filth. The words we use to describe them reinforce our collective disdain. The name alone causes many of us to recoil. Even researchers fascinated by their social structures, history, and migration cannot help but adopt imagery and language of fear and loathing. Dr. Jason Munshi-South unconsciously uses terms like "pest species" despite his academic interest in the brown rat's adjacent history with European humans' migration (Wu 2022). We use the term to describe dishonesty, disarray, selfishness, suspicion, squalor, cowardice, cooperation with police, and these are just a few examples (Harper 2001). Even mischief, the word used to describe a group of rats, is steeped in negative connotation. The two definitions offered by the website peteducate.com are "harm or trouble caused by someone or something" and "playful misbehavior" (*Pet Educate* 2021). One captures a misunderstanding, and the other definition accurately describes rats' demeanor. Our cultural aversion to these beings may be magnified through our language and the (mis)conceptions surrounding them. I believe this makes rats a good choice for my inquiry. If I can show that even a species as unpopular as the rat should not be morally excluded based on language use, many other beings (and many human animals) might also warrant reconsideration.

I am concerned that non-verbal beings are excluded from moral consideration because they do not use speech and speech is mistaken for

a marker of human exceptionalism. Speech is frequently conflated with language and language becomes a site for the moral exclusion of animal-beings and indeed some human-beings from certain group memberships. By defining language only as oration, we obscure other modes of language and reinforce a framework of human exceptionalism. Maurice Merleau-Ponty has an embodied account of language which complicates the "speech as language" model. Embodied accounts of language could include the laughter, play and labor of rats as a form of language. The debate over moral considerability may not be solved in this way, but by showing that many animal-beings (I will of course focus on rats) use language, many more animal-beings and some human-beings will have to be included in moral consideration.

2. Language as gesture

Maurice Merleau-Ponty is one phenomenologist who describes language as a gesture. He may still distinguish between the mind and the body, but his account of language and of language learning is embodied. Merleau-Ponty describes this embodied language as a gesturing. I would, however, be doing Merleau-Ponty a disservice if I neglected to mention he believes language is a strictly human activity. He believes that

> [t]his insertion of our factual situation as a particular case within the system of other possible situations begins as soon as we *designate* a point in space with our finger. For this pointing gesture, which animals do not understand, supposes that we are already installed in virtual space – at the end of the line prolonging our finger in a centrifugal and cultural space. (Baldwin 2004, 28)

Even in this moment, Merleau-Ponty has clearly missed something. Perhaps he never had a dog who lounged on his couch but knew through the simple gesture of pointing at the ground that "couch time" had come to an end. The pointing gesture can convey meaning across divides of species, culture, age, vernacular, and sensory ability. Merleau-Ponty believes gestures are the "first language" for precisely this reason (2004, 28). Part of what Merleau-Ponty is teasing here is that gesture coveys meaning and as more meaning is taken up by subjects communicating with one another, gestures become increasingly precise and systematic (*ibid.*, 39). There is a break that Merleau-Ponty believes is relevant. Once gestures become precise and systematic enough, they cease to be representations of meaning but representations of the thought related to the meaning. I think a written example may help illustrate this point. When I type the let-

ters "R", "E", and "D" there is nothing about the shapes that are created, the movements of my fingers, or the image my reader sees that suggest the crimson hue of a tropical hibiscus. The reader extrapolates meaning from the representation of the thought rather than the color. Merleau-Ponty uses a similar example, "the sense of the gesture is not perceived like, for example, the color of the rug" (Merleau-Ponty 2013, 190). Through something akin to social convention, listeners (or readers) can extrapolate meaning from gestures. In the case of human beings, these gestures evolve into speech, but even Merleau-Ponty's jump from representational gesture to abstract representation does not, in my opinion, mean that the representations cease to be gestures. What I am saying, and Merleau-Ponty would agree, is that human speech is still a gesture. Speech just happens to be an effective gesture human beings use to make nuanced gestures that express (and are even sometimes understood) meaning and thoughts. These effective gestures, however, do not make a strong case for human exceptionalism.

Human beings have found that by passing air and fluids across, over, and through the surfaces of our bodies (especially the mouth, nose, and throat) we can convey a variety of meanings. I do not believe this is what makes us special but what makes us especially good at speech. John McWhorter points out we have exceptionally effective vocal cords and asks us to imagine what might happen to a human being who ate dog food from a dog bowl with a dog's fervor. He worries we might risk choking to death, but this is hardly a dire danger for the dog (McWhorter 2013).

I believe Merleau-Ponty overstates the transcendence of the human mind. However, I agree that language has subjective but constitutive powers. He states, "Speech is a gesture, and its signification is a world" (Merleau-Ponty 2013, 190). Which may seem incompatible with rats' language. Do rats, or other animals (social mammals or otherwise) have worldviews with which to wrestle? I believe this is where Merleau-Ponty makes his distinction between animals and humans, however, rats do have a worldview. That worldview may not sync with a human being's, but every being must have a spatial, structural, and social understanding simply to survive. An anthropocentric view makes little to no sense in this case. But what does this have to do with language? Language conveys meaning, meaning about our world and ourselves. Human language, as Merleau-Ponty has shown, is gesture. This gesture, however, is not necessarily exclusively human nor a maker of human exceptionalism. I feel compelled to make a distinction between communication and language (as gesture). Communication can convey information, as can language,

but only language has the capacity to convey meaning. This distinction may seem superficial, but since language use is a metric to excuse exclusion, the distinction demands deliberation. What then, is the difference between meaning and information?

Merleau-Ponty, although he is trying to take animals out of the conversation, notices the importance of intersubjectivity. This linguistic intersubjectivity is

> the understanding of gestures is achieved through the reciprocity between my intentions and the body as expression, and speech the other person's gestures, and between my gestures and the intentions which can be read in the other person's behavior. Everything happens as if the other person's intention inhabited my body, or as if my intentions inhabited his body. The gesture I witness sketches out the first signs of an intentional object. (Merleau-Ponty 2013, 190-191)

Clearly, by conveying meaning a subject must convey something of itself and that must be taken up by the witness. Simply conveying information would not require recognition of intersubjective intentions. In the next section, I will show that there is an element of intersubjectivity that occurs between rats when they gesture, grapple, and giggle.

3. Laughter, play, and community of rats

Jaak Panksepp is a neuroscientist who is interested in the neuroscience of emotions. He is one of the pioneers of affective neuroscience and he discovered that rats laugh (McGrath 2015). Panksepp plays with rats in his research facility, and as it turns out, they are ticklish. Rats laugh in a register too high for the human ear to hear. However, with the aid of auditory devices, this ultrasonic chirping can be heard. Panksepp discovered the ticklishness of rats after hearing the sound during play. That is, playing with other rats. Panksepp and his team decided to tickle their subjects to see if they could reproduce the sound (*ibid.*). They could. This discovery disrupts anthropocentric intuitions that believe laughing is solely a human activity. Virginia Morell believes Panksepp's research has "helped overturn the old, Cartesian idea that emotion and reason are separate entities" (Morell 2013, 116). When Morell accompanies Panksepp to his lab at Washington State University, she offers a third-party account of the research. They meet at Penksepp's home where he keeps his work clothes sealed and away from his cat. Penksepp had discovered early in his research that the rats could smell his cat on his clothes and would not play and certainly would not laugh if they smelled his cat (*ibid.*,

117). Morell finds this significant and suspects an evolutionary response to the presence of a predator. Although, the other implication is that the laughter is related to an emotional state. Stress and uncertainty disrupt the phenomena Panksepp calls laughter and play. This response to uncertainty is confirmed by Lydia Chain and Catherine Caruso (2016). Their brief video includes an element of a study in which researchers place rat subjects on an exposed pedestal showered with light. The subject rats that were "out in the open" did not readily respond to tickling. This supports the thought that tickling and play are contingent on mood.

Panksepp and Burgdorf are also confident that habits of play and laughter, although not necessarily apparent, have an evolutionary advantage for social animals. They theorize that "one [possible] ultimate evolutionary function of such states is to help organize social dynamics in support of reproductive fitness" (Panksepp and Burgdorf 2003, 541). Laughter socializes humans and rats and Penksepp and Burgdorf have conducted several experiments with this theory in mind (*ibid.*, 533). I was especially struck by one experiment where isolated rats would seek out play with researchers, "their behavior reflects an instrumental attempt to elicit playful engagement from their only available partner (the experimenter's hand)" (*ibid.*, 540). Katie and Addie would think this hypothesis is a matter of common sense. When they have small mischiefs of two or three rats, the rats depend much more on Katie and Addie for affection, playtime, and physical contact. The larger the mischief, say five or six rats, the less they depend on the humans for social interaction and play. The larger groups play with each other more and, while they still enjoy the human interactions, they are far less emotionally dependent on Katie and Addison. Mary Midgley largely agrees with the underlying interspecies social organizing that Panksepp, Burdorf, Katie, and Addie observe. She believes a species will prefer its own kind but is not prevented from making meaningful social bonds with members of a substitute species (Midgley 1998, 108-109).

Panksepp and Burdorf (2003, 540-541) are aware they make a substantial claim by asserting that social interaction is an evolutionary advantage. However, seeing how rats in particular interact with one another and have distinct personalities, the claim seems less dramatic. When animal-beings like rats live in communities, the interests of the individual are innately tied to the interests of the group. Even if mating where the only function of social interaction, personalities would be material. I may sound like I am willfully anthropomorphizing rats, but an anthropocentric view does little to account for the different personalities between individual rats. Dirty Harry, Addison's favorite rat, can only be

described as strange. Harry will sit in the same spot for hours if he has some blankets and some food. Most rats will get bored and explore a new setting after fifteen or twenty minutes because they want to play, but not Harry. He tolerates playing with his brothers but rarely initiates the play. His brothers appear to know he is different and show him more affection than they show each other (which is saying something). They sleep with him and snuggle with him when he has been isolated for too long. He does not behave like other rats. This could be chalked up to a psychological disorder rather than a personality type, and maybe it is, but a social developmental disorder should probably fundamentally assume personality. Harry is an extreme example, but Mateo may be a more nuanced case. Mateo was one of Katie's favorite rats, and she was his favorite being, human or rat. He had his own predispositions too. Mateo loved affection and contact from humans and rats, but he was also fastidiously clean and wherever someone would touch his body, he would clean and groom shortly after. He spent more time preening himself than any of the rats we have housed during the time I have been part of Katie's life. Pyewacket is a curmudgeon, Achoo is adventurous, Nina was domineering, I could go on. The point is not that my family anthropomorphizes their companion animals, but that the companion animals are diverse in their own context and socialize on their own terms. Whether this is enough to claim personalities in rats (although I would like to be convincing) is immaterial. What is certainly clear is each individual has tendencies and must therefore engage with the world and their community in a way that attempts to align with those tendencies. Each rat, then, must have their own worldview.

How does a worldview follow from tendencies or proclivities? The decisions made based on those proclivities or tendencies are value judgments. Mateo cleaned himself because in some lived way, he believed that being clean is better than being (frankly, the tiniest bit) dirty. Mateo could compartmentalize too. If the dogs were in the room, both of whom are "ratting" dogs, he would forgo his bath to stay near Katie and feel safe. So, Mateo was not acting automatically, he had a preference, but he could be in a mood-state that would cause him to forego his preference. Mateo was not destined by some essentialism to clean himself; he had his own wants and desires; he made his way in the world in ways that made sense to him. Mateo had a worldview. This worldview may not be useful or intelligible to a human, but that worldview still has meaning. Meaning itself is perhaps not philosophically interesting but meaning and a community is. Meaning coupled with community creates social life. Panksepp and Burgdorf recognize the relationship between social

interaction and emotions. Besides studying the socioemotional response of laughter, "[the] other prong of [their] work was devoted to analyzing the special social-emotional aspects of this vocalization" (Panksepp and Burgdorf 2003, 535). Laughter for Panksepp and Burgdorf is a social and emotional activity. Although they also seem to be claiming that the emotional is social.

Laughter, then, is social and emotional, and an evolutionary advantage for social animals. Play is also motivated by social interaction. Pinning behavior for instance, is tied to social status (Panksepp 1981, 331). Subjects determine social order through non-aggressive play. This looks like "rough housing" but is precisely the activity in which Panksepp discovered rats' ultrasonic laughter. Alone, this does not seem interesting, many species jockey for supremacy through physical competition and that competition is not always motivated by aggression. Panksepp observes, that the "most characteristic aspect of rat play was its assertiveness, though it appeared to lack the hallmarks of true aggression. Basically, the play appeared friendly" (2003, 331). The activity of rough housing is an intimate social activity rather than just creating a hierarchy. The supremacy that comes from rough housing is more related to the likability of specific members of a mischief. Members who "win" too much or make the game less fun are less popular with the other citizens of the mischief and therefore have less social power. Morrell highlights another complexity Panksepp reveals to her about play and pinning. There are rules. According to Morrell "one rat ends up winning a majority (about 70 percent) of the pinning matches – but the winner keeps the game fun by handicapping himself or herself, letting the other rat hold him or her down" (Morell 2013, 120). I believe this begins to show the complexity of play and social interaction. Each rat is figuring out its station in the social order, but they are committed to the "fun" of play. They show awareness of the other and yield something to that intention (not to lose all the time) to satisfy their own intention (to keep playing). Rats interact with each other in more ways than play, although play and laughter has been the focus of this discussion. They can empathize with one another. One of Addison's rats was sick, and his cage mates would bring food to him, and they would share treats with him when he did not have the energy to leave his hammock.

4. Laughter, play, and work as embodied language

Do the social emotional elements of laughter and of play constitute language? Is a social life alone enough to assume a language, embodied or otherwise? I think that a social life is certainly evidence of a communication capacity, but, as I mentioned earlier, communication alone does not rise to the complexity of language. Panksepp has not taken up this argument and remains focused on the emotional dimension of laughter, tickling, and play. Language, however, is simply not his project. Panksepp and Burgdorf believe play, and therefore tickling and laughing, clearly (albeit surprisingly) have evolutionary advantages for social animals like rats. Why and how does social situating through play benefit a species from an evolutionary standpoint? In a community, like a mischief, the wellbeing of the group outweighs the wellbeing of the individual. The survival of the community is paramount to the survival of the individual. A lone rat would not and could not thrive in the way a community of rats could. By being social, rats recognize the other. The dominant subject foregoing uncontested dominance for the sake of the game recognizes the other. This recognition is not necessarily altruistic (although it could be) but the point is there is an understanding of one's desires and of the other's desires. There is meaning in this interaction that is not captured by a simple struggle for social superiority.

Rats have also become working animals. In Cambodia, the most densely landmine-laden location in the world, rats clear minefields (DeAngelo 2020). The reasons rats are employed for this labor is that they have an excellent sense of smell, they tend to be too light to set off the explosives, and they are intelligent enough to be trained. The rats can smell explosive material whereas metal detectors sometimes yield false positives. Mines are set to detonate at somewhere between eleven and thirty-five point three pounds and rats tend to weigh less than three pounds (none of Katie or Addison's rats have weighed more than two pounds) (*ibid.*). Training rats is not as difficult as it might be to train other animals, although some of them, due to their personalities, prove to be more independent than others. Like dogs, rats are pack animals and like to please their mates and people. More than this, they negotiate. Dogs can give a cue when they smell drugs or bombs, and they (I assume) are rewarded. Mine-clearing rats are also rewarded with their treat of choice, bananas. What I found interesting in DeAngelo's article is that the handlers have a clicker. When the rat signals it has found an explosive device, the handler clicks a clicker to signal the rat that they may go get their treat. Obviously, this mode of communication protects the

handler from having to enter the minefield and reward the rat by hand. However, this communication is abstracted. The rat must first understand what the handler is looking for. When he or she discovers a device, they must communicate (convey information) to the handler effectively. The rat must then interpret the meaning of the clicker. The clicker, like Merleau-Ponty's rug, does not represent the banana, but conveys (represents) the abstracted thought of a banana. Clearing a minefield is a simple example of inter-species communication, but more than this, it shows that the rats here interpret and convey meaning rather than simply complete a task for approval or operant conditioning. Charlotte Sophie Leidinger, Nadine Kaiser, Nadine Baumgart, and Jan Baumgart promote the use of clicker training to prime laboratory housed rats to change cages (Leidinger *et al.* 2021). Rats' living areas need to be cleaned and to do so, they are typically moved to an already clean cage. The moving and the handling of these rats is stressful and a potential health hazard. The researchers are confident they have used operant training, with a clicker, and trained the rats to change cages voluntarily. The argument being the rats are just simply responding to stimuli. However, "[e]ven without training, the rats learn to perform the desired behavior by observation" (*ibid.*). Although the researchers believe the rats have been conditioned to behave in some way, they are still conveying meaning to one another in an embodied mode. There seems to be little difference between this example and how human animals might participate in on-the-job training.

To recap, rats play with other rats and researchers. This is an embodied activity that creates a social structure but also relationships between subjects. They develop relationships through recognition of the self and the other and convey and interpret meaning through play. Rats laugh. They are ticklish and this is an element of play. They seek tickling when they feel safe and secure, they like this style of play only when they are in the mood. They also anticipate tickling after some social conditioning, when Panksepp or other researchers gesture towards tickling, rats know what is coming and begin to giggle in anticipation of the impending tickling (Morell 2013, 121). Rats are interpreting the meaning of these pre-tickling movements. They also convey meaning by seeking the tickling hand or by not laughing in tense situations. By not laughing, the rat conveys the meaning of his or her emotional state. Rats also work. That is, they have work relationships with human beings that demand understanding between subjects. The rat conveys and interprets information but also meaning through gesture. All these examples illustrate the distinction between communication, conveying information, and

conveying meaning, language. Merleau-Ponty has a robust anthropocentric account of language that he believes excludes animals from the use of language. I feel he misses the way his embodied account of language challenges human exceptionalism and includes many animals. Animals who are typically excluded from moral consideration in the abstract or (as in the case of rats) in policy. For example, the *Animal Welfare Act* of 1966 excludes rats along with guinea pigs, mice, and farm animals from protection (Rollin 2017, 172). By asserting an embodied form of language use, Merleau-Ponty and others must concede that animals (like rats) indeed use language. If those thinkers or policy makers choose to retain language use as metric from moral consideration, they must start to include many more beings into moral consideration. Consequently, researchers should adopt practices for rats and other common research animals that recognize the intention and desire of these beings. Adopting an embodied account of language use may even require reimagining the scope of the *Animal Welfare Act*.

5. Closing thoughts

While I have been consumed with writing this essay, thinking about rats, bodies, speech, language, gesture, and moral consideration, Katie has been at our home a state (and a world) away. She has made an appointment with the veterinarian to have Pyewacket put down. His lungs have been ravaged by a common respiratory infection and he displays all the typical behavior of a rat who no longer wishes to fight. Katie has also discovered that a handful of outdoor rats have burrowed under the basement door. She worries she will be driven to place traps or else the rats will chew through wires running beneath the floorboards. Addison's solution is to use non-lethal traps and release them in a nearby greenbelt. This, however, is illegal. I hear the crack in Katie's voice over the phone and picture her eyes welling up while she wrestles with this double bind. Rats may be euthanized or killed and disposed of in any manner deemed convenient. "They have no rights so, we can throw them in a dumpster like they're garbage, but because they are vermin, we can't put them in a new home" she laments to me. "I've spent the last two months moving heaven and earth to keep Pye alive just to turn around and kill another one just like him? I'm just really struggling with it". I placate her with promises of pouring concrete over the summer and placing auditory deterrents in the basement, but I am struck by the impact of civic policies on her (our) lived experiences. A philosophical framework has, by trying to

organize the world according to seemingly arbitrary criteria, driven some to become death dealers without consensus. This lays bare the tangible function of philosophy. A philosophical framework, or the way we see the world, may seem like nothing more than a mental exercise, but there are concrete and destructive consequences that follow from having a particular world view. A philosophy can dictate how we move about in the world and what we treat with reverence or disdain. Our world view might cause us to reject a life-saving procedure, for instance. Philosophy can also be a constructive force. A particular world view can have concrete benefits. For example, ideological shifts in the medical community contributed to the better treatment of people with mental health concerns. Our lived experiences can be shaped by our philosophical frameworks or the philosophical frameworks of those beings who surround us.

I realize I have asked for a revision of moral consideration based on an unconventional interpretation of language. Some may find this argument compelling while others may not. I know I cannot and am not asking that we all welcome rats into our homes. Our history with these beings is permeated by a fear of disease, uncleanliness, and the damage rats can cause to homes. This history contributes to repulsion and can cause an apathetic attitude to the well-being of rats by some human animals. This may explain why rats have been permanent fixtures in research settings. Norwegian rats and white rats have been some of the most frequently used beings in research seemingly out of habit (Rollin 2017, 230-231). The dependence upon rats as research subjects creates an absurdity related to Katie's anxiety. Many rats may be indiscriminately exterminated as vermin while an entire industry of captive breeding for research purposes thrives. Research aside, some people will always find rats repellent, and frankly changing those perceptions is not my project. I would ask that we question human exceptionalism and reflect on the parameters we use to exclude. Are those parameters accurate, are they useful, or are they simply convenient because they align moral justifications with matters of taste? Language is a fascinating element of living, but humans are not the only beings who employ it. We use speech, but speech itself is less fascinating. Language has the capacity to convey meaning between subjects. Speech is simply one bodily activity that can transmit meaningful language or information, but speech itself does not contain meaning. Meaning, self-actualization, recognition of the other, community building, and negotiation are elements of language that are deeper than just information. All these elements can be and are conveyed through bodily activity, whether that activity is speech, play, or laughter. What is important is that two subjects have access to much

more than just the information conveyed between them. Language is indeed bodily, and humans are not the only ones who use it. We should act accordingly.

References

Baldwin, Thomas. 2004. *Maurice Merleau-Ponty: Basic Writings*. London - New York: Routledge.

Chain, Lydia, and Catherine Caruso. 2016. "Eavesdrop on Ultrasonic Rat Giggles". *Scientific American*. New York: Springer Nature American Inc. https://www.scientificamerican.com/video/eavesdrop-on-ultrasonic-rat-giggles/

DeAngelo, Darcie. 2020. "Rats Help Clear Minefields in Cambodia – and Suspicion of the Military". *The Conversation*. Last modified October 26. http://theconversation.com/rats-help-clear-minefields-in-cambodia-and-suspicion-of-the-military-148685

Harper, Douglas. 2001. "Etymology of Rat". *Online Etymology Dictionary*. https://www.etymonline.com/word/rat

Leidinger, Charlotte S., Nadine Kaiser, Nadine Baumgart, and Jan Baumgart. 2021. "Using Clicker Training and Social Observation to Teach Rats to Voluntarily Change Cages". *JoVE – Journal of Visualized Experiments* 140: e58511. doi: 10.3791/58511.

McGrath, Megan. 2015. "Do Rats Laugh?". *Thinking Animals United*. Last modified December 20. https://www.thinkinganimalsunited.org/do-rats-laugh/

McWhorter, John. 2013. *The Story of Human Language*. Chantilly (VA): The Teaching Company.

Merleau-Ponty, Maurice. 2013. *Phenomenology of Perception*. New York: Routledge.

Midgley, Mary. 1998. *Animals and Why They Matter*. Athens (GE): University of Georgia Press.

Panksepp, Jaak. 1981. "The Ontogeny of Play in Rats". *Developmental Psychobiology* 14 (4): 327-332.

Panksepp, Jaak, and Jeff Burgdorf. 2003. "'Laughing' Rats and the Evolutionary Antecedents of Human Joy?". *Physiology & Behavior* 79 (3): 533-547.

Pet Educate. 2021. "What Is a Group of Rats Called? [And the Reason Why]". *Pet Educate*. Last modified February 26. https://peteducate.com/what-is-a-group-of-rats-called/

Rollin, Bernard E. 2017. *The Unheeded Cry: Animal Consciousness, Animal Pain, and Science*. Columbia (MO): University of Missouri Press.

Wu, Lawrence. 2022. "'Throughline': How Rats Became One of Earth's Most Successful Mammalian Colonizers". *NPR – National Public Radio*. Last modified April 26. https://www.npr.org/2022/04/26/1094766076/throughline-how-rats-became-one-of-earths-most-successful-mammalian-colonizers

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