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The Capacities and Limitations of Language in Animal Fantasies

Introduction. This paper will explore fictional animal languages and the representation of other forms of communication between nonhuman species in the animal fantasy genre, focusing in particular on Richard Adams's Watership Down (1972). Adams's novel is not the first anthropomorphic narrative to explore ways in which nonhuman animals might communicate by systems other than the human language in which the text itself is written, but its fictional rabbit language of Lapine has inspired subsequent writers in their efforts to represent the capacities and limitations of language in relation to nonhuman systems of communication. It has prompted writers to explore, by focalizing through nonhuman animals, what constitutes a language in the first place. The significance of nonhuman forms of communication, and the place of human language within a spectrum of sign-systems, has been contemporaneously explored in the field "zoosemiotics." Coined and founded by Thomas A. Sebeok in 1963, zoosemiotics denotes the study of systems of communication within and between species (intraspecific and interspecific communication, respectively). While zoosemiotics does not regard nonhuman systems of communication as languages in the sense of our human languages, it does consider various equally, if not more complex, communication systems; human language is encompassed within the much larger sphere of animal (including human) communication. Sebeok writes that

each kind of animal has at its command a repertoire of signs that forms a system unique to it or is, in biological parlance, species-specific. Language is a species-specific trait of man; it is therefore counterproductive and misleading to ascribe language to any other animal, except, perhaps, metaphorically. ("Talking with Animals" 88)

Contrary to Sebeok's separation of language from the nonhuman, I will apply the term *language* in a less limiting sense throughout this paper. As David Abram claims in *The Spell of the Sensuous*,

[e]very attempt to definitively say what language is is subject to a curious limitation. For the only medium with which we can define language is language itself. We are therefore unable to circumscribe the whole of language within our definition. It may be best, then, to leave language

undefined, and to thus acknowledge its open-endedness, its mysteriousness. (73)

This paper will therefore focus on analyzing the capacities and limitations of accepted, human-centered definitions of language inherent in an example of a fictional animal language, Richard Adams's Lapine, as well as in non-verbal channels of communication in *Watership Down* and other animal fantasies.

One aim in exploring the depiction of nonhuman "languages" in animal fantasy is to challenge traditional critical responses to such fiction as anthropomorphic. Do the efforts of certain texts to explore language along a wider spectrum of communication systems across an array of different species provide a basis for defending fictional animal languages against the charge of anthropomorphism? The fact that most of the narratives I shall discuss feature animals communicating through channels other than the spoken language of humans would seem to suggest this is the case, and despite their adherence to the anthropomorphic tropes of animal fantasy for the most part, each narrative demonstrates to some degree a genuine attempt to remain faithful to factual and observable details of animal behavior. Of course, the texts which will be discussed here, most of which are animal fantasies, are inevitably anthropomorphic. Even such natural history narratives as Henry Williamson's Tarka the Otter (1927) feature some level of anthropomorphism, despite their lack of more obvious anthropomorphic elements. Anthropomorphism permeates all narrative; any attempt to represent the consciousness or subjectivity of another individual is an instance of anthropomorphism. Monika Fludernik speaks of the "anthropomorphic bias of narratives and its correlation with the fundamental story parameters of personhood, identity [and] actionality" (9). The more overt anthropomorphic tropes of animal narratives have tended to invite more scrutiny than the more covert, natural-historical elements. In the last sixty years or so, animal narratives have tended towards a more "natural" representation of animal characters, albeit still retaining some of the explicit anthropomorphism of earlier traditions — namely, the trope of ascribing speech to animals.

The focus of this paper on the various channels used to communicate by animal characters in these fantasies is more specific than previous studies on the speaking animal in fiction. Previously, the subject of speaking animals in literature has raised questions about narrative agency and the concept of giving animals a voice with which they evoke sympathy for their suffering from the human reader. Early examples of such didacticism, especially in children's fiction, include Dorothy Kilner's *The Life and Perambulations of a Mouse* (1783). In the nineteenth century, the "animal autobiography"

Black Beauty (1877), written by Anna Sewell, is undoubtedly the most famous example. In Sewell's novel horses communicate with each other in their own language, which is not understood by humans but is rendered as simplified English. Sewell tries to differentiate Beauty's voice from the human voices he overhears and reports. In Black Beauty and subsequent other texts, humans are excluded from the nonhuman realm as they are rendered unable to understand the language spoken between nonhuman others, while the nonhuman characters can understand what humans are saying for the most part. While this may provide a narrative convenience which prevents Sewell's novel from lapsing into the fantastical trope of humans speaking with other animals, it might also be a commentary on the separation of humans from the natural world in the modern age. Literally and metaphorically, we are deaf to the voices of our nonhuman cohabitants.

Later fiction, however, begins to explore questions of language and communication in ways which reflect growing interest in the differences of degree between human and nonhuman animals sparked by evolutionary theory, thus using language as a phenomenon which bridges, rather than widens, the conceptual gap between humans and other species. One of the many debates intensified by Darwinism was that of whether language was a trait unique to human beings or continuous with other forms of animal communication demonstrated by groups as diverse as bees, songbirds, and cetaceans. Darwin himself remarks that,

With social animals, the power of intercommunication between the members of the same community, — and with other species, between the opposite sexes, as well as between the young and the old, — is of the highest importance to them. This is generally effected by means of the voice, but it is certain that gestures and expressions are to a certain extent mutually intelligible. Man not only uses inarticulate cries, gestures, and expressions, but has invented articulate language; if, indeed, the word invented can be applied to a process, completed by innumerable steps, half-consciously made. (44-45)

Darwin makes the point here that human language has developed as a result of evolutionary processes. Humans still retain a plethora of vocal signals demonstrated by other animal species, therefore blurring the boundary between animal communication and human language, between "inarticulate cries, gestures and expressions" and "invented articulate language." Amongst twentieth-century writers who responded to

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this difference of degree between supposedly inarticulate animal sounds and articulate human speech is Franz Kafka.

Kafka's Inarticulate Hybrids. Kafka's short fiction often explores the failing attempts of human-animal hybrids, or "humanimals," to articulate or express themselves to humans despite their capacity for speaking in human language, emphasizing the untranslatability of nonhuman subjective experience into human terms. The most striking example from Kafka's narratives is the character of Red Peter in "A Report to an Academy" (1917). Marianne DeKoven writes: "It is the story of his acquisition of human language that makes Red Peter's life history so important to Kafka's attack on the belief that language is what makes humans superior, in fact supreme beings, not just separate from but dominant over all other animals" (20-21). Kafka's ape-human speaks in articulate human language when addressing his audience of academics, although the process of becoming-human that he undergoes in captivity has prevented him from recounting his life as an ape prior to his capture. He can only recount his experiences leading up to and during his life as ape-become-human. The first instance of Red Peter's acquisition of human signals of communication is learning the handshake: "The first thing I learned was to give a handshake; a handshake betokens frankness; well, today, now that I stand at the very peak of my career, I hope to add frankness in words to the frankness of that first handshake" ("Report" 251). Red Peter interprets the handshake in a manner that ascribes a sort of translation to the gesture, whereas frankness is not the only thing implied by a handshake. A handshake can be a diplomatic gesture or it can demarcate familiarity. Moreover, Red Peter's attempt to translate the meaning of a physical gesture into linguistic terms mirrors human attempts to translate the gestures of animals into language, as well.

Red Peter does demonstrate an understanding of the nuances of meaning, however. "I fear that perhaps you do not quite understand what I mean by 'way out.' I use the expression in its fullest and most popular sense. I deliberately do not use the word 'freedom'" (252). This delineation of the literal from the abstract shows that Red Peter has not only learned to articulately imitate speech but has acquired an understanding of the abstract nature of many concepts expressed in human language. Peter's recollection of his own observations of the ship's crew are also interesting in that he seems at first to invert the human-animal binary. Akira Mizuta Lippit remarks that "[t]he ape's transformation accompanies a noticeable becoming-animal of its human captors and proceeds around the oral/aural loci" (149). "Their laughter had always a gruff bark in it that sounded dangerous but meant nothing," Red Peter recounts. He explains further that "they hardly spoke but only grunted to each other" ("Report" 254). As an ape, Red

Peter initially hears human speech as inarticulate grunting, a form of communication very distant from his familiar and (to him) articulate way of communicating with his own species. Conversely, humans can only hear nonhuman vocalizations as inarticulate sounds. DeKoven interprets the sequence "not as a comic reversal of human and animal, but rather as a moment suggesting their commonality," a reading which might be applied to any of Kafka's short stories depicting "humanimal" hybrids (22).

Gregor Samsa, the protagonist of "The Metamorphosis" who wakes up transformed into a giant cockroach, is another example of one of Kafka's inarticulate "humanimals":

"Gregor," said a voice — it was his mother's — "it's a quarter to seven. Hadn't you a train to catch?" That gentle voice! Gregor had a shock as he heard his own voice answering hers, unmistakably his own voice, it was true, with a persistent horrible twittering squeak behind it like an undertone, which left the words in their clear shape only for the first moment and then rose up reverberating around them to destroy their sense, so that one could not be sure one had heard them rightly. Gregor wanted to answer at length and explain everything, but in the circumstances he confined himself to saying: "Yes, yes, thank you, Mother, I'm getting up now." ("Metamorphosis" 91)

While his family understand his speech at first, the intelligibility of Gregor's words gradually deteriorates as the story unfolds. Instead of forming coherent sentences, Gregor is reduced to uttering audible but incoherent squeaks, and it is the chief clerk who first remarks that his voice is no longer human. However, Gregor's unintelligibility to others correlates with his increasing ability to understand himself: "The words he uttered were no longer understandable, apparently, although they seemed clear enough to him, even clearer than before, perhaps because his ear had grown accustomed to the sound of them" (99). We might arguably read this passage as another moment of "commonality" between the human and the nonhuman.

"The Metamorphosis" could, arguably, occupy a tenuous position on the spectrum of anthropomorphic and zoomorphic representation. David Herman writes that "if anthropomorphism entails the imposition of human language on species that communicate otherwise, zoomorphism can entail the loss of language by the species assumed to be its rightful possessor — thereby staging a different way of being in the

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world" (174). Lippit reads Gregor's transformation as an escape from the limitations of language:

For Gregor to complete the metamorphosis, he must willingly leave behind the human world of consciousness and language. Kafka suggests that once one's existence is no longer regulated by language, by the convergence of language and body, the entire world is thrown into an animated state of disarray [...] Since language is the means by which human beings are said to determine their existence, and since Gregor lacks that capacity to be human, he must instead allow his insect body to lead him to a new identity. (146-47)

While Kafka's narratives do not feature any fictional animal languages, his depiction of human language in "A Report" and "The Metamorphosis" as an inevitably limiting factor in establishing commonalities between humans and other animals (or, indeed, between humans and other humans) illuminates many questions about communication within and between species.

While Kafka's short stories do not strictly belong in the animal fantasy genre, they do seem to encompass tropes found across many genres in which animals feature. As Mario Ortiz Robles asserts, "Kafka lends his name (which means 'crow' in Czech) to a unique generic moniker, the Kafkaesque, that comes to subsume all animal genres with dark bureaucratic efficiency" (20). The preoccupation of his short stories with language and its capacities and limitations provides a useful framework for analyzing texts in the animal fantasy genre which similarly address, and challenge, the place of human language in the spectrum of communication systems across species. Another concept prompted by questions about language in a species-specific context is that of translation. We understand the concept insofar as it applies to translating between different human languages, and primatologists and the like have developed systems for interpreting the bodily and facial gestures of primates and other mammals, but how does animal fantasy translate for animals?

Translating for Animals. Before moving on to discuss the linguistic elements of Watership Down, it should first be noted that the term "Lapine," the name of Richard Adams's rabbit language, is not only derived from the French for "rabbit" but is also an analogue of "Equine," featured in the full title of Anna Sewell's *Black Beauty* (1877), an animal autobiography which is, as the "translator" states, "translated from the original

Equine." Tess Cosslett highlights some inconsistencies in Sewell's text, however, remarking that

"Translating" is a very apt metaphor for the way that Sewell imagines a human voice for animal experiences. It does not, however, account for the horses' ability to understand human language. And, in addition to this understanding a quite different kind of communication goes on from human to animal, via tone and touch. [...] The book's need to promote this kind of sympathetic communication with animals is at odds with the convention that the animals can understand everything the humans say anyway. (69)

The notion of translation figures significantly in all such stories in which nonhuman animals converse in dialogue, which occurs in all manner of texts from the fables of Aesop to the tales of Beatrix Potter, or in animal autobiographies such as Black Beauty. The "view that there exist signs, per se, in animal communication, or in any other communication among living systems," write Kull and Torop, "poses the question about the translatability of these signs, both by humans and by other organisms" (411). Artistic licence, of course, permits literature to bypass the question of translation, especially in the case of talking animals. However, some authors, as Daryl Hague points out, engage in "covert translation"; Hugh Lofting's The Story of Doctor Dolittle (1920) and Margery Sharp's *The Rescuers* (1959) he gives as examples. It is arguable, claims Hague, that from an "ideal semiotic perspective [...] translators add no value at all, since the output is supposed to be directly exchangeable for the input." In Lofting's and Sharp's narratives, "inter-species communication is an issue. What happens is that the narrator expressly states that communication is taking place in mouse language (or whatever), then supposedly translates all the dialogue for the reader. In many instances, the narrator provides these translations inexplicitly, with no reference to their status as translations" (Hague 178).

Ernest Thompson Seton, one of the turn-of-the-century "nature fakers" (along with Jack London and Charles G.D. Roberts), acts as an overt translator in the opening of "Raggylug," his short story about an Eastern cottontail rabbit featured in Wild Animals I Have Known (1898). This is in large part because Seton is one of the most recognized writers of the "realistic" animal story, and thus any elements of his work that might be subject to the charge of anthropomorphism would be qualified by the author. We do

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not find this in the animal fantasy genre, where such elements are to be expected. Seton writes:

Truly rabbits have no speech as we understand it, but they have a way of conveying ideas by a system of sounds, signs, scents, whisker-touches, movements, and example that answers the purpose of speech; and it must be remembered that though in telling this story I freely translate from rabbit into English, *I repeat nothing that they did not say*. (Seton 93-4; author's emphasis)

While Seton makes explicitly clear his role as translator, he also legitimizes his translations on the basis of his own knowledge of the various channels by which rabbits actually communicate. This tenuous basis for defending his translation from "rabbit' into English is rendered more explicitly anthropomorphic later in the narrative. Seton describes how Raggylug's mother, Molly Cottontail, teaches him a signal code: "Rabbits telegraph each other by thumping on the ground with their hind feet [...] A single thump means 'look out' or 'freeze.' A slow thump thump means 'come.' A fast thump thump means 'danger'; and a very fast thump thump thump means 'run for dear life'" (106). While Seton is correct in remarking that rabbits communicate by thumping with their feet, his translation of these signals is limited to one basic meaning per signal. Any of the variations of thumping listed above might signify any number of meanings depending on other variables.

Adams acts as a much more covert translator in *Watership Down*, although Lapine words are occasionally intermingled with English words in the dialogue. The narrator therefore shifts between the translation and the transcription of Lapine. An interesting example of a narrative which features passages of dialogue in an animal language which are not — even overtly — translated, is also a major influence on Adams's novel: Walter de la Mare's *The Three Mulla-Mulgars*, or *The Three Royal Monkeys* (1910). De la Mare's tale depicts monkeys as linguistically diverse creatures. The monkey Seelem teaches his three sons — Thumb, Thimble and Nod — "the common tongue of the Forest-Monkeys — that is the language of nearly all the Mulgars that live in the forests of Munza — Jacquet-Mulgars, Mullabruks, purple-faced and saffron-headed Mulgars, Skeetos, tuft-waving Manquabees, Fly-catchers, and Squirrel-tails," as well as 'a little of the languages of the dreaded Gunga-Mulgars, of the Collobs, and the Babbaboomas. But the Minimul-Mulgars' and the Oomgars' or Man-Monkeys' languages (white, black, or yellow) he could not teach, because he did not know them." Alone, Seelem and his sons speak "the secret language of the Mulla-Mulgars [...] that is, Mulgar-Royal" (De la

Mare 16-17). When Seelem leaves his family to find his brother Assasimmon in his home of Tishnar, he tells his sons: "Wait here and guard your old mother, Muttamatutta, my sons, her Ummuz and Ukkas. And grow strong, O tailless ones, till I return. Zu zoube seese muglareen, een suang no nouano zubpf!' And that was all he said" (18). The reader is left to surmise what this last sentence might mean. Some sort of farewell parting would be an educated guess, but there is no indication as to the meaning of these words. Adams, on the other hand, provides footnotes and a glossary of Lapine terms, although he does not include any full sentences written entirely in Lapine.

Thus there are two central and interdependent features of language which have surfaced from exploring a breadth of animal narratives, and which play a significant role in the animal fantasy genre, particularly in late twentieth- and twenty-first-century texts: the ability of language to express or articulate subjective experience, and its ability to be translated from systems of communication other than human language itself. *Watership Down*, with its fictional rabbit language of Lapine, is the first novel in the animal fantasy genre which really brings to the fore questions about the capacities and limitations of language in relation to these two features.

Watership Down and the Lapine Language. There are several works of literature which feature fictional animal languages to a greater or lesser extent. The argument for these languages as anthropomorphic is twofold: while attributing a system of communication to nonhuman animals which is described in terms of language is clearly anthropomorphic, the recognition of difference between such languages and human languages emphasises their mutual unintelligibility. Richard Adams's rabbit-epic, Watership Down, features a rabbit language called Lapine, in which Adams's characters presumably converse throughout the novel, although their spoken dialogue is translated into English for the understanding of the reader. Adams provides, however, some Lapine terms and their meanings, as well as a Lapine glossary (see table below).

Efrafa	The name of the warren founded by General Woundwort.
El-ahrairah	The rabbit folk hero. The name Elil-hrair-rah means Enemies-Thousand-Prince' = the Prince with a Thousand Enemies.

Elil	Enemies (of rabbits).
Embleer	Stinking, e.g. the smell of a fox
Embleer	Striking, e.g. the shiel of a lox
Flay	.Food, e.g. grass or other green fodder
Flayrah	Unusually good food, e.g. lettuce.
Frith	The sun, personified as a god by rabbits. Frithrah! = lord Sun; used as an exclamation.
Fu Inle	After moonrise.
Hlessi	A rabbit living above ground, without a regular hole or warren. A wandering rabbit, living in the open. (Plural, hlessil.)
Hrair	A great many; an unaccountable number; any number over four. U Hrair = The Thousand (enemies).
Hrairoo	'Little Thousand.' The name of Fiver in Lapine.
Hraka	Droppings, excreta.
Hrududu	A tractor, car or any motor vehicle. (Plural, hrududil.)
Hyzenthlay	Literally, 'Shine-dew-fur' = Fur shining like dew. The name of a doe.
Inle	Literally, the moon; also moonrise. But a second meaning carries the idea of darkness, fear and death.
Lendri	A badger.
Narn	Nice, pleasant (to eat).
Ni-Frith	Noon.
Owsla	The strongest rabbits in the warren, the ruling clique.
Rah	A prince, leader or chief rabbit. Usually used as a suffix. E.g. Threarah = Lord Threar.

Roo	Used as a suffix to denote a diminutive. E.g. Hrairoo.
Sayn	Groundsel.
Silf	Outside, that is, not underground.
Silflay	To go above ground to feed. Literally, to feed outside. Also used as a noun.
Tharn	Stupefied, distraught, hypnotized with fear. But can also, in certain contexts, mean 'looking foolish,' or again 'heartbroken' or 'forlorn.'
Thethuthinnang	'Movement of Leaves.' The name of a doe.
Thlay	Fur.
Thlayli	'Fur-head.' A nickname.
Threar	A rowan tree, or mountain ash.
Thrennions	Berries of rowan tree.
Vair	To excrete, pass droppings.
Zorn	Destroyed, murdered. Denotes a catastrophe.

Adams's Lapine Glossary

From a glance through this glossary, Kathleen Anderson points out that Lapine "consists primarily of nouns (many of them descriptive, objects described through action or negation); it contains numerous multi-syllabic and/or compound words; it is vivid, imagistic, poetic (that is, aesthetic in nature); and it resembles human language in various respects." However, despite this resemblance to elements of human languages (Anderson finds affinities with French, Spanish, Sanskrit, Arabic and Native American languages), she also highlights the seeming lack of abstract linguistic terms. Adams's rabbits "employ words which are practical because they convey concrete and thus accessible meanings, and beautiful because they describe, not replace, what they represent" (Anderson 31). It should also be noted that almost all of the phonemes contained in the Lapine words listed above are soft sounds, which at least shows some

consideration of the limitations of rabbits' vocal capabilities, if it were possible that they spoke a language.

As a spoken language, Lapine comprises only one of a plethora of channels used by the rabbits to communicate both with other species and with each other. Adams draws upon the influence of R.M. Lockley's *The Private Life of the Rabbit* (1964) for passages of description which emulate a style of narration found in the natural history genre. Lockley, homogenizing the terms *language* and *communication*, writes:

Rabbit language is through the senses of sight, smell and hearing — the hearing of signals made by movement, of a body rustling in the grass or in the burrow, or by the thudding stamp of hind feet on the ground in alarm. Vocally, it has two rare sounds: a low nasal grunt, hardly audible, and used in sexual contacts; and a high treble scream or vocal squeal resembling that of a little pig, or perhaps a child in severe distress, and it is only uttered when the rabbit is terrified, as when its life is in danger, in a trap, or when attacked by an enemy. (Lockley 23)

Adams reminds the reader that rabbits communicate primarily through the senses of smell and touch, while also including Lapine terms throughout the novel. Language is depicted at times as useful to the rabbits in formulating concepts relating to their behavior or their environment, at other times unhelpful or only partially useful. Lapine terms such as *tharn*, which describes the "state of staring, glazed paralysis that comes over terrified or exhausted rabbits, so that they sit and watch their enemies — weasels or humans — approach to take their lives" (Adams 24), are simple monosyllabic words which denote complex meanings and describe concepts particular to the lifeworld of the rabbit. The term *hlessi* (plural: *hlessil*), used to describe a wandering rabbit living above ground without a warren, is also a term which describes a concept particular to the rabbits' lifeworld, although there are analogous terms we might use to describe similar figures in human societies — *vagrant*, for example.

The categorizing function of language, however, is also reductive and works against the rabbits' instincts. Take Hazel's encounter with the crow, for example:

It so happened that Hazel had never seen a crow. It did not occur to him that it was following the track of a mole, in the hope of killing it with a blow of its beak and then pulling it out of its shallow run. If he had realized this, he might not have classed it light-heartedly as a "NotHawk" — that is, anything from a wren to a pheasant — and continued on his way up the slope. (39)

While Hazel's lack of caution stems from his lack of any previous knowledge of crows, it is unlikely that as a rabbit in the natural world Hazel would not be instinctually cautious around a new and unfamiliar species of bird. Verbal language, rather than the instinctual language of the senses, guides Hazel's response in this brief passage. Lapine is used to delineate categories of animals in the natural world, most clearly between *elil* (enemies) and not-*elil*. This reductive use of language categories to distinguish predators of rabbits from other animals results in Hazel's classing the crow as a "Not-Hawk."

The limits of language are expressed elsewhere in the novel. After Hazel's company and Cowslip's warren exchange a few spoken words, more sensual channels of communication take over. Adams writes:

There were no more speeches. Rabbits have their own conventions and formalities, but these are few and short by human standards. If Hazel had been a human being he would have been expected to introduce his companions one by one and no doubt each would have been taken in charge as a guest by one of their hosts. In the great burrow, however, things happened differently. The rabbits mingled naturally. They did not talk for talking's sake, in the artificial manner that human beings — and sometimes even their dogs and cats — do. But this did not mean that they were not communicating; merely that they were not communicating by talking. All over the burrow, both the newcomers and those who were at home were accustoming themselves to each other in their own way and their own time; getting to know what the strangers smelt like, how they moved, how they breathed, how they scratched, the feel of their rhythms and pulses. These were their topics and subjects of discussion, carried on without the need of speech. (72)

Adams emphasizes the limits of human language, destabilizing the human-animal dichotomy predicated on the faculty of language, while also aligning the categories of language and communication with, respectively, human and animal modes of exchange. Rabbits are portrayed in the novel as only partially linguistic beings; some

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exchanges, as in the above example, are left described, though unsaid, "topics and subjects of discussion, carried on without the need of speech."

Interspecies communication is an important aspect of Adams's representation of language in Watership Down. Rabbits can communicate with virtually any other species except humans, which again reconfigures the human-animal dichotomy, excluding humans from the animal-centric universe Adams creates. The first spoken exchange between two different species is Hazel's conversation with the field mouse. "Mice do not speak Lapine," Adams tells us, "but there is a very simple, limited lingua franca of the hedgerow and woodland" (143). The field mouse speaks with an Italian lilt: "Go now,' said the mouse. 'No wait owl. But a what I like a say. You 'elp a mouse. One time a mouse 'elp a you. You want 'im, 'e come."' (147). Kehaar, the seagull befriended by Hazel's warren, speaks with a different accent entirely. He speaks the "hedgerow patois," despite not being a creature of hedgerow or woodland, and his speech is a "harsh gabbling which they [the rabbits] all felt immediately to be exotic. Wherever the bird came from, it was somewhere far away. The accent was strange and guttural, the speech distorted. They could catch only a word here and there" (Adams, 179). While the field mouse's accent is Italian, Kehaar's is Norwegian, as evidenced in a remark by Adams himself: "Kehaar's character, even his voice, is based on a Norwegian Resistance man I knew in the war, a splendid chap, Johansen" ("To the Order" 121).

It is also mentioned in the novel that the Efrafan rabbits speak with a different accent to Hazel's warren; accents do not only differ between species. The inclusion of a lingua franca understood by most nonhuman animals suggests that each animal speaks a language particular to their species, but only nonhuman animals understand the hedgerow patois. It is not only this patois to which human beings are unattuned, it is also the subtler sounds and signals of the natural world and its creatures. "A bat flittered through the trees and out again without touching a twig. It was followed by another," writes Adams. "Hazel could sense that there were many all about, taking flies and moths on the wing and uttering their minute cries as they flew. A human ear would hardly have heard them, but to the rabbits the air was full of their calls" (Watership 288). While there is a flavor of primitivism in Adams's exclusion of humans, particularly modern, industrial humans, from the linguistic exchanges of nonhuman animals, it is not implausible to speculate on mutually intelligible forms of communication between other species. "In order to avoid predators, capture prey or in other ways further the mutual advantage of two or more species," writes Sebeok, "animals must have additional code-switching capabilities, an interspecific communication system" (88). Perhaps Adams's hedgerow patois is an expression of these "additional code-switching

capabilities." Interspecific communication also exists between humans and other, significantly non-domesticated, animal species:

A famous example of interspecific communication to mutual advantage is found in the savannahs of Africa south of the Sahara, where a bird, called the honey guide, indicates to man the location of beehives that the bird cannot open but on whose honeycombs it likes to feed. This bird produces conspicuous beckoning calls, followed by certain optical signs, until a willing human being finds the hive, feeds the wax to the bird and consumes the honey himself. (89)

The honey guide communicates its meaning to humans not only through bodily gestures but, significantly, through vocal signals.

Language is often used in a novel like *Watership Down* to symbolize primitivist tropes. For example, the dichotomy between orality and literacy, between spoken/natural and written/artificial language, is used to mirror other dichotomies, such as nature/culture, nature/technology, and, most importantly, animal/human. Lissa Paul writes: "When rabbits abandon their oral tradition in favour of literacy, as they do in Cowslip's warren, they lose their rabbit identities and are doomed." There is a critical difference depicted in *Watership Down*, argues Paul, "between vital oral rabbits and doomed literate ones" (118). Visible, material markers of language are depicted as negative forces in Adams's novel: the notice-board placed by humans signifying the destruction of the Sandleford warren, the stones in Cowslip's warren symbolizing a false concept of El-ahrairah, the claw marks gouged into the bodies of the Efrafan rabbits to indicate their appointed time for feeding, or *silflay*.

Kathleen Anderson claims that the oral traditions of Adams's rabbits indicate a reading of nature: "Rabbits cannot read humans' printed texts, but they can read the texture of nature as no human can. Thus, their emphasis on nature as an integral element in their oral narratives occurs as a manifestation of their instinctive reading of the nature-text" (29). According to this reading, Adams is implying that humans lack the ability to read the "nature-text" which is accessible to rabbits and, presumably, other nonhuman animals and "primitive" people. Lapine, argues Anderson, "represents a literalization of nature, and as such, an affirmation of textuality" (32). Adams's rabbit language thus breaks down primitivist dichotomies, and Adams attempts to think through the process of linguistic expression by assuming the perspective of another animal. He considers

features of the landscape, both natural and man-made, which are significant to the rabbits' lifeworld, and the rabbits' language reflects the degree of significance pertaining to particular features. Rabbits need know nothing more than whether or not another animal is a predator, for example, or whether or not an object is a "man-thing." Adams's attention to the differently experienced world of another species, despite the human author being inevitably sundered from experiencing it himself, is nonetheless demonstrated by his particular lexical and semantic choices when it comes to his construction of Lapine. Nuances of meaning and the significance of lifeworld both play a crucial part in subsequent works of animal fantasy which explore the capacities and limitations of language.

Ursula Le Guin's "Therolinguistics." Ursula Le Guin's short story, "'The Author of the Acacia Seeds' and Other Extracts from the Journal of the Association of Therolinguistics" (1974), features a discipline called "therolinguistics', the study of animal languages specifically. Le Guin applies the term "language" loosely indeed, and her story is one of the most intriguing in terms of questioning our assumptions about what should define language. The story opens with a description of some messages left by a colony of ants: "The messages were found written in touch-gland exudation on degerminated acacia seeds laid in rows at the end of a narrow, erratic tunnel leading off from one of the deeper levels of the colony." It is of particular interest that these messages are not only written but the seeds are arranged in an ordered sequence. While Le Guin specifies that these messages are "fragmentary, and the translation approximate and highly interpretative," the advances in translation imagined in her story include the means to translate not only vocal or visual signals, but chemical signals as well (11). Literacy, in Le Guin's story, also undermines the hierarchy of the ant colony: "The seeds, carefully arranged in a pattern resembling a musical stave, had not been disturbed. (Ants of the soldier class are illiterate; thus the soldier was presumably not interested in the collection of useless seeds from which the edible germs had been removed.)" (13). This contrasts with Adams's polarization of literacy and orality in Watership Down, in which the rabbit societies that flourish rely less on written forms of communication and more on oral storytelling to preserve their cultural history and the mythology of El-ahrairah, the semi-divine rabbit trickster figure.

In the second extract from Le Guin's story, about different dialects of penguin language, the therolinguistic study of these birds is conducted by monitoring body language, rather than translating chemical signals: "On film it is at least possible to repeat, and to slow down, the fluid sequences of the script, to the point where, by constant repetition and patient study, many elements of the most elegant and lively literature may be

grasped, though the nuances, and perhaps the essence, must forever elude us" (13-14). Le Guin overrules scientific conclusions about the definitive characteristics of language here; "body language" acquires a literal instead of a figurative status. Rather than merely measuring language in written or spoken form, therolinguistics translates even the visual signals and gestures of nonhuman animals. Moreover, Le Guin attributes a kind of "writing" to penguins through the medium of their bodies. Penguin language supposedly has "analogies with Dolphin," although it "seemed strange that a script written almost entirely in wings, neck, and air, should prove the key to the poetry of short-necked, flipper-winged water-writers" (14).

The inclusion of all of these signed nonhuman forms of communication within the umbrella term of "language" in Le Guin's story emphasizes to the reader the limitations of that system of communication that humans have traditionally understood as language. Edward O. Wilson, founder of sociobiology, humbles his human readers by calling us "chemosensory idiots." "By comparison," he writes, "most other organisms are geniuses. More than 99 percent of the species of animals, plants, fungi, and microbes rely exclusively or almost exclusively on a selection of chemicals (pheromones) to communicate with members of the same species" (80-81). Wilson's discussion of chemical communication between other organisms serves to highlight the anthropocentric partiality towards human language as the most advanced system of communication. As humans, we have tended to disregard the senses of smell and taste in the communication process because we do not rely on these senses to communicate ourselves. Analogous arguments could be made for any quality which has been proposed as being unique to humans (morality, free will, knowledge of death, and so on).

Hauser, Chomsky, and Fitch even go so far as to deconstruct our long-standing assumptions about what makes human language unique. Amongst these assumptions is the view that human language alone features categorical perception, "the phenomenon by which the categories possessed by an observer influences the observers' perception"; for example, our perception of a rainbow possessing a finite amount of distinct colors is influenced by our preconception of these colors as distinct categories (Goldstone and Hendrickson 69). "It was some time before the same underlying perceptual discontinuities were discovered in chinchillas and macaques, and even birds," they explain, "leading to the opposite conclusion that the perceptual basis for categorical perception is a primitive vertebrate characteristic that evolved for general auditory processing, as opposed to specific speech processing." They conclude:

A trait present in nonhuman animals did not evolve specifically for human language, although it may be part of the language faculty and play an intimate role in language processing. It is possible, of course, that a trait evolved in nonhuman animals and humans independently, as analogues rather than homologues. This would preserve the possibility that the trait evolved for language in humans but evolved for some other reason in the comparative animal group. (Hauser, Chomsky and Fitch 1572)

Returning to Le Guin's story, the message written in the acacia seeds bears a "striking lack of resemblance to any other Ant texts known to us." The opening lines of the text are as follows:

Seeds 1-13

[I will] not touch feelers. [I will] not stroke. [I will] spend on dry seeds [my] soul's sweetness. It may be found when [I am] dead. Touch this dry wood! [I] call! [I am] here!

Alternatively, this passage may be read:

[Do] not touch feelers. [Do] not stroke. Spend on dry seeds [your] soul's sweetness. [Others] may find it when [you are] dead. Touch this dry wood! Call: [I am] here!

The narrator explains that no "known dialect of Ant employs any verbal person except the third person singular and plural and the first person plural"; ant language possesses "he/she/it," "they" and "we," but no subjective "I" (11). This suggests that the ants that composed this new message are different in that they demonstrate self-awareness.

Dominique Lestel writes:

Another approach to animal cultures might consider that they constitute societies in which the more central communication is to the society, the greater the individual member's gradient of freedom, and that the most remarkable feature of this complexification is the emergence of an animal subject which prefigures the possibility of a human subject. (377)

Perhaps fictional animal languages that are attributed to members of a species which supposedly possess more self-awareness are less a matter for speculation than those attributed to species with a lower degree of self-awareness. This correlation would seem to confirm rather than to challenge the assumption that the complexity of a

communication system depends on the degree of intelligence in a particular species. However, this assumption requires a clearer definition of intelligence and how it can be measured other than by its comparability with humans.

Le Guin ends her short story with an extract that opens with the question: "What is Language?" In this third extract, Le Guin addresses contemporaneous scientific debates regarding currently accepted and limiting definitions of language. "The question," the narrator writes, "central to the science of therolinguistics, has been answered heuristically — by the very existence of the science. Language is communication" (17). Language and communication are thus one and the same, according to Le Guin. But the narrator is dissatisfied even with this broad answer. "Why do therolinguists study only animals?" they ask. Therolinguists "have not faced the almost terrifying challenge of the Plant" (18). This is an interesting development in the narrative. Le Guin's speculations on the potential languages of plants reflect similar speculations about animal languages at the time her short story was written. Its not-too-distant-future setting places "The Author of the Acacia Seeds" on the cusp between the acceptance of already discovered animal languages (towards which contemporaneous scientific studies were tending) and another complete revision of the definitive features of language itself. The narrator can only speculate on whether plants can communicate in their own vastly different sort of language:

Can we in fact know it? Can we ever understand it?

It will be immensely difficult. That is clear. But we should not despair. Remember that so late as the mid-twentieth century, most scientists, and many artists, did not believe that even Dolphin would ever be comprehensible to the human brain — or worth comprehending! Let another century pass, and we may seem equally laughable. "Do you realize," the phytolinguist will say to the aesthetic critic, "that they couldn't even read Eggplant?" And they will smile at our ignorance, as they pick up their rucksacks and hike on up to read the newly deciphered lyrics of the lichen on the north face of Pike's Peak.

The narrator even goes on to consider that "after them, may there not come that even bolder adventurer — the first geolinguist, who, ignoring the delicate, transient lyrics of the lichen, will read beneath it the still less communicative, still more passive, wholly atemporal, cold, volcanic poetry of the rocks" (19). This semi-satirical note on which the narrative ends suggests that yes, if animal "languages" can, and are, being discovered,

then the floodgates of possibility might be thrown open wider still, while at the same time pointing out that there are inevitable limits to the human capacity to understand the "languages" of other species. Perhaps we are not meant to understand them, but only to appreciate that a system of communication unique to each species may very well exist, and that this is enough for us to reconsider the arbitrary distinctions we make between ourselves and nonhuman animals.

Post-Lapine: Other Channels of Communication in Animal Fantasies. Many animal fantasy narratives after *Watership Down* have also explored the complexity of communication systems in different species. Kenneth Oppel's *Silverwing* (1997), the first of a series about a colony of bats, describes the way in which bats communicate through the auditory channel of echolocation, although the novel does not feature a bat language of any kind. One of the Silverwing elders, Frieda, brings Shade, the young runt and protagonist of the novel, to the echo chamber, located deep in a cave beneath the home of the colony in Tree Haven:

He found himself in a surprisingly small, completely round, and totally deserted cave. But it wasn't truly deserted. All around him, like currents of warm air, were voices, moaning at his ears, getting caught in his fur, his wings.

"Fold your wings tight," Frieda said, carefully closing the mud panel behind Shade, "and stay still."

He barely breathed. Still the voices seemed faint and far away, but he could hear them more clearly now as they swirled about:

- "...in the winter of that year..."
- "...owls took their revenge..."
- "...fifteen newborns died in the nursery..."
- "...rebellion crushed after the battle..."

And he realized they were echoes, bouncing off the walls of the cave, again and again and again.

"See how smooth the walls are," Frieda whispered. "It took years to hollow them out, polish them. Generations. But it had to be smooth, or else the echoes would snag and fade. Here they can bounce for centuries. It's not perfect. Sound escapes even through the door they so carefully built, and which I tend to every spring. Sound gets old. Loses its power." (Oppel 32-33)

Oppel depicts the echo chamber as a sort of archive recorded with echoes, albeit an archive which inevitably fades over time. Of course, the spoken dialogue between the bats in Oppel's novel is written in English, the language of the author, but the bats' communication through echoes is more central to its depiction of language and communication.

After Tree Haven is destroyed by the owls, the Silverwing colony begins their migratory journey south, and along the way Shade's mother, Ariel, shows him the path of their journey by singing him a map: "Ariel pressed her forehead against his and began to sing. A brilliant silvery landscape flared up from the darkness: a forest, a clearing, and a high oak rising up, spreading branches. It was Tree Haven" (55-56). Once Ariel has sung the path, Shade is able to visualize the various landmarks along the path after he is separated from the clan during a storm. Echolocation is but one element of Oppel's series that marks the first attempt in the animal fantasy genre to address Thomas Nagel's conundrum: what is it like to be a bat?

David Clement-Davies's *Fire Bringer* (1999) features a protagonist, a red deer named Rannoch, who can communicate with other animal species by means of a mysterious power. He converses with a raven early in the story, as well as a mole during his time living with humans. Again, there are no fictional animal languages featured in the novel, although the subject of language remains central to the story. Rannoch cannot understand human language, although the tone and texture of their speech evokes images in Rannoch's mind: "Then the voices came again. They seemed to be all around him now. First there was one, then two, then three, and the texture of each sounded different to the deer. One — the boy's — was like a spring. Another, like a dead pool. The third was like a waterfall" (226). Despite being unable to understand the humans, Rannoch is able to discern some of the characteristics of each human by the texture of their speech. Rannoch believes his ability to talk to other animals is unique until he meets Rurl the seal:

"I mean, how do you think I found out about the world? I've had conversations with dolphins that would make your fur stand on end. I've talked to penguins and kittiwakes. I've chatted to sharks — from the rocks, of course — and I've even had a long talk with an albatross, though I wouldn't recommend it — they've really got very little to say for themselves."

"But I never learnt it," said Rannoch.

"You don't need to learn it; all Lera could do it if they wanted to. Or rather if they'd only stop thinking of themselves and being afraid all the time. Listen for a change."

The seal's tone had grown rather serious.

"There was a time, in the old days, when all the animals conversed as a matter of course. But they lost the knack. Don't ask me why. Most of the sea creatures can still do it but that's the trouble with the land, I suppose.

It cuts you off. Splits you up, if you know what I mean."

Rannoch looked rather relieved.

"But why couldn't I understand the boy?" he asked.

"Ah. No animal can talk to man and no animal should," Rurl muttered.

"But man is an animal too, isn't he?" (252-53)

Land animals have lost the ability to converse with each other, claims the seal, because of the physical barrier of the land itself. Rurl's assertion could also suggest that when creatures evolved and started to walk and live on the land, they gradually lost the ability to communicate with one another. Language is thus tied to the landscape, contradicting conceptualizations of language as a system of arbitrary signs. Clement-Davies extends the primitivist trope found in Adams's novel of excluding humans from the domain of animal communication to other species. By developing written, artificial forms of language, humans have forgotten the ancient, natural language by which they once communicated with the nonhuman world.

Scents, Codes and the Language of Dance in Laline Paull's *The Bees*. Laline Paull's novel *The Bees* (2014) is a more recent example of an animal fantasy which blends the anthropomorphic trope of having nonhuman characters speak in human language with the representation of systems and channels by which they actually communicate. The "language" of bees, which is communicated largely via frequencies and vibrations in the air, and pheromone signals, really sheds light on the limitations of human language. Paull's narrative does not treat the apian system of communication as a language in the more liberal way employed by Le Guin in her short story. Instead, Paull depicts the ways in which the honeybees communicate by both paying close attention to the observations of ethologists on honeybee behavior, and drawing on a repertoire of mechanomorphic terms typically used to describe insects in particular. Any nonanthropomorphic "language" which is depicted in The Bees is described in terms of frequencies and codes and various other terms we would normally understand as technical jargon.

The language of codes and scents which is depicted in the novel is clearly portrayed as a capacity which is instinctual rather than learned. Flora 717, the sanitation bee who is the protagonist of the novel, is bombarded by an influx of information from the moment she hatches, passed on to her through an elaborate network of codes: "As the Queen's Love flowed through her body and brain, all the different frequencies and codes in the tiles slowed and clarified into a map of the hive, constantly running with information" (10). This transfer of information into Flora's body and brain sounds like the uploading of files onto a computer, and the "language" of the hive is described in this way countless times throughout the narrative.

There is a more anthropocentrically charged element to Paull's representation of language. When Flora is brought to Sister Teasel, whose kin are the nurses of the hive, Sister Teasel is surprised when she discovers that Flora is capable of speech: "'She speaks? The impudence! [...] I hope all Sanitation is not now possessed of tongues for we shall be in uproar!' She glared at Flora. 'Obstreperous dirty creatures'" (15). This attitude reflects the anthropocentric distinction (one of many) that humans have traditionally drawn between humans and other animals based on the supposition that only humans can speak, as well as the ethical stakes implied by this distinction. In this instance, however, the distinction which the capacity for speech is used to advance is that between higher and lower kin of honeybees in the hive. Much like human language itself, this hierarchy in the hive is an arbitrary construct, emphasizing the capacity of language to enforce power, despite its limitations elsewhere.

Similarly to Adams's representation of the more articulate (i.e. Standard English) speech of the rabbits compared with the simplified hedgerow patois spoken by other animals, Paull's novel includes some spoken interactions between the honeybees and other insects which feature some similar differences. Interestingly, bees and wasps seem to speak with very much the same level of Standard English, probably to be expected considering the close genetic relationship of the two insect groups. The bee (Apis) and the wasp (Vespa) address each other as cousins during instances where they encounter one another. Bees and spiders also have no trouble understanding one another, which is more surprising considering spiders are arachnids. However, bees and ants, both members of the Hymenoptera group of insects, struggle to communicate with each other through speech, evidenced by the following passage:

Flora hovered as low as she could and called out in clumsy Hymenopteraese, the old shared tongue.

```
"Speech, sister!"

The largest of the ants paused from directing the column's labour. Her mandibles shone black and strong.

"Speech, sister," she replied in her strange accent.

Flora struggled to remember the coded tongue from the Queen's Library.

"The dead," she said, 'befell?"

"Sick rain."

"When?'

The big ant pulsed her antennae. "Two...sun."

"Two days ago?" (115-16)
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In this passage the capacity possessed by bees and ants to communicate through speech is limited indeed, more so that the rabbits' ability to speak to the field mouse, the cat, or Kehaar the seagull in *Watership Down*. It is unclear, however, whose Hymenopteraese is more advanced, Flora's or the ant's. This is of course due to the fact that the narrative is written from the perspective of the former, as *Watership Down* is written from the perspective of the rabbits.

But speech is not the most powerful form of communication in the hive, or indeed a channel by which insects naturally communicate. Sister Sage remarks to Flora about the Sisters Teasel that "they must still use speech to know each other's thoughts. It is most quaint" (29). As a system of communication vocalized speech is therefore inferior to the transmission of scents and codes, and is depicted as almost primitive ("quaint") in hive society. The Sisters Sage, the tyrannous priestesses of the hive, often extract secrets from honeybees of lower kin, including Flora, by detecting scents through their powerful antenna. One secret that Flora tries to conceal from them is that she has laid an egg, an act which is outlawed in the hive for any bee besides the queen. When Flora resists their probing in order to conceal her secret, she finds herself beset by several Sisters Sage intent on extracting it from her: "Another priestess joined the first, and Flora felt their combined will focusing on breaking into her mind. They probed her antennae with their powerful scent, trying to force their chemicals into her brain — but despite the burning pain, Flora maintained her lock. She concentrated on speaking calmly" (123). It is interesting here that "speaking calmly" is a way in which Flora can bluff her way through the situation, emphasizing the capacity of spoken language to deceive.

The passage of Paull's novel which remains truest to accounts of communication between honeybees is the description of dances performed by foraging bees to communicate such details as the location of pollen, the richest sources of pollen, and the distance of pollen from the hive. German ethologist Karl von Frisch first discovered this language of dance, and Paull's depiction of the dance in her novel remains true to observation for the most part:

Finding space by Flora, [the forager] began to dance. Slow and clear she stamped out a single phrase, over and over until the bees understood it and the rhythm caught. Then she clicked her wing-latches open, pulsed her thoracic-engine and shimmered and stopped her wings to the same rhythm. Other bees applauded and began to follow as back and forth she ran, into one section of the crowd then another, trailing the lure of raw nectar behind her. She stopped at another forager and fed her a drop from her own mouth. The sparkle of fresh nectar lit the air and the bees cheered again, and more ran to learn the dance.

Flora ran too, thrilled by the mixed scent of nectar and the cold fresh air clinging to the forager's wings. Her mind grew sharp with excitement as her feet picked up the choreography — and suddenly she understood the language of the dance.

Go south! sang the bee's steps. For this long!

There were fields — she described the pattern of the crops — the heavy waving heads of grain, the great west current of air that always blew through them — more fields, the stream, count two fences...

Then East! And the forager ran again, swirling and buzzing her abdomen to urge more sisters to follow. Many bees shouted in excitement and ran to leap into the air themselves, but Flora followed close behind this wonderful bee, copying her steps.

And turn and go on.

"Turn and go on," sang Flora behind her.

And then Here, the flowers, the nectar, the sweetness!

"The flowers, the nectar, the sweetness!" shouted the bees, dancing their map to the treasure. (88-89)

A great deal of information is transmitted through this language of dance, more than could be quickly conveyed in speech. The fact that Von Frisch himself referred to his experiments as decoding a language goes far towards understanding what he considers to constitute language as a concept.

Von Frisch talks about both the language of scent *and* the language of dance, and how the two "languages" complement each other:

Various types of plants blossom simultaneously, producing nectar of differing concentrations. The richer and sweeter its flow, the livelier the dance of the bees that discover and visit one type of flower. The flowers with the best nectar transmit a specific fragrance which ensures they are most sought after [...] A new and hitherto unknown side of the biological significance of flower fragrance is revealed. Its great diversity and strict species specificity communicate a truly charming scent language. (143)

This "charming scent language" is not only understood by the honeybees and then relayed to the hive; it is *spoken* by the flowers themselves. When she is led by a wasp towards some warehouse buildings, Flora encounters some weeds which call out to her with their weak scent: "[S]upplications and pleas came from every flower in every crack of concrete or breezeblock wall for Flora to come to them, to them, they called and begged her, they wanted to speak with her and feel her feet on their petals" (167). Thus do plants, as well as nonhuman animals, possess their own "language" in Paull's novel, and the transmission and reception of scent which characterizes the interaction between flower and bee is depicted in terms of an almost spoken exchange. Paull also ascribes an emotional (even sexual) quality to this scent language, which is arguably, though not unequivocally, anthropomorphic.

Conclusion. "Linguistic meaning," writes Abram, "is not some ideal and bodiless essence that we arbitrarily assign to a physical sound or word and then toss out into the 'external' world. Rather, meaning sprouts in the very depths of the sensory world, in the heat of meeting, encounter, participation" (75). Abram here breaks down the distinction between the concrete and the abstract. While languages like Lapine or the various animal languages of Le Guin's "Author of the Acacia Seeds" are fictitious and thus highly speculative representations of nonhuman communication systems, they do raise questions of translatability between species. Exploring language in these texts as situated along a more complex spectrum of communication systems reveals that the animal fantasy genre is responding to shifting revelations in the ways that nonhuman animals communicate within and between species. Adams's rabbits communicate, as we have seen, through a multiplicity of channels, not simply the Lapine language, which invites us to consider the place of the supposedly human faculty of language on the spectrum of animal communication.

Since *Watership Down*, several works of literature featuring speaking animal protagonists have explored the diverse means by which the species featured in each narrative communicate. There is a marked shift after Adams's novel in the explicit representation of nonhuman forms of communication as different from human language. While such representations are, of course, highly speculative and still anthropomorphic to a certain extent, these narratives demonstrate a genuine desire on the part of the author to imagine how the sign systems used by nonhuman animals might be translatable into human terms. A degree of anthropomorphism is unavoidable in such depictions, but animals are not presented as simply speaking subjects, communicating only by means of audible speech. Sebeok writes:

It seems likely that a full-fledged synthesis will be achieved before long, offering both a new paradigm and a methodology for the comparative analysis of semiosis in its full diversity, ranging from the two vast linked polymer languages at one end of the scale to the thousands of natural languages at the other, with a host of singular information coding and transmission devices, inside and outside the body of every organism, in between. Semiosis, independent of form or substance, is thus seen as a universal, criterial property of animate existence. (86)

Animal fantasies are exploring this semiotic diversity, and by comparing fictional representations of the ways in which animals communicate we can perhaps begin to imagine in human terms what it is like for other species to communicate, as well as acknowledging the limitations of human language in a multispecies world.

Works Cited

Abram, David. The Spell of the Sensuous: Perception and Language in a More-Than-Human World. Vintage, 1996.

Adams, Richard. "To the Order of Two Little Girls: The Oral and Written Versions of Watership Down." *The Voice of the Narrator in Children's Literature: Insights from Writers and Critics*. Charlotte F. Otten and Gary D. Schmidt, eds. Greenwood Press, 1989.

Anderson, Kathleen, "Shaping Self Through Spontaneous Oral Narration in Richard Adams' 'Watership Down'." *Journal of the Fantastic in the Arts* 6.1 (21) (1993): 25-33.

Clement-Davies, David. Fire Bringer. Macmillan, 1999.

Cosslett, Tess. Talking Animals in British Children's Fiction, 1786-1914. Ashgate, 2006.

Darwin, Charles. "General Principles of Expression." In Maran, et al. 39-48.

DeKoven, Marianne. "Kafka's Animal Stories: Modernist Form and Interspecies Narrative." *Creatural Fictions: Human-Animal Relationships in Twentieth- and Twenty-First-Century Literature*. David Herman, ed. Palgrave, 2016: 19-40.

De la Mare, Walter. The Three Mulla-Mulgars. A.A. Knopf, 1919.

Fludernik, Monica. Towards a 'Natural' Narratology. Routledge, 1996.

Goldstone, Robert L. and Andrew T. Hendrickson. "Categorical Perception." Wiley Interdisciplinary Reviews: Cognitive Science 1.1 (2010): 69-78.

Hague, Daryl R. "Fuzzy Memories: Why Narrators Forget They Translate for Animals." *Translation and Literature* 16.2 (2007): 178-192.

Hauser, Marc D., Noam Chomsky and W. Tecumseh Fitch. "The Faculty of Language: What Is It, Who Has It, and How Did It Evolve?" *Science* 298.5598 (2002): 1569-1579.

Herman, David. "Storyworld/Umwelt: Nonhuman Experiences in Graphic Narratives." *SubStance* 40.1 (2011): 156-81.

Kafka, Franz. "The Metamorphosis." *The Complete Short Stories of Franz Kafka*. Nahum N. Glatzer, ed. Minerva, 1992. 89-139.

_____. "A Report to an Academy." *The Complete Short Stories of Franz Kafka*. Ed. Nahum N. Glatzer, ed. Minerva, 1992. 250-62.

Kilner, Dorothy. The Life and Perambulations of a Mouse. G.S. Appleton, 1851.

Kull, Kalevi and Peeter Torop. "Biotranslation: Translation Between Umwelten." In Maran, et al. 411-26.

Le Guin, Ursula K. "The Author of the Acacia Seeds." *The Compass Rose*. Grafton Books, 1986: 11-19.

Lestel, Dominique. "The Biosemiotics and Phylogenesis of Culture." In Maran, et al. 377-409.

Lippit, Akira Mizuta. *Electric Animal: Toward a Rhetoric of Wildlife*. U Minnesota P, 2000.

Lockley, R.M. *The Private Life of the Rabbit: An account of the life history and social behaviour of the wild rabbit.* Andre Deutsch, 1964.

Lofting, Hugh. The Story of Doctor Doolittle. Jonathan Cape, 1953.

Maran, Timo, Dario Martinelli, and Aleksei Turovski, eds. *Readings in Zoosemiotics*. De Gruyter Mouton, 2011.

Oppel, Kenneth. Silverwing. HarperCollins, 1997.

Paul, Lissa. "Dumb Bunnies: A Re-visionist Re-reading of 'Watership Down'." *Signal* 56 (1988): 113-22.

Paull, Laline. *The Bees*. Fourth Estate, 2014.

Robles, Mario Ortiz. *Literature and Animal Studies*. Routledge, 2016.

Sebeok, Thomas A. "Zoosemiotics: At the Intersection of Nature and Culture." In Maran, et al. 77-86.

_____. "Talking' with Animals: Zoosemiotics Explained." In Maran, et al. 87-94.

Seton, Ernest Thompson. Wild Animals I Have Known. Scribner, 1898.

Sewell, Anna. *Black Beauty*. Puffin Books, 1994.

Sharp, Margery. *The Rescuers*. Puffin Books, 1964.

Von Frisch, Karl. "Decoding the Language of the Bee." In Maran, et al. 141-55.

Williamson, Henry. Tarka the Otter. Puffin Books, 1963.

Wilson, Edward O. The Meaning of Human Existence. Liveright, 2014.