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Experiencing Dystopia Through *Umwelt*: Modelling the Nonhuman Animal in *Hollow Kingdom*

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ABSTRACT

The experience of nonhuman animals is typically neglected in dystopian fiction, particularly as concerns the experiences of domestic pets. The presence of such creatures in dystopia is often notable only by their absence, with animal life (or the lack thereof) being a characteristic, albeit peripheral, marker of social or environmental loss. In recent years, however, authors have been increasingly drawn to the role of animals in the end times, presenting dystopian worlds from the perspective of animal characters. Exploring the projection of nonhuman consciousness in contemporary dystopia, I look to investigate this phenomenon, focusing on the modelling of animal minds in *Hollow Kingdom*. Drawing upon the work of Caracciolo and Herman, I analyse the presentation of animal narration, exploring how we attribute consciousness to nonhuman characters and how, in turn, the conceptualisation of *Hollow Kingdom* is given texture as a result of the animal voices, perceptions and attitudes it presents.

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Animals in the End Times

Depicting a world in which humanity has reached a point of functional extinction, of devolution and mass degeneration, Kira Jane Buxton's *Hollow Kingdom* projects a unique vision of international contagion, illustrating global fallout and the aftermath of societal collapse, as realised from the individual and collective perspectives of the world's fauna. Published in 2019, *Hollow Kingdom* presents a dystopian world in which humans (referred to in the text as "Hollows") have noticeably regressed, becoming "zombie-like" in mannerism, physicality and mental capacity, yet exhibiting no recognisable illness or disease. Displaying symptoms typically attributed to the infected, often cannibalistic, post-human species of contemporary horror, the Hollows are reminiscent of such zombie-adjacent creatures as M. R. Carey's "Hungries" (*The Girl with all the Gifts*), Carey Ryan's "Unconsecrated" (*The Forest of Hands and Teeth*) or James Dashner's "Cranks" (*The Maze Runner*),¹ exhibiting mindless, erratic and violent behaviour, alongside severe physical deterioration. However, in comparison to these examples, in which such characters are infected or plagued (as opposed to being undead or

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¹Carey; Ryan; Dashner.

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reanimated),² the humans of Buxton's text are sickened by their overexposure to electronic devices, being technologically and then biologically afflicted.

The disease – for which no formal classification or epidemiology is specified – appears to have affected the entirety of the human population, with reflections on the devastation of humankind being offered by creatures from around the world. Taken collectively, these narrative accounts present the experiences of a range of animals, from domestic pets through to exotic wildlife, whose existence has been significantly altered by either the loss of a beloved owner or alternatively, their release from captivity or predation. In the wake of humanity's fall, the animal world (or at least, the undomesticated animal world) consequently rises up, presenting something of a return to nature: wildlife comes back into the city, animals escape from the zoo, certain sea-life flourishes in unmanned aquaria. However, for domesticated animals or those unable to free themselves from synthetic enclosures, the potential loss of humanity presents a much more devastating set of circumstances, raising the oft-neglected question in this particular genre of what happens to man's best friend when man ceases to exist.

Dystopian fiction is, after all, inherently concerned with human experience, presenting nightmarish extrapolations that revolve around such salient topics as political deviance, tyranny, systematic discrimination, genocide or war (to offer but a few examples) which are, in the main, resultant of human action. Such topics are often reflective of the fears, anxieties and occupations of the age in which a particular text was conceived, with dystopian narratives projecting estranging yet recognisable future worlds which are, to a greater or lesser extent, refracted from their author's own.³ These anxieties may, of course, be reflective of environmental issues, with ecodystopian fictions in particular – those texts which take on topics surrounding ecological crises⁴ – being frequently inclusive of, or responsive to, human-animal relations, presenting discourses on economic consumption, agricultural production, ecological conservation, human nutrition and bioethics, for example. In such cases, animal absence may be attributed to specific plot events such as flooding, drought, pollution or biological warfare which, in negatively impacting upon the environment, have resulted in species decline or blanket extinction, as in *The History of Bees*, *Hummingbird Salamander* or *The Migrations*.⁵

What we do not often see, however, are the direct experiences of animals, particularly domestic animals, with scenes of human-pet relations being fleeting and largely underdeveloped. There are flashbacks in *The Handmaid's Tale*, for example, in which we learn that Offred owned a cat prior to the Gileadean regime; she also expresses the desire for a pet during her narrative present: “a bird, say, or a cat. A familiar. Anything at all familiar”,⁶ suggesting that either Handmaids are forbidden such companions or that pets are no longer an established part of domestic life. The role of pets in Gilead and, indeed, the fate of Offred's cat are unestablished. In Wimmer's *Equilibrium*, the keeping of pets is an unimaginable and confusing concept, being associated with expressions of love and care that are unfathomable in a world in which emotion is not

²For a detailed examination of the Zombie and the evolution of the Zombie as posthuman species see Christie and Lauro, 2011.

³Norledge, *Language of Dystopia*.

⁴See Otto for discussion of ecodystopia.

⁵Lunde; Vandermeer; McConoghy.

⁶Atwood, *The Handmaid's Tale*, 120.

only suppressed but criminalised.⁷ In comparison, the ownership of an animal is a marker of social status in *Do Androids Dream of Electric Sheep*, in which nuclear war has ravaged the natural landscape.⁸ Katniss Everdeen bargains for her sister to keep her cat in District 13 in *Mockingjay*, dogs are wild and largely feared in *Riddley Walker*, and though pets are present in *Oryx and Crake*, they are embodied by hybridised, cloned creatures such as the “rakunk”.⁹

Such narratives, being centred on the lives of their primary human protagonists, offer only limited insights into the existence of animals in dystopia, with the creatures themselves being tangential to the conceptualisation of each respective world. Looking beyond such peripheral examples, in which animals are secondary to human characters or “enactors”,¹⁰ contemporary authors such as Matt Haig, Adrian J. Walker, and Kira Jane Buxton have taken a more nuanced and direct perspective, presenting dystopian worlds in which narrative events are projected from the point of view of personified animal narrators.¹¹ Unlike *Animal Farm* (an arguable precursor to such animal-centric dystopias), in which a small-scale totalitarian society is controlled by highly intelligent pigs,¹² these more recent publications project hypothetical – as opposed to allegorical – dystopian visions, presenting worlds which are to be perceived as possible extensions of our own.

Set in Seattle during an indeterminate future, *Hollow Kingdom* presents such a world, illustrating an apocalyptic conclusion to the Anthropocene. Populated with familiar world-building elements (those elements which enrich our conceptualisations of a particular world),¹³ such as Cheetos, Pabst Blue Ribbon beer, La-Z-Boy recliners, and Tinder dates, the world projected is inferably near-at-hand. Technology, though evidently life-threatening, has not advanced beyond the smart devices we have access to in the 2020s, and beyond the looming extinction of the human race, there is no definitive suggestion that we are experiencing a world that is not of this century. The physical locations of Buxton’s novel are similarly recognisable, as evidenced by the depiction of Seattle-based landmarks (e.g., Woodland Park Zoo, Seattle Aquarium) and the compositional deixis of the chapter markers, each of which details the name and whereabouts of a particular enactor, which ranges from various parts of the United States to the Arctic Circle. The movement between and across these landscapes offers a holistic vision of dystopia, one which not only spans multiple continents but is visualised and experienced from the land, the sea and the air. The experience of dystopia in *Hollow Kingdom* is consequently unique to this novel, being multifaceted, polyvocalic, and decidedly unnatural.

Unnatural Narrative and Nonhuman Experience

Unnatural narratives, in transgressing the boundaries of mimetic or “natural” narrative, “conspicuously violat[e] conventions of standard narrative forms”,¹⁴ presenting a series

⁷Wimmer.

⁸Dick.

⁹Collins; Hobin; Atwood, *Oryx and Crake*.

¹⁰Emmott.

¹¹Haig; Walker.

¹²Orwell.

¹³The term “world-building element” is here taken from Text World Theory. For discussion and application see Gavins, and Werth.

¹⁴Richardson, “What is Unnatural Narrative Theory?”, 34.

of anti-mimetic features which impact significantly upon the projection of voice (or the identity of the narrator); story logic and/or epistemic or ontological consistency.¹⁵ Depicting “physically impossible scenarios and events, that is, impossible by the known laws governing the physical world”,¹⁶ unnatural narratives are anti-mimetic, presenting scenarios, events or abstractions that are fundamentally opposed to notions of the “real”. In contrast to non-mimetic texts, which are actively aligned with the non-real (as in supernatural or marvellous narratives, fantasy texts, allegories and fables), such opposition is unaccounted for by internal story logic, being unnatural both within and beyond the diegesis.¹⁷

The presentation of animal minds in *Hollow Kingdom* is very much unnatural, being in no way accounted for by the logical make-up of the fictional world. The narrative novum (i.e., the new element foregrounded in a particular world that signals cognitive estrangement)¹⁸ is the virus itself – there is no implication that the novel also addresses the advancement or hybridity of futuristic animal life. There is nothing to suggest, for instance, that animal-human communication is an established or natural feature of the projected future (at least beyond the kind of animal-human interaction we are able to achieve in the present day), or that the ability of animals to communicate with humans is a side-effect of the unnamed virus. As with the majority of dystopian texts, which typically conform to standard notions of ontology and experientiality, the impetus of Buxton’s novel, its treatise on environmentalism and degeneration, is an arguably realist one.¹⁹ The addition of nonhuman perspectives poses a consequent interruption to this frame, bringing into focus questions of dystopian hybridity and the evolution of dystopian experience.²⁰

Nonhuman narrators present one of several forms of unnatural voice or unnatural mind.²¹ Unnatural minds, as defined by Iversen, present “consciousness that in its function or realizations violates the rules governing the possible world it is part of in a way that resists naturalization or conventionalization”, crossing logical boundaries of embodied experience.²² Consider, for example, narratives which manipulate the use of second-person or first-person plural narration; experiment with “paralepsis”,²³ in which first-person narrators appear omniscient (this also being an example of ontological inconsistency); or project markers of ontological instability, as with the presentation of dead, inanimate, non-sentient, and naturally, nonhuman, narrators.

Engaging with such minds requires a distinct form of cognitive processing, with the construal of nonhuman consciousness producing something of a “double dialectic”. As noted by Bernaerts et al.:

Non-human narrators prompt readers to project human experience onto creatures and objects that are not conventionally expected to have that kind of mental perspective (in other words, readers “empathize” and “naturalize”); at the same time, readers have to

¹⁵Ibid., 23. See also Richardson, “Unnatural Voices” for comprehensive review.

¹⁶Alber, “Impossible Storyworlds”, 80.

¹⁷Richardson, “Unnatural Narrative Theory”, 398.

¹⁸See Suvin *Metamorphoses of Science Fiction and Defined by a Hollow* for discussions of the novum in science fiction.

¹⁹Richardson, “Unnatural Narrative Theory”.

²⁰See Norledge, “Immersive Reading”.

²¹See Iversen.

²²Ibid., 97.

²³Gennette.

acknowledge the otherness of non-human narrators, who may question (defamiliarize) some of readers' assumptions and expectations about human life and consciousness.²⁴

Following Bernaerts et al., the conceptualisation of nonhuman minds requires, then, something of a conceptual blend, in which human and nonhuman traits are interwoven, and the degree and nature of "otherness" is resultantly established. Through the activation and integration of two or more pre-existing conceptual frames, "we are urged to blend our real-world knowledge about human narrators with our knowledge of animals to picture a physically impossible scenario in which an animal serves as the narrator of a story."²⁵ In reading nonhuman minds and unwrapping the intricacies of animal consciousness, the reader must consequently interpret the deviations from standard expectations of narrative voice and narrator identity in line with their knowledge of both human and animal thought, actively mapping between the two in order to realise the representation of nonhuman experience.²⁶

Representing Nonhuman Experience

Being fundamentally concerned with *qualia* (individual instances of conscious experience) – as, according to Herman, all narratives are²⁷ – *Hollow Kingdom* offers a sense of "what it is like" to be an animal in a dystopian world, placing nonhuman experience at the forefront of the reader's imagination. In examining what it is like to be an animal or, more specifically, how fiction invites us to consider such experience, Herman applies the ideas of Thomas Nagel, whose seminal paper "What is it like to be a bat?" posits a definitive connection between consciousness and experientiality, arguing that "the fact that an organism has conscious experience at all means, basically, that there is something it is like to be that organism".²⁸ Taking a cognitive-narratological approach, Herman expands upon this idea, broadening out the concept of animal consciousness to consider more closely how literary (and, in some cases, non-literary) accounts manipulate and explore animal consciousness, experimenting with point of view, speech and thought representation, identification and empathy.

Following Herman, the degree to which animal minds are projected in narrative can be seen to vary across a cline of richness and granularity. Recognising the complexity and multifaceted nature of animal minds, Herman's model (illustrated in [Figure 1](#) below) highlights various permutations of animal consciousness presentation, whereby the representation of experience may be more or less "coarse-", or more or less "fine-grained", as determined by the level of generality or detail with which such minds are portrayed.

At the far left of Herman's scale are those narratives in which human experience is most substantially mapped onto nonhuman experience, with "humanness" and human qualities determining the portrayal of animal minds. "Animal Allegory", for example, depicts animals as "virtual stand-ins for humans, by way of cultural associations that have accrued around a particular species", as in Aesop's fables or moralistic fairytales.²⁹

²⁴Bernaerts et al., 69.

²⁵Alber, "Unnatural Narratives", 62.

²⁶Alber et al., *Unnatural Narratives*, 116.

²⁷Herman, *Basic Elements*.

²⁸Nagel.

²⁹Herman, "Storyworld/Umwelt", 167.

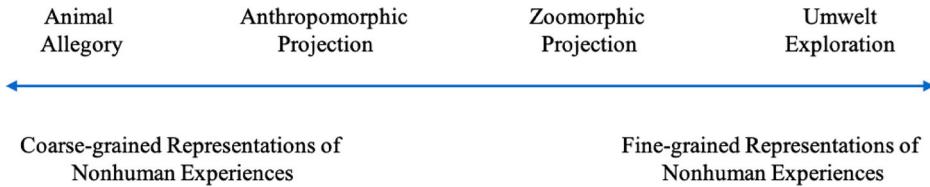


Figure 1. Herman's continuum of strategies for representing nonhuman experiences (adapted from "Storyworld/Umwelt: Nonhuman Experiences in Graphic Narratives", 2011).

"Anthropomorphic Projection" is similarly characterised by the plotting of human expectations, but indicates a more noticeable shift in focus from human to nonhuman. Presenting increasingly ostensible animal minds, narratives which display anthropomorphic projection imply a stronger sense of animal experience than those of animal allegory (as in such examples as *The Pride of Baghdad*),³⁰ whilst continuing to rely on human motivations, actions and intentions as a template for rendering nonhuman behaviour. As we move to the right of the scale, "animal experiences and capabilities are again translated into human terms, but now for purposes of comparison rather than explanation",³¹ with the next category along, "Zoomorphic Projection", defining those instances in which animal characteristics are instead mapped onto humans, as in Kafka's *Metamorphosis*.³² For the final category, "Umwelt Exploration", Herman draws on Jacob von Uexküll's notion of *the umwelt* – experience as determined by the individual sensorimotor and cognitive capacities of a given species.³³ For von Uexküll, the recognition of such abilities and the identification of an animal's specific perceptual cues, enables us to enrich our understanding of animal life. Moving away from the impression of animals as "machines", *umwelt* research allows for the conceptualisation of animals as conscious and active agents, appreciating their capacity for full sensory experience and cognitive reception. Recognising the need for such identification, Herman's final category is used here, then, to define those narratives in which focus is given less to the mapping of human-to-nonhuman or vice versa, but to the "lived, phenomenal worlds of nonhuman animals themselves".³⁴

In a more recent adaptation of the model, Herman slightly amends his classifications to better reflect theoretical debate surrounding the notion of anthropomorphism as a concept, which has faced critique regarding frequently naïve applications of the term. Emphasising instead the process of metaphorical mapping – as expressed in terms of terms of Conceptual Metaphor Theory³⁵ – Herman's modified rubric "foregrounds and ... clarifies the inverted analogical mappings performed by narratives, or segments of narratives, situated near the second and third increments on the scale" (visualised in Figure 2), detailing the interaction between source and target domains.³⁶

³⁰Vaughan and Henrichon. See Herman, "Storyworld/Umwelt" for analysis.

³¹Herman, "Storyworld/Umwelt".

³²Kafka.

³³Uexküll. See also Caracciolo, "Three Smells", 486

³⁴Herman, "Storyworld/Umwelt", 168.

³⁵See Lakoff and Johnson.

³⁶Herman, *Narratology Beyond the Human*, 316



Figure 2. Herman's continuum of strategies for representing nonhuman experiences (updated and adapted from *Narratology Beyond the Human*, 2018).

As can be seen in the above figure, “Anthropomorphic Projection” has been replaced with “Human-Source-Animal-Target Projections” in which human qualities, characteristics or features are conceptually transferred to an animal “target” – a target being the less familiar element of a metaphorical mapping that is being enriched through comparison with a stipulated “source”. The direction of this mapping is then inverted in cases of “Animal-Source-Human-Target Projections”, emphasising the cognitive underpinnings of the originally termed “Zoomorphic Projection”.

In mapping human/nonhuman states along this scale, we can effectively visualise and deconstruct an array of animal minds, ranging from the non-mimetic minds of “Animal Allegory” through to the distinct unnatural minds projected further along the scale. All variations of these mappings, to a greater or lesser extent, contribute to the conceptualisation of nonhuman consciousness, offering insights into experiences beyond those accessible to us in the real world. It is the representation of “Human-Source-Animal-Target Projections” and “Umwelt Exploration”, however, which take the analytical focus of my remaining investigation as I move on to explore the consciousness and experiences of two of Buxton's characters: that of the primary crow narrator, S.T., and that of Genghis Cat, to whose mind I now turn.

A Change in the Order of Things

Genghis Cat is one of several recurring narrative voices in *Hollow Kingdom*, recounting two of the novel's chapters and appearing in the background throughout the main narrative. Moving from “a home in Capitol Hill, Seattle” to Washington (in which the respective chapter setting defines his exact location as “everywhere like an omnipotent ninja”),³⁷ Genghis Cat offers one of the first detailed insights into the state of humankind:

There has been a change in the order of things that I can't quite put my claw on ... Perhaps it's due to a shift in the lunar light, a cosmic spell, or because I have finally mastered my innate feline sorcery. One thing that hasn't changed – my Mediocre Servants still never seem to leave the home. I believe, if it's at all possible that they have devolved. According to my calculations, they now spend 186 percent of their time growling at the wall. But I have always known them to be a lower life-form, no better than slug-tongued, alopecia-stricken bears with epically shitty balance. They are eggs on legs with no discernible senses and the reflexes of a bugle stuffed with brine shrimp.

I have watched, with my unparalleled vision and laser-pointer focus, as my Mediocre Servants jab at the wall repeatedly with their fingers (or what's left of them). Up to down,

³⁷Buxton, 227.

up to down. Both are overdue for a thorough grooming, which their own mothers wouldn't attempt at this point. Today –

WAIT! HOLD EVERYTHING WHILE I GROOM MY INNER THIGH.

...

I will no longer bring them offerings, exotic or otherwise. I will not grace them with my presence. Should have known it was all over when they stopped summoning the requisite number of boxes from the Amazon for me to cavort in. No. I made my decision to leave the home. It's true that I shall miss the toasty laps and the dehydrated fish blobs and ambushing their bulbous toes under the bed blanket and how they used to worship me. Most especially, I will miss the cheese. But not as much as they will miss me. I am incredible.

So once I'd systematically eaten all the contents of Aquarium, I left through the Flap of Cat to the great outside, never to return to the home. Besides, I'd yarfed on every square inch of the place. There was nothing more to decorate. Before I left, I made sure I'd unrolled all the toilet paper.³⁸

As can be seen from this extract, Genghis Cat is clearly personified, presenting human qualities and characteristics which are mapped onto the reader's prototypical conceptualisation of a cat:³⁹ he can speak, he has clear agency and intentions, he expresses recognisable social dominance, and presents a very human confidence and swagger. In part this is projected as a result of his heightened register, his apparent formality setting him apart from his humans – i.e., his “Mediocre Servants”. The relationship structure presented here, as evidenced by the social deixis, adds to this image – Genghis Cat is someone whose presence one is “graced” with, he is “worshipped”, spoilt and (in his mind at least) adored. His inflated sense of self is suggested further by the adjectives he applies to describe his own character: he is “incredible”, his vision is “unparalleled”, and his focus laser-pointed. His vocabulary range is also notable, adding further to his formality and projecting a sense of almost aristocratic entitlement: he does not play, he “cavorts”, he acts “systematically” and makes “calculations”. Genghis Cat presents intelligence and strategy here as well as power – as perhaps reflected in his playful pun of a name.

The narrative presented offers clear examples, then, of Human-Source-Animal-Target projections: typical human idioms are repurposed to reflect feline anatomy (“can't quite put my claw on”/ “can't quite put my finger on”) and Genghis Cat presents advanced cognitive processes, emotions and attitudes that would typically be ascribed to a human enactor. Combined with the projection of a clear unlikeable, sarcastic (and often hilarious) personality, the reader is encouraged to imagine Genghis Cat as a power-happy, condescending dictator-cat. However, though Herman's categorisations clearly apply here, a more nuanced mapping is also at work with readers not only needing to map human-to-animal qualities in conceptualising the mind of Genghis Cat, but also to activate and engage their individual knowledge of “catness”. We all have a cat schema: a bank of information we have accrued concerning the nature, behaviour and appearance of cats which we have learned and refined as based on our interactions with cats in the real world, as well as our experience of cats on screen, in fiction and/or across other forms

³⁸Ibid., 21–23.

³⁹See Rosch, “Cognitive Representations” for discussion of prototypes.

of discourse. We draw on this schema whenever our “cat” script is activated in our minds, drawing on relevant aspects of said schema to understand the use of “cat” in any given interaction.

In the above extract, for example, Buxton peppers Genghis Cat’s narration with capitalised interjections (“WAIT! HOLD EVERYTHING WHILE I GROOM MY INNER THIGH”), highlighting the notoriously short attention span of a cat. The action of “grooming” is a typically animal rather than human activity, and Genghis Cat’s actions throughout the extract are similarly cat-specific: he brings his owners “offerings”, sits on “toasty laps”, “yarfs”, ambushes toes, and unrolls toilet paper. Catness is also reflected in Genghis Cat’s projected world-view, as indicated for example by his often inaccurate use of articles – there are instances of article omission in which a common noun is presented as a proper noun as in “the contents of Aquarium” as well as examples of article addition as in “boxes from the Amazon”, both of which change the status of their referents to reflect the cat’s perspective, further supported by the humorous inversion of “Flap of Cat” in which the possessive preposition emphasises the cat’s egocentric worldview.

Highlighting further his judgmental temperament, Genghis Cat also employs creative metaphorical constructions which are far more expressive than typical human insults. Sources for such expressions are notably drawn from the natural world, as determined by those elements which are most familiar to his animal mind. Humans, for example, are described as “alopecia-stricken bears”, as “slug-tongued”, as “eggs on legs” and as “bugles stuffed with brine shrimp”. They are measured against their lack of positive cat qualities – their senses, their reflexes, their balance – things I can imagine a cat would prize. The tone with which such comparisons are made emphasises the cat’s derision, as does the addition of expletives (“epically shitty balance”) and the shift to a more informal, colloquial register whenever he is being mean. His lack of compassion is definitive of his attitude towards his altered circumstances, his assessment of his owners’ deterioration being judgmental rather than sympathetic. Projecting his own schema to understand his owners’ actions, Genghis Cat notes they require a “thorough grooming”, suggesting their unkempt appearance, and reflects that they now spend “186 percent of their time growling at the wall”, “growling” here being either the cat’s interpretation of human language, or given the devolved state of the human characters, an accurate interpretation of inarticulate speech.

In unwrapping the characterisation of Genghis Cat and, in turn, his perceptions of the dystopian world in which he suddenly finds himself, it is necessary to make a series of mappings, drawing together our expectations of traditional narrators, our knowledge of human minds, and our experiences of animals in the real world. Setting out the intricacies of such interpretation and, in so doing, building on Herman’s approach, Carraciolo represents the process of conceptualising animal minds as follows:

- (1) readers are invited to categorise a fictional entity as a minded being, thus adopting a mimetic stance toward him or her
- (2) on the basis of textual cues, readers attribute to this entity mental processes and patterns that deviate from their expectations and folk psychology (cognitive strangeness)

- (3) in order to explain this deviation or strangeness readers draw on what they know about the consciousness of non-human animals, through scientific accounts of animal cognition or intersubjective experiences.
- (4) the “fit” between textual strategies and readers’ beliefs and presuppositions may pave the way for empathetic perspective taking and thus create a character-centred illusion: readers are given (what they consider to be) a startling insight into a nonhuman mind.⁴⁰

The practice described, though focused specifically on the reading of animal minds, is one of “mind-modelling”.⁴¹ Drawn from early work on Theory of Mind,⁴² mind-modelling details the process by which “we go beyond a simple tagging of another person as having consciousness, viewpoint, and beliefs relevant only to a single setting, and begin to build up a rich mental model of that person’s mind as a whole.”⁴³ Taking into account the thoughts, beliefs, attitudes and desires of a particular character as they change, fluctuate and develop across a given discourse, mind-modelling enables the nuanced representation of minds in action, not only as demonstrated in a particular extract, chapter or narrative moment, but as developed across the entirety of a text. We develop relationships with characters in part because of our ability to model their consciousness, empathising and identifying with their emotions, and perceiving of fictional worlds in relation to their perspectives and world-view. As I have argued elsewhere, there is, in fact, an indissoluble link between mind-modelling and world-building: for not only are characters in themselves world-building elements but also – in terms of focalising characters in particular – rich and textured frames through which our conceptualisations of fictional worlds are shaped.⁴⁴

In modelling the mind of Genghis Cat, the reader, having acknowledged his character as a minded being (as in Carraciolo’s Step 1) and accepted such a mind as akin to a “real” mind,⁴⁵ begins to imagine and enrich his character’s consciousness as determined by textual cues and their broader schematic knowledge of his particular species (Steps 2 and 3). According to Keen “any anthropomorphized representation of an animal either tacitly accepts or works against cultural pre-sets”,⁴⁶ an argument exemplified by Genghis Cat’s inflated sense of self and, indeed, his inflated sense of “cat”, a quality typically attributed to cats, particularly on social media and in other forms of popular culture. Our modelling of animal minds has, in fact, developed in recent years, in line with particular media trends – consider, for example, the “I can has cheezburger” cat which popularised a particular style of consciousness representation in which animal thought is depicted using inaccurate orthography and syntax as in various memes or spoof accounts (e.g., Thoughts of Dog). Such developments add an additional layer to our animal schemata, reflecting not only our knowledge of animals but also our awareness of how particular communities perceive of animal thought. As noted by Carraciolo, such knowledge

⁴⁰Caracciolo, “Tales of Rats”, 145.

⁴¹Stockwell, *Texture*.

⁴²See Premack and Woodruff, and Baron-Cohen *et al.*

⁴³Stockwell, *Cognitive Poetics*, 178.

⁴⁴Norledge, “Modelling Unethical Minds”.

⁴⁵See Palmer, *Fictional Minds* for discussion of fictional vs. real minds.

⁴⁶Keen, 138.

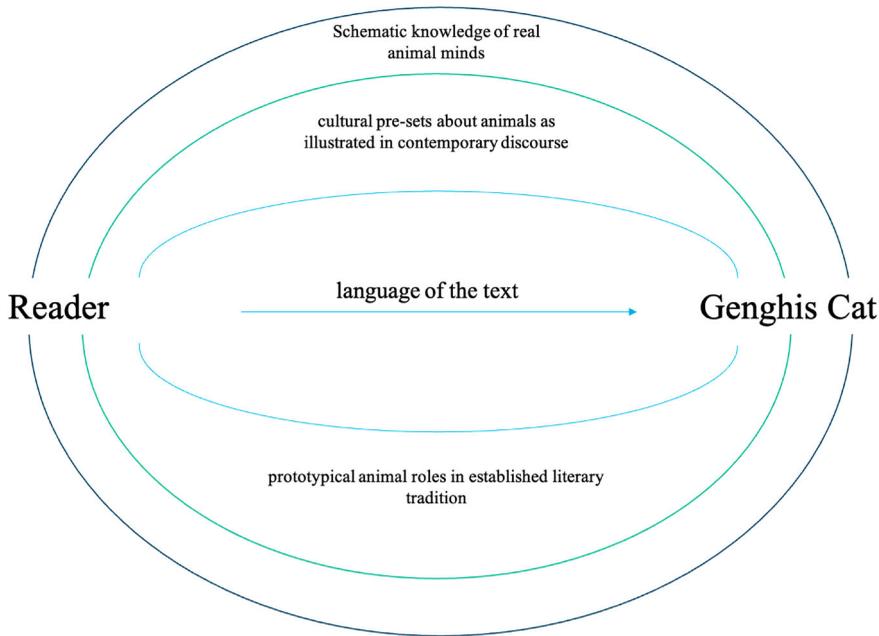


Figure 3. Mind-modelling Genghis Cat.

enables empathetic-perspective taking, heightening the empathetic recognisability of a particular textual attractor.⁴⁷

To zone in further on the conceptualisation of Genghis Cat, we can, then, produce the model shown in Figure 3. As illustrated in the figure, the implied reader models the mind of Genghis Cat as based on the linguistic cues presented by the text, mapping human characteristics onto a nonhuman mind. In bringing their schematic knowledge to bear on their reading, their conceptualisations are coloured by cultural pre-sets about animals as illustrated in contemporary discourse, by the ways in which we talk and think about cats, as well as our schematic knowledge of prototypical animal roles in an established literary tradition. Such mappings are then encompassed and furthered by schematic knowledge of cats in the real world, of our interactions with our pets, and our understanding of real cat thought and behaviour.⁴⁸ By interweaving human experience with multiple layers of nonhuman projection, *Hollow Kingdom* in this way not only generates humour but offers a nuanced and granular representation of nonhuman experience, one which is adaptive and responsive to the particular species holding the narrator role. This granularity fluctuates throughout the novel increasing or decreasing depending upon animal type, how familiar or believable a particular animal discourse appears to be, and the level of time spent engaging with their particular experience. The most developed and complex mind within *Hollow Kingdom* is consequently that of the primary narrator, S.T, whose search for human life and eventual quest to free entrapped domestics forms both the narrative core and shapes our interpretation of this particular dystopian world.

⁴⁷Stockwell, *Texture*.

⁴⁸Nelles, 189.

Mind-Modelling Shit Turd

In order to examine S.T.'s experience of dystopia, around which the other narrative threads combine, it is first necessary to model his mind, applying the process set out in the previous section so as to understand and appreciate the peculiarities of his personal world-view. Consider the following extract:

I hesitate to go on for fear you will judge me and not want to hear the rest of my story. However, in the interest of full disclosure, I feel a duty to tell you the truth about everything. You deserve it. My name is Shit Turd and I am an American Crow. Are you still with me? Crows aren't well liked, you see. We're judged because we are black, because our feathers don't possess the speckled stateliness of a red-tailed hawk's or the bewitching cobalt of a blue jay's, those stupid fuckers. Yeah, yeah, we're not as dainty and whimsical as hummingbirds, not as wise as owls – a total misnomer by the way – and not as “adorable” as the ham-beast-bellied egg timer commonly known as a penguin. Crows are harbingers of death and omens, good and bad, according to Big Jim according to Google. Midnight-winged tricksters associated with mystery, the occult, the unknown. The netherworld, whatever that is – Portland? We make people think of the deceased and angsty poetry. Admittedly, we don't help the cause when we happily dine on fish guts in the landfill, but hey ho.

...

So, the truth – my name is Shit Turd (S.T. for short) and I'm a domesticated crow, raised by Big Jim who taught me the ways of your kind whom he called “MoFos.” He gave me my floral vocabulary and my indubitably unique name. He taught me to say some MoFo words. Because of the aforementioned Tinder misadventures, Big Jim and I spent quality, or rather quantity, time together and I have an array of tricks under my plume. I know about MoFo things like windows and secrets and blow-up dolls. And I am the rare bird who loves your kind, the ones who walk on two legs and built the things you dreamt of, including the Cheeto®. I owe my life to you. As an honorary MoFo, I'm here to be utterly honest and tell you what happened to your kind. The thing none of us saw coming.⁴⁹

As with the narration of Genghis Cat, S.T.'s perspective is presented through internal homodiegetic narration, being indicative of his direct personal experience. Projected in the present tense, S.T.'s opening narrative frames the narrative proper, detailing his initial realisations that something is critically wrong with his owner, Big Jim, and establishing his intentions to tell of humanity's fall. Directed to an unknown addressee, the narrative appears at first to be “apostrophic”, with the use of second-person pronouns (“your kind”) appearing to cross ontological boundaries so as to directly address the reader.⁵⁰ However, unlike instances of dystopian epistolary in which characters write to a future reader or record materials for posterity,⁵¹ S.T. is unable to communicate in such a manner. The “you”, instead, is addressed to a fictional narratee, a baby, who – being found in the final chapter of the novel – stands as the last living member of the human race. Only S.T.'s narration is presumably accessible to the child, with his narrative proper being a continual reference point throughout the novel and the only instance of retrospective storytelling.

As with Genghis Cat, S.T.'s language offers detailed insights into his state of mind, projecting his overarching impressions of his species and of his individual character.

⁴⁹Buxton, 3–4.

⁵⁰Herman, “Textual You”.

⁵¹See Norledge, “Building The Ark”.

Opening with hesitation, S.T. highlights a reluctance to reveal himself as a crow, with the initialised short form of his name being used up until this moment to obscure his identity for fear of judgment and/or abandonment. He pulls out human expectations and beliefs surrounding “crownness”, modelling in turn the mental processes of an alternative species. He notes, for example, that crows “aren’t well liked” and that they are “judged” for their colour and their plain appearance. Note that emphasis here is on human rather than animal attitudes, with such judgements being resultant of human superstition (“crows are harbingers of death and omens, good and bad”) and human thought (“we make people think of the deceased and angsty poetry”). The associations drawn are based on human fears (“mystery”, “the occult”, “the unknown”, “the netherworld”), several of which are beyond S.T.’s schematic knowledge (“the netherworld, whatever that is – Portland?”).

S.T. has a much more conversational register than Genghis Cat, as exemplified by his use of informal discourse markers such as “yeah yeah” and colloquial exclamations such as “hey ho”. He makes consistent use of contracted language, and the punctuation of the extract projects a sense of his casual spoken expression and sense of humour, as exemplified by the sarcastic use of air quotes around “adorable”. Throughout the extract and, indeed, the novel he takes on contemporary slang, and uses a substantial number of expletives and other impoliteness markers. Consider, for instance, his commentary on the appearance and qualities of other birds: his reflections, though initially complimentary (as in descriptions of “the speckled stateliness” of a red-tailed hawk or the “bewitching cobalt” of the blue jay), quickly become offensive. Taboo language is used to modify relational processes (“those stupid fuckers”) and expressive metaphors offer insulting descriptions of animals S.T. dislikes such as the “hambeast-bellied egg timer otherwise known as the penguin”, an aversion which is noted frequently throughout the text.

There is an interesting divide, evident in his comparison of the avian species, between his own thoughts and those he projects onto humans, with S.T. going so far as to correct or contradict stereotypical human opinion, such as the belief that owls are wise, or that penguins are cute. He has a notable sense of what constitutes “humanness”, detailing his knowledge of human objects such as Google, “windows and secrets and blow-up dolls”, possesses human language and is confident in his engagement with the human narratee. As a self-professed “rare bird” who loves humans, S.T., in fact, considers himself “an honorary MoFo” – MoFo being the word used by Big Jim and consequently S.T. as both a collective noun and a term of reference for human individuals. In modelling S.T.’s mind, it is possible to see the influence of such thinking with S.T.’s language and world-view being very much coloured by the apparent opinions, thoughts and actions of his former owner. Not only did Big Jim give S.T. his “floral vocabulary” and “indubitably unique name” but also transferred through S.T.’s processes of observation, aspects of his character and, from S.T.’s perspective at least, his inherent humanness.

As S.T. considers himself to be an honorary human, and in effect behaves and acts with human-like motivation and intent, there is a notable meta-level to his consciousness which must be taken into account when conceptualising his character. Firstly, the mapping of human traits onto S.T. is much more granular and specific than straightforward “Human-Source-Animal-Target Projections” would suggest. Though it remains necessary to project such general qualities as human agency and the ability to converse

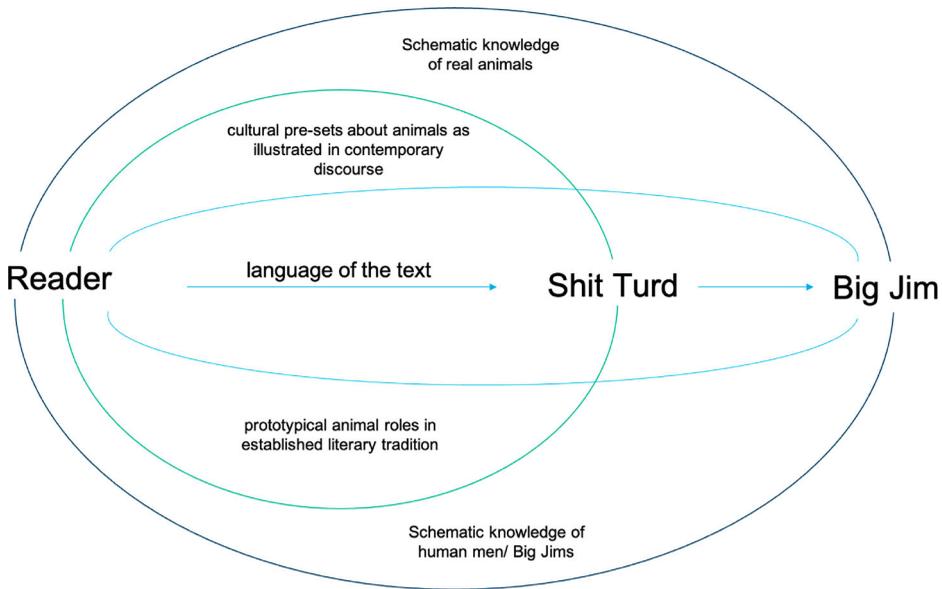


Figure 4. Mind-modelling Shit Turd.

using human language to S.T.’s character, the unique attributes we ascribe are arguably “Big Jim-qualities” rather than simply “human-qualities”. Though an initial reading of S.T.’s mind mirrors that of Genghis Cat, there is, then, an additional step in the mind-modelling process whereby the reader effectively models S.T. modelling Big Jim, as realised in [Figure 4](#).

Following Carraciolo’s four-step process, the modelling of S.T.’s mind begins as expected with the recognition of S.T. as a personified human animal and a minded being (Step 1). Driven by the language of the text (Step 2), attributes are then assigned to his character which are conceptualised in relation to schematic knowledge of crows, drawn from cultural pre-sets regarding crows (potentially aligning with S.T.’s own projections of human-crow perceptions), prototypical illustrations of crows in literary discourses (e.g., the melancholic crow in *Grief is the Thing with Feathers* or Ted Hughes’ *Crow*)⁵² and scientific accounts (Step 3). However, in order to conceptualise S.T. as a crow/human hybrid and understand his mind as being both crow- and Big Jim-like, the model must draw not only on reader knowledge of crows at various levels, but also knowledge of human men and of Big Jim-like men in particular.

It is this layered human/animal crossover which invites increased identification with S.T.’s character, positioning him closer to the human category on Stockwell’s scale of empathy.⁵³ The granular, albeit unusual, personification of S.T. creates what Caracciolo refers to as a “cognitive illusion”, presenting nonhuman consciousness in such a way as to appear and feel believable, so as to offer a convincing representation of a nonhuman mind.⁵⁴ However, it is S.T.’s hybrid perspective which adds texture to his character,⁵⁵

⁵²Porter; Hughes.

⁵³Stockwell, *Texture*.

⁵⁴Caracciolo, “Three Smells”, 488.

⁵⁵See Stockwell, *Texture* for discussion.

and determines the particular resonance of Buxton's novel. It is his human-crownness which enables him to interact so effectively with the world around him, allowing him to communicate with not only the child narratee (and/or the reader) but also all other animals he encounters throughout the narrative. It is his blended mind, and his knowledge of both the animal and human world which allows him to become "The One Who Keeps", the saviour of the domestic animal world and the guardian of the last human on Earth. As argued by Bernaerts et al., "all non-human narrators exploit human experientiality in varying degrees", but the specific fusion of human and animal which comprises S.T.'s character is very much unique, heightened by his individual modelling of human minds and, as I go on to examine in the following section, animal *umwelt*.⁵⁶

Experiencing Dystopia through *Umwelt*

Early on in S.T.'s narration, following the opening frame, the reader is introduced to "the goat rodeo that is *Aura*":

Something you might be unaware of – in the natural world, there is an Internet. In English, it would roughly translate as *Aura* because it is all around us. It's not the same as MoFo Internet with YouTube crabby cat videos and sneezing infant pandas, but it is similar in that it is a network, a constant flow of information at your disposal, if you can be bothered to tune in and listen. Information streams daily via the winged ones, the judicious rustle of trees, and the staccato percussion of insects. I can't tell you the number of times I've heard a MoFo claim, "Listen to that bird's mating song!" writing off the feathered kind as licentious horn-dogs (they are not squirrels for shit sakes).⁵⁷

To return to Herman's earlier notion of "Umwelt Exploration", what S.T. describes here presents a direct impression of *umwelten*, "the lived phenomenal world of creatures ... whose organismic structures differ from our own",⁵⁸ focused specifically on the *umwelt* of "the feathered", and the "winged ones", comprising all avian species as well as insects. There are three such phenomenal worlds represented in *Hollow Kingdom*, the other two being *Web* and *Echo*. *Web* connects all underground life: "the communication hotbed of the underlings ... made up of the real part of the forest, the roots, magic mycelium, red and yellow mineral horizons ... it's the foundation of the forest, the Very Beginning".⁵⁹ *Echo* reflects the world of marine life: "those of scale and shell ... the ocean's breath, the song of whales, the hum of a mollusk, the swish and sway of kelp".⁶⁰ *Web* is described as the densest of the *umwelten*, being referred to alternatively as "The Other World", controlled by "The Mother Trees" on whom all life depends. All animals are connected to these worlds, which in themselves are connected to each other, and some animals such as seagulls and other seabirds, are able to interact with multiple networks (in this case *Aura* and *Echo*), tuning in to the communications of both centres of nonhuman experience.

The strategies Herman groups under "Umwelt Exploration" detail those methods which "emulate, with as much granularity or detail as possible, how other animals

⁵⁶Bernaerts et al., 72.

⁵⁷Buxton, 9–10.

⁵⁸Herman, "Storyworlds/Umwelt", 159.

⁵⁹Buxton, 102.

⁶⁰Ibid, 65.

engage with their surrounding world”⁶¹ – Buxton’s projection of *Aura*, *Web* and *Echo* highlight such methods. Throughout the novel, the characters’ experiences are shaped by their engagement with their *umwelt* and in turn the reader’s understanding of the world is determined by that engagement. *Aura*, for example, in addition to the other *umwelt* networks, plays a fundamental role in forming S.T.’s experience of dystopia, acting as a source of information about the world around him, warning him of things he cannot see, and offering detailed insights into the effects of human extinction on his kind. Such connections are presented similarly to radio impressions, with S.T. accessing or foregrounding the network in his mind as and when needed, as detailed in the following example in which, requiring information, S.T. turns to the network:

I reluctantly tuned in to *Aura*, listening to the boastful hoarding stories of a magpie. A Townsend’s warbler couple fretted about whether the eagle would return. Black-capped chickadees warned of a large troupe of Hollows clustered around a shop called Scarecrow Video.⁶²

As can be seen here, communications are seemingly presented in tandem, overlapping with one another, unfiltered and backgrounded until brought into focus. Through the network of *Aura*, S.T. can access bountiful other perspectives through his *umwelt*, tapping into the knowledge and experience of a nonhuman “social mind”.

The term social mind is here taken from Palmer’s work on social cognition in which he differentiates between internal thought (or intramental thought) and “joint, group, shared, or collective” thought, categorised as intermental thought.⁶³ Intermental thought is that which is experienced by “intermental units” of varying sizes and levels of connectivity, intermental units being reflective of particular groupings of individuals or communities. Social minds are comprised of “intermental units, large, medium, or small, that are so well defined and long-lasting, and where so much successful intermental thought takes place that they can plausibly be considered as group minds”.⁶⁴ Typically, group minds are attributed to human enactors, with the majority of Palmer’s examples being drawn from nineteenth-century realist texts. However, the *umwelten* presented in *Hollow Kingdom* clearly align the animal characters of the novel with Palmer’s definitions of intermental units, presenting through *Aura*, *Web* and *Echo* literal examples of distributed cognition. Palmer contends that “individual minds are situated by being embodied and social minds are situated by being distributed”, a notion which has received some criticism in respect to the application of human thought.⁶⁵ However, in presenting a networked representation of thought, made up of individual animal minds, *Aura*, *Web* and *Echo* present large intermental units, through which consciousness comes together in such a way and to such an extent as to form a working social mind.

The networks themselves are constantly open, presenting communication systems which can always be heard. Being somewhat beyond human cognition, it is unclear whether the animals experience *umwelt* through internal consciousness or a combination of internal and external mental processes. S.T. is most often depicted as “listening” to *Aura* which, being a cognitive mental process, reflects sensorimotor activity.⁶⁶ *Aura* is

⁶¹Herman, “Storyworlds/Umwelt”, 174.

⁶²Buxton, 35.

⁶³Palmer, *Social Minds*, 41. See also Palmer “Social Minds in Fiction”.

⁶⁴Palmer, *Social Minds*, 48.

⁶⁵Palmer, “Enlarged Perspectives”, 396.

⁶⁶See Halliday for details concerning types of mental action process.

presented, then, both as medium through which interactions occur (e.g., “Name-calling happens through *Aura*, sticks and stones are thrown at me and my mother is described in colourful ways”), almost like a social media platform, and through which messages can be sent to all avian species (e.g., “Woodpeckers drilled into the wooden telephone poles, sending a sort of emergency Morse code through *Aura*”).⁶⁷ Thinking in Palmer’s terms, thought is also shared and enacted as *Aura*, with the term being used metonymically to reflect the reactions or responses of all group members (e.g., “Adrenaline turned the air static, and *Aura* was humming in panic”; “*Aura* was silent ... a predator can silence *Aura*”).⁶⁸ In presenting *Aura* in this way, Buxton details a highly resonant form of nonhuman experience, with the *umwelt* being a form, mode and style of nonhuman communication.

S.T.’s description of *Aura* (to return to this section’s opening extract), is reflective of his human-animal hybridity, with him offering comparisons with objects and concepts from the human world, such as the Internet, to underpin a form of communication that is inaccessible to human interlocutors. His awareness and modelling of such accessibility is evidenced further by his closing frustrations at humans collapsing animal language and in so doing “writing off the feathered kind as licentious horndogs”. S.T., as in the previous extract, comments here on human error, reflecting on their naïve or limited impressions of animal life. Interestingly, the source of S.T.’s comparisons (through which he attempts to enlighten his human audience) will be equally unfamiliar and unattainable to the child narratee, who will grow up in a world devoid of such technologies. At this point, however, the true identity of the narratee is unknown, with the reference to real-world objects cementing at this moment the assumed address of the implied reader as suggested through that seemingly apostrophic “you”. The specifics of S.T.’s mapping – such as the detail regarding types of YouTube video – add to this impression, with the videos described being popular around the time of publication. The sneezing panda, for example, encourages a “marked narrative interrelation” (the cognitive act of drawing a link between narrative media)⁶⁹ with the infamous “Sneezing Baby Panda” video which went viral in 2016, having accrued over 5 million views as of July 2021.⁷⁰ Such links not only enhance the reader-character relationship, but also add to the impression of this particular dystopian world as being very much near-at-hand.

S.T.’s engagement with *Aura* adds, then, a further layer to the modelling of his nonhuman mind, with his positioning within a broader social mind being a defining aspect of his cognitive processes, thought patterns and perceptions. S.T. experiences dystopia through *umwelt*, as a response not only to his immediate physical situation but to those of all other animals connected through the network. His perceptions of dystopia, of the fall of humanity, are very much shared, being made up of the thoughts, reactions and emotions of his broader species, processes the reader must add to their model in order to fully understand his nonhuman experience. Such shared experience impacts significantly on how the reader, too, engages with dystopia and, in turn, how they conceptualise the worlds of the novel. After all, key narrative moments are projected through *Aura*, clues regarding core plot points are communicated through the network, and

⁶⁷Buxton, 274–5, 16.

⁶⁸*Ibid.*, 239, 83.

⁶⁹Mason.

⁷⁰Wildcandy.

urgency and suspense are generated through the fragmented and often cryptic messages or, indeed, silences, of the wider animal world.

A Not-So-Hollow Kingdom

The depiction of animal minds in *Hollow Kingdom*, as set out across this article, is textured and very much multilayered. The narrative form draws together animal accounts on a global scale, presenting the experiences of animals from around the world as they adjust to living in a time devoid of human life. Such experience is in itself unique, with *Hollow Kingdom* presenting one of the most intricate and creative accounts of animals in contemporary dystopian fiction to date. As argued by Caracciolo, “inflicting an anthropomorphizing element into a (fictional) nonhuman consciousness can allow us to – paradoxically – see further into the nonhuman”.⁷¹ By projecting detailed personified impressions of non-human consciousness, Buxton’s novel offers such unique insights, presenting the fears, anxieties and eventual joys of animals in dystopia as realised through “Human-Source-Animal Target Projections” and “Umwelt Exploration”. Though such an account is not reliable in terms of scientific phenomenology,⁷² the presentation of animal minds is nevertheless plausible, aligning with human expectations, beliefs and schematic knowledge of nonhuman consciousness in the real world.

In focusing on the networking of *umwelten* alongside the projection of individual minds, Buxton creates characters whose minds feel real, and whose experiences are both authentic and poignant. The plight of S.T. is particularly emotive, with his animal/human hybridity increasing his empathetic recognisability and the ability of the reader to engage with his conscious experience. As argued by Keen, “when it comes to evoking reader’s empathy in tales that employ animal figures ... the representation of particular animals can rarely be a neutral matter”, and this very much applies here both in terms of S.T. being a crow, and in terms of him being in his mind an honorary human. The inversion of certain pre-sets such as the ominous harbinger quality of the crow adds humour to an otherwise bleak narrative with the animal/human blend allowing the reader to experience dystopia from a nonhuman perspective whilst being able to psychologically project their own minds into the text, identifying and empathising with S.T. whilst simultaneously experiencing the defamiliarisation and estrangement characteristic of dystopian storytelling.

In drawing together the work of Carraciolo and Herman, I have aimed to unwrap this schematic playfulness and narratological creativity, examining how such complex non-human minds are conceptualised in the mind of the reader. Pairing these narratological approaches with advances in cognitive poetics has enabled a detailed discussion of mind-modelling, both at the level of the individual character, as with Genghis Cat, and at the level of the *umwelt*. It is only by engaging with the individual minds of the narrators, modelling their personal characteristics, personalities, attitudes and emotions, and in turn modelling the connected social minds of which they are part, that a full and rich conceptualisation of dystopia in *Hollow Kingdom* can be drawn.

⁷¹Caracciolo, “Tales of Rats”, 142.

⁷²Caracciolo, “Three Smells”, 496.

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