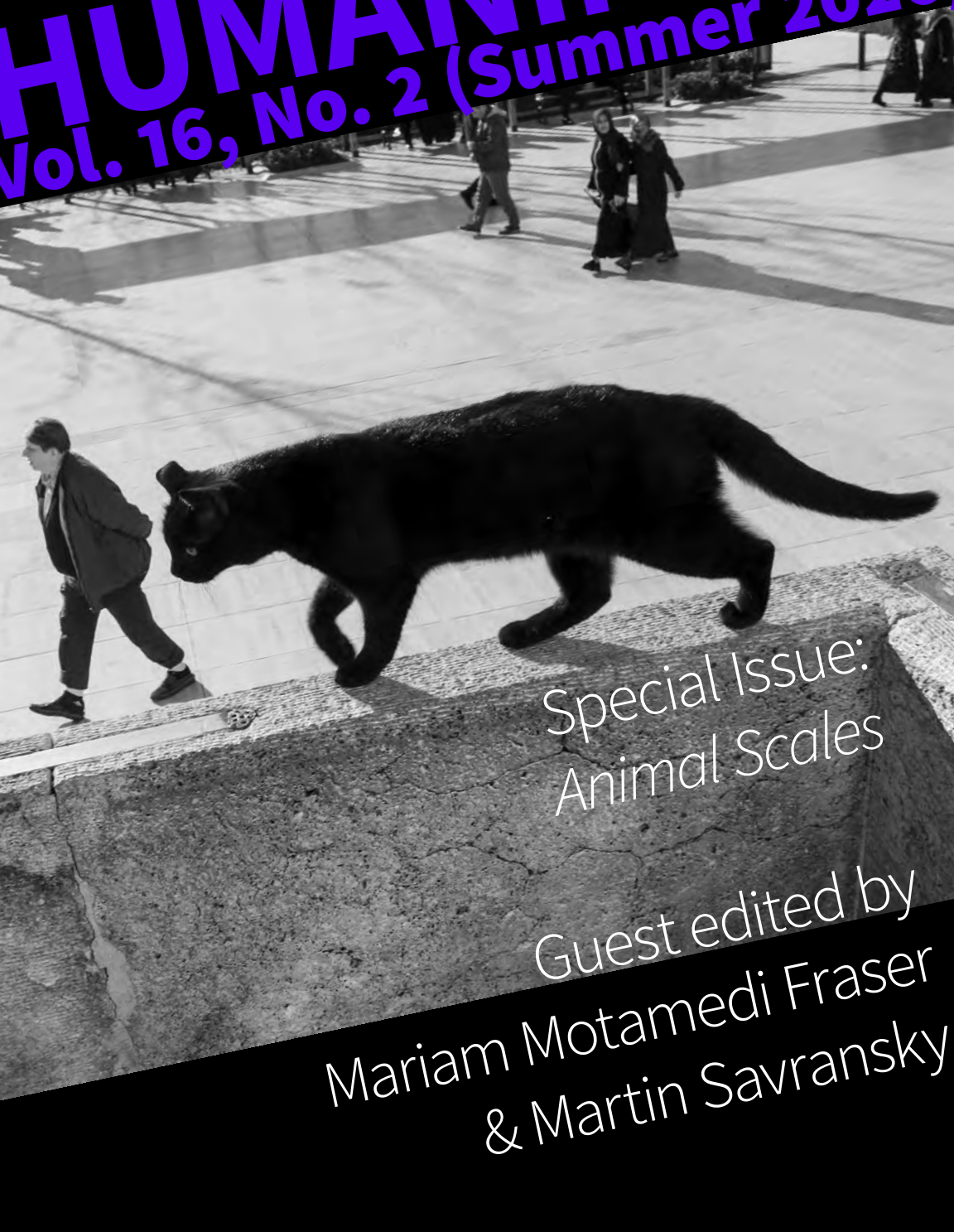


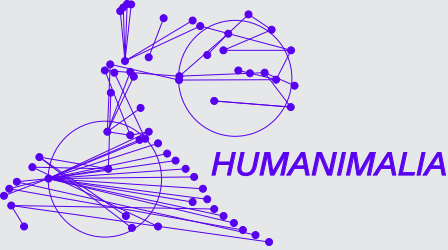
HUMANIMALIA

Vol. 16, No. 2 (Summer 2026)



Special Issue:
Animal Scales

Guest edited by
Mariam Motamedi Fraser
& Martin Savransky



Humanimalia is a biannual journal devoted to the study of human–animal relations. It is interdisciplinary, open-access, and peer-reviewed, publishing original articles from a wide range of cultural, historical, philosophical, political, and aesthetic perspectives.

Humanimalia has three aims: (1) to explore and advance the vast range of scholarship on human–animal relations; (2) to encourage exchange among scholars working from a variety of disciplinary perspectives; and (3) to promote dialogue between the academic community and those working closely with animals in non-academic fields.

We invite innovative works that situate these topics within contemporary culture via a variety of critical approaches. Ideally, we seek papers that combine approaches, or at the very least draw upon research in other disciplines to contextualize their arguments.

We are particularly interested in papers that acknowledge and seek to advance a more-than-human conception of aesthetics, culture, society, and politics.

<https://humanimalia.org>

Cover: Sami Uçan, “Sokak Kedisi”
Istanbul, 2018.

EDITORIAL BOARD

Editor-in-Chief

Kári Driscoll
Utrecht University

Associate Editors

Shumon T. Hussain
Universität zu Köln

Monica Mattfeld
University of Northern British Columbia

Dominic O’Key
University of Cambridge

Emelia Quinn
University of Ottawa

Marianna Szczygielska
MPIWG Berlin

Kerstin Schachenhofer
Independent scholar

Book Reviews Editor

Sreyashi Ray
Harvard University

Production Assistants

Imogen Grigorovich
Lotte Suardi

Layout and Typesetting

Kári Driscoll

“Scale”, in English, has two distinct meanings and etymological derivations. On the one hand, “scale”, from the Latin *scala*, meaning “ladder” or “stairs”, refers to an ordered sequence or set of gradations used to measure distances, sizes, and relative proportions. A scale, in this sense, as Joanna Zylinska puts it, is “a practical and conceptual device that allows us to climb up and down various spatiotemporal dimensions in order to see things from different viewpoints”.¹ The other sense of “scale” is of Germanic origin and refers to the thin, overlapping keratinous or bony plates covering the bodies of certain animals, notably fish and reptiles. Cognate with “shell”, “shield”, and, interestingly, “shoal”, “scale” in this sense refers to an anatomical feature and a means of protection, indeed a kind of technology of self-defence. Ultimately, this scale seems to derive from Proto-Indo-European **skel-*, to cut, divide, separate—whence, incidentally, the Old Norse *skilja*, to understand, distinguish, discern. The two scales are etymologically unrelated, but their convergence in modern English gives rise to an ambiguity that is potentially productive. One lineage (scale as ladder) is about ordering, gradation, and movement between levels; the other (scale as skin or armour) is about division, articulation, and protection. Both, however, have to do with drawing distinctions: dividing things up into discrete units, separating self from other, inside from outside, the better to apprehend and comprehend the world around us. Scales, then, are inherently dynamic and relational. Scaling is an act of incision, carving out entities or intervals from an otherwise continuous field, which in turn makes it possible to establish relations between entities. By the same token, an animal’s scales are both a barrier and an interface: they separate the animal from its environment precisely in order to allow it to encounter that environment as a bounded organism.

When I mentioned to my co-editors that we had a special issue on “animal scales” coming up, they all assumed it would be about snakes and other reptiles. It was only when they saw the table of contents, and especially the cover image, by Sami Uçan, of the giant

1 Joanna Zylinska, *Minimal Ethics for the Anthropocene* (Open Humanities Press, 2014), 26.

cat and the comparatively diminutive human — a trick of perspective that highlights the importance of positionality when thinking about questions of scale — that the initial confusion was cleared up. Nevertheless, I did want to take this opportunity to dwell on the inherent ambiguity of the concept of “animal scales”, while also pushing back against the assumption that scales on the skin necessarily imply reptiles or fish. There is, after all, one *mammal* whose body is covered in scales, namely: the pangolin, or scaly anteater.

In fact, there are eight extant species of pangolin, distributed across Africa and Asia, all of them members of the order Pholidota (“clad in scales”), and the genus *Manis* — a name which, eerily, refers to the *mānēs*, the spirits of the dead in Roman mythology, apparently because of their solitary nocturnal habits.² Pangolins may lead a ghostly existence, but today it is they who are haunted by the spectre of extinction. The word “pangolin” derives from the Malay *pengguling*, “one who rolls up”, a reference to their characteristic defensive response when threatened. The pangolin is thus an animal defined by its scales twice over: taxonomically, as the only living mammal order whose members are scaled, and behaviourally, in the way those scales enable them to transform themselves into an armoured ball. Pangolins, moreover, have the dubious distinction of being “the world’s most trafficked mammal”,³ and are thus defined by scale in the other sense as well, in large part due to the growing demand for their scales, which are used in traditional Chinese medicine, as well as their meat, which is considered a delicacy in several southeast Asian countries, especially China and Vietnam.⁴

2 See Martha E. Heath, “*Manis pentadactyla*”, *Mammalian Species* no. 414 (1992): 5. The designation stems from Linnaeus, who was fond of naming nocturnal mammals after Roman chthonic deities, e.g. lemurs, so called “because they go around mainly by night, in a certain way similar to humans [*hominibus quodammodo similes*], and roam with a slow pace”. See Carl Linnæus, *Museum regis Adolphi Friderici* (Stockholm, 1754), 4.

3 The designation “the world’s most trafficked mammal” (or “most illegally traded mammal”) appears to have crystallized around 2013–2014, largely through the work of the IUCN SSC Pangolin Specialist Group. See D.W.S. Challender, et al., “Scaling Up Pangolin Conservation: IUCN SSC Pangolin Specialist Group Conservation Action Plan” (Zoological Society of London, 2014).

4 See IUCN, “Eating Pangolins to Extinction”, 29 July 2014, <https://iucn.org/content/eating-pangolins-extinction>.

The very structures that evolved to protect them from predation have made them a target of human exploitation, as their scales have become commodities circulating through global networks of the illegal wildlife trade. The pangolin is, in this sense, an animal caught in a scalar predicament, one where the two senses of *scale* quite literally overlap. The pangolin's scales are what make possible its movement from the scale of the individual body to the scales of commodity, population, statistic, and planetary crisis.

Until recently, pangolins were largely unknown in the West. That changed in 2020, when, in the early months of the COVID-19 pandemic, they were suddenly thrust into the global spotlight as a possible intermediary host in the emergence of SARS-CoV-2. Thus, the pangolin's recent entry into Western consciousness is overdetermined by two planetary crises: the pandemic and the sixth mass extinction. Ironically, the supposed link between the pangolin and the pandemic seemed like it might be a blessing in disguise for pangolin conservation: heightened attention to the wildlife trade contributed to renewed calls for its suppression, while China strengthened its restrictions on the consumption and trade of wild animals, including pangolins.⁵ Ultimately, the link was never substantiated, and the theory was quickly set aside, but by then the reclusive pangolin had acquired an unprecedented and somewhat uncanny visibility: the species have become globally recognizable at precisely the moment when their continued existence is increasingly precarious. Their image proliferates while the living animals remain elusive; their scales circulate around the world after being stripped from the bodies that once bore them. Named after the spirits of the dead, the ghostly *Manidae* seem to haunt the very distinction between presence and absence, visibility and invisibility, life and death.

Prior to their new-found celebrity, familiarity with pangolins would have been limited primarily to conservationists — and, of course, English majors, who have encountered the pangolin in the form of Marianne Moore's 1936 poem "The Pangolin", which begins:

5 See Michael Marshall, "Covid-19 — a Blessing for Pangolins?" *The Guardian* 18 April 2020, <https://www.theguardian.com/environment/2020/apr/18/covid-19-a-blessing-for-pangolins>.

Another armoured animal—scale
lapping scale with spruce-cone regu-
larity until they
form the uninterrupted central
tail-row.⁶

Moore approaches her subject with characteristic fastidiousness and scientific precision. Despite her penchant for zoo-going, she likely never saw a pangolin in the flesh, and so her intense engagement with this creature is mediated through the pages of natural history (dutifully cited in footnotes) and through the increasingly elaborate analogies by which she attempts to make this unfamiliar armoured body intelligible. Thus, the pangolin, this “Im-/pressive animal/and toiler, of whom we seldom hear” is likened to a pine cone, an artichoke, a “miniature artist-engineer”—the first syllable of *artichoke* subtly prefiguring that of *artist*⁷—one of Leonardo da Vinci’s fantastic machines, a sculpture by Gargallo, a wrought-iron vine at Westminster Abbey, and so on. Gradually, the pangolin is transformed from a natural thing into an *objet d’art*, a cultural artefact. Conversely, the poem, whose regular pattern of indented and heavily enjambed lines recalls the overlapping scales of the pangolin, assumes a sort of armour of its own composed of meticulous observation and recondite allusion.⁸ “The Pangolin” thus aspires to be (like) a pangolin, impenetrable and intricate, possessed of a “grace” and “splendor” which “man in all his vileness cannot set aside”, while at the same time the pangolin becomes an ideal zoopoetic double of the poet herself, who, in turn, reveals herself to be one of the *other* “armoured animal[s]” implied by the opening line.

Moore’s empirical observations are coupled with an allegorizing gesture that seeks to articulate a certain kinship between the

6 Marianne Moore, *New Collected Poems*, edited by Heather Cass White (Farrar, Straus & Giroux, 2017), 141.

7 See Fiona Green, “Moore, Pound, Syllabics, and History”, *Twentieth-Century Literature* 63, no. 4 (2017), 430.

8 Note also how in the lines quoted above, “tail-row” is literally “uninterrupted” (unenjambed), despite the fact that “tail” should, technically, come at the end of the previous line, to rhyme with “scale”. This structure reproduces in miniature the form of the poem as a whole, whose final stanza, in stark contrast to the rest, contains no “broken” words.

pangolin and “man, the self, the being / so-called human, writing- / master to the world.” The pangolin’s habit of walking “on hind feet” invites comparison with the human body; forefeet clasped together like hands folded in prayer, while the formidable claws are reserved for “digging” — a word that, as any reader of Kafka knows, admits of a metaleptic substitution with writing as γράφειν [*graphein*], to scratch, to carve, to dig. Thus, through the figure of the hand (*manus*) and the gesture of writing, the distinction between pangolin and human is gradually undermined over the course of the poem. In the 1936 version, this convergence is marked paronomastically through the explicit reference to the pangolin’s genus:

The manis, made
for moving quietly also,
is neither a prisoner
nor a god; on hind feet plantigrade,
with certain postures of a
man.⁹

These lines serve as a hinge between the poem’s description of the *manis* and its speculation on what *man* is.¹⁰ In 1941, Moore revised the poem, replacing “the manis” with “Pangolins”, thus removing (or at least burying) the pun:

Pangolins, made
for moving quietly also, are models of exactness,
on four legs; on hind feet plantigrade,
with certain postures of a man.¹¹

While the explicit echo is gone, the more fundamental relation between pangolin and man, the “so-called human”, remains. Indeed, it is displaced onto a higher taxonomic scale. The two do not converge at the species level, but at the level of taxonomic class — at the *mammalian* scale, we might say:

9 Moore, *New Collected Poems*, 143.

10 Cf. Heather Cass White, Introduction to *Adversity & Grace: Marianne Moore, 1936–1941* (ELS Editions, 2012), xxi–xxii.

11 Marianne Moore, *The Complete Poems* (Faber and Faber, 1969), 119

Consistent with the
formula — warm blood, no gills,
two pairs of hands and a few hairs — that
is a mammal.¹²

What the revision removes at the level of lexical coincidence, the poem retains at the level of biological classification. The 1941 revision arguably produces a less anthropocentric relation: the commonality is no longer that the pangolin somehow contains or resembles “man”; it is that both are contained within a category larger than either. But there is also something odd about this “formula”, specifically in its reference to “two pairs of hands”, which is two too many according to the standard definition of “man” (and “hands”, for that matter — paging Tom Tyler¹³). On the one hand, this might be read as an ironic nod to the kind of “error with four/r’s” that the “so-called human, writing-/master to this world”¹⁴ is liable to make. But on the other (second?) hand, we might say that what emerges from this scalar operation is a kind of chimera, a hybrid creature, an amalgam of human and pangolin.

Such incongruities and errors only become apparent at a certain level, or scale of analysis. At a higher level of abstraction, it may be possible to argue, as indeed critics have, that the poem is not about pangolins at all, but rather about grace in a transcendental sense.¹⁵ Such readings are quite plausible; in fact the poem more or less announces “grace” as its true object, as that which lies hidden beneath the outer armour: “To explain grace requires/a curious hand”, Moore writes in what is undoubtedly the central and most often-quoted line of “The Pangolin”.¹⁶ Curiosity is a form of attention, a reaching out

12 Moore, *New Collected Poems*, 144

13 See Tom Tyler, “Four Hands Good, Two Hands Bad”, *Parallax* 12, no. 1 (2006): 69–80.

14 Moore, *New Collected Poems*, 143.

15 See, for example, Bonnie Costello, *Marianne Moore: Imaginary Possessions* (Harvard University Press, 1981), or Ann Struthers, “Marianne Moore’s use of Grace in ‘The Pangolin’”, in *Marianne Moore: Woman and Poet*, edited by Patricia Willis (National Poetry Foundation, 1990), 127–33. For a critique of such readings, see Dancy Mason, “‘Another Armored Animal’: Modernist Prosthesis and Marianne Moore’s Posthumanist Animiles”, *Feminist Modernist Studies* 1, no. 3 (2018): 319.

16 Moore, *New Collected Poems*, 143.

toward the animal other; it can even be an “unsettling obligation”, as Donna Haraway writes, “which requires knowing more at the end of the day than at the beginning.”¹⁷ What is at stake here, then, is not simply a change in scale but a particular *volonté de savoir*. The impulse to approach an unfamiliar animal, to observe its habits, identify its parts, classify it, compare it with what is already known, and situate it within a larger taxonomic or ecological order is inseparable from the history of natural history itself. This desire to know can be an expression of care: we attend to what we value, and we cannot care for what we refuse to notice. But there is also always the risk of reducing the animal to what can be known about it; to render it legible at one scale may be to make other relations, other ways of being, disappear. The curious hand — but whose? The poet’s or the reader’s? — that reaches out to know the other is also the hand that can grasp, capture, measure, dissect. The ambiguity is particularly acute in the case of the pangolin, who cannot be so easily explained, least of all when he “rolls himself into a ball that has / power to defy all effort / to unroll it”.¹⁸ Yet, just as with Derrida’s hedgehog — that *other* armoured zoopoetic animal — the pangolin’s apparent self-containment is inseparable from his exposure and vulnerability.¹⁹

The pangolin has accompanied us across multiple scales, as an individual animal, encountered through the peculiarities of a particular body; a member of a species whose survival is measured in populations and rates of decline; an object of political and economic relations that extend across borders; and a participant in temporal and planetary processes that exceed both individual lifetimes and human political horizons. Its scales are at once bodily and conceptual, material and metaphorical. They separate the animal from its surroundings even as they mediate its relation to them; they distinguish one body from another even as they become the basis for its incorporation into global networks of trade, conservation, and representation.

17 Donna Haraway, *When Species Meet* (University of Minnesota Press, 2008), 36.

18 Moore, *New Collected Poems*, 141–42.

19 See Jacques Derrida, “*Que cos’è la poesia?*”, in *Points . . . : Interviews, 1974–1994*, edited by Elisabeth Weber, translated by Peggy Kamuf (Stanford University Press, 1995) 289–99; cf. Maria Trejling, *Metaphor, Animals, Modernism: Spectres of Literarity* (Palgrave Macmillan, 2026), 23–29.

The contributions to this special issue explore how animal lives are shaped by and caught between different scalar modalities. Attending, respectively, to political, temporal, planetary, and individual scales, the authors ask what becomes visible, and what is obscured or rendered incommensurable, as we move between scales of animal life, from multispecies political communities and animal histories to planetary upheaval, industrial agriculture, and the singular lives of individual animals (human and nonhuman), and how nonhuman animals themselves complicate, resist, and transform the scales through which we attempt to comprehend them.

The issue was curated by Mariam Motamedi Fraser and Martin Savransky, and grew out of a seminar series they organized in 2024, which was co-hosted by UCL Anthropocene and the Centre for Critical Global Change at Goldsmiths, University of London. It comprises ten contributions arranged according to four scalar modalities: “Scale Political” by Sue Donaldson and Will Kymlicka, with responses by Alasdair Cochrane and Eva Meijer; “Scale Temporal” by Éric Baratay, with responses by Thomas Rath and Sophie Page; Dinesh Wadiwel’s “Industrial Scale Surrogacy” explores the “planetary” scale, with responses by Andrew Barry and Katie Gillespie; and finally, Anat Pick’s interview with filmmaker Andrea Arnold brings the focus back to the scale of an individual lifetime, “from eyes open to eyes closed”.

The issue also includes four non-themed contributions, on questions of trans*species encounters and the ethics of care (Louis van den Hengel et al.); and the role of insects in shaping representations of gender and sexual dissidence in Mexico (Francisca Dennstedt); on the importance of multispecies interactions in shaping environmental knowledge across the *longue durée* of human history and prehistory (Shumon Hussain and Dominik Ohrem); and finally, on the use of silence and non-semantic utterances to convey the biopolitical violence of language and the law in a short story by the early-twentieth-century Japanese writer Miyazawa Kenji (Miyabi Goto).

The issue concludes with a review article, in which Kiene Brillenburg Wurth responds to Carol Gigliotti's *The Creative Lives of Animals*, bringing her conception of nonhuman creativity into conversation with Daoist and processual philosophy. This is followed by four book reviews: Lotte Suardi on *Animals and Science Fiction* (2024), edited by Nora Castle and Giulia Champion and published in the Palgrave Studies in Animals and Literature series, which is celebrating its tenth year this year; Carol Gigliotti on John Sanbonmatsu's *The Omnivore's Deception* (2025), which she considers to be nothing short of "the most significant book to address our planetary crisis since Rachel Carson's *Silent Spring*"; Peter Sands on — paging Tom Tyler, again — Tom Tyler's *Game: Animals, Video Games, and Humanity* (2022); and, finally, Guillem Rubio-Ramon on *Straying with Street Dogs: A Dialogue on Animal Tainted Politics* (2025), by Aron Nor and Eva Meijer.

Thanks, as always to all the authors, peer reviewers, editors, copy-editors, and production assistants for their invaluable contribution to bringing this issue out — truly, a multi-scalar operation if ever there was one! Special thanks to Mariam and Martin for curating this extra special issue, and to Sami Uçan for permitting us to use his wonderful photograph on the cover, which thoroughly scrambled the scales of our standard template.

On behalf of the editorial team,

Kári Driscoll

August 2026

