

LOOKING AT BATS

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Abstract

Thomas Nagel's 1974 essay "What Is It Like to Be a Bat?"¹ is one of the most cited texts on the problem of consciousness, and its theses have been discussed and debated in many different fields, from philosophy of mind to animal cognition and animal ethics. Nagel's argument, that it is ultimately impossible for us to know what it is like to be a bat *for a bat* given the extreme differences in sensory experience between humans and bats, has come under fire from very different and even opposed perspectives: if, on the one hand, science-oriented philosophers and scholars accused him of underestimating and ultimately curtailing the power of scientific inquiry, on the other researchers in the humanities and animal ethics indicted him of defeatism for dismissing the power of imagination in bridging the species gap. In what follows, I will present and contrast two such positions, the critique of Nagel by neurophilosopher² Kathleen Akins and a very different approach to bat lives through poetry, exemplified by two poems by Ted Hughes (1930-1998) and Les Murray (1938-2019). The goal of counterposing these two different ways of looking at bats is not only or not much that of suggesting a preferable approach to bats' otherness (though this is also what I will do), but also of emphasizing the aesthetic dimension of our relationship with the animal other and the role it plays in our ethical decision-making.

¹ T. Nagel, "What Is It Like to Be a Bat?", in *The Philosophical Review*, vol. 83, n. 4, 1974, pp. 435-450.

² Neurophilosophy is an interdisciplinary field at the intersection of philosophy and the neurosciences in which traditional philosophical problems about the nature of the mind are approached through current findings within the neurosciences.

Keywords

Bats, Animal Otherness, Science As Inquisition, Attention, Animal Poetry

I. The Bat-Machine

Nagel's basic position is that «[o]ur own experience provides the basic material for our imagination, whose range is therefore limited».³ Though he concedes that the imagination is «remarkably flexible», Nagel argues nonetheless that it cannot go «very far» and therefore that the understanding of other forms of life «may be permanently denied to us by the limits of our nature».⁴ Donald Griffin, the American zoologist who, together with Robert Galambos, discovered echolocation in bats in the late 1930s and early 1940s and coined the very term «echolocation», took Nagel to task because his positing the impossibility of knowing something unless totally perfect data are clearly in view ultimately inhibits or even prevents investigation. Griffin calls this attitude «paralytic perfectionism» because it paralyzes scientific exploration and works as a potent excuse not to face a scientific problem. There is probably nothing that we can ever know with complete perfection and total certainty, Griffin argues, but this does not diminish the possibility and the importance of significant if incomplete understanding.⁵

Griffin proposed that in bats listening takes the place of seeing,⁶ and Richard Dawkins picked up and developed this thesis, arguing that probably bat brains can use echoes to do something akin to *seeing* images.⁷ Dawkins' argument is that bats use sound information for the same purpose as we use our visual information: «Bats and we need the same kind of internal model for representing the position of objects in three-dimensional space. The fact that bats construct their internal model with the aid of echoes, while we construct ours with the aid of light, is irrelevant. That outside information is, in any case, translated into the same kind of nerve impulses on its way to the brain».⁸ So, Dawkins concludes, bats *see* in much the same way as we do, even though the physical medium they use for *seeing* is different from the one we use.

³ T. Nagel, «What Is It Like to Be a Bat?», cit., p. 439.

⁴ Ivi, pp. 442n8, 439, 440.

⁵ D. Griffin, *Animal Minds: Beyond Cognition to Consciousness*, Chicago, The University of Chicago Press, 2001, p. 32.

⁶ D. Griffin, *Listening in the Dark: The Acoustic Orientation of Bats and Men*, New Haven, Yale University Press, 1958, p. 297. See also D. Griffin, *Animal Minds*, cit., p. 257.

⁷ R. Dawkins, *The Blind Watchmaker*, New York, Norton & Company, 1986, p. 24.

⁸ Ivi, p. 34.

This is the context in which Kathleen Akins made her intervention. Following the tenet of her mentor Daniel Dennett, according to whom «the structure of a bat’s mind is just as accessible as the structure of a bat’s digestive system»⁹ – but also Nagel’s program of devising «an objective phenomenology not dependent on empathy or the imagination» that could «describe, at least in part, the subjective character of experiences in a form comprehensible to beings incapable of having those experiences» –,¹⁰ Akins purports to analyze what science (i.e., the neurophysiological, «objective» data about bats’ brain we possess) is able to tell us about bats’ subjective experience. She thus meticulously surveys the available literature on the neurophysiology and behavior of the bat to see what we can learn from it about bats’ phenomenal experience. And her starting point is to question Griffin’s and Dawkins’ intuition that sonar perception is somehow similar to human vision – what she names the «intuitive view».¹¹ Despite all her claims of pursuing and adhering to «scientific objectivity», however, from the very beginning she devises her inquiry as a comparison between a superior faculty/experience/being (vision/humans) and an inferior one (echolocation/bat): her first claim is in fact that the size of the bat’s brain – «the size of an aspirin tablet!», she writes, and adds the exclamation mark for emphasis – and its «limited computational space» can only allow for a «downgraded» version of spatial perception.¹²

Akins’ language is telling throughout the essay, starting with the title: “What Is It Like to Be Boring and Myopic?,” which already brands its subject with negative and dismissive terms and reveals a – quite unscientific – anthropocentric bias.¹³ Because in their perception they rely mainly on sound instead of light, bats are deemed «unusual» and are called a «rarity» and even an «anomaly of adaptation»¹⁴ (despite the fact that the order of Chiroptera is the second largest order of mammals after rodents and that many other species also use echolocation). Unlike light, the world of sound in which bats move is deemed «fairly messy» and not a good source of spatial information: sound does not

⁹ D. Dennett, *Consciousness Explained*, New York, Back Bay Books, 1991, p. 447.

¹⁰ T. Nagel, “What Is It Like to Be a Bat?”, cit., p. 449.

¹¹ K. Akins, “What is it Like to be Boring and Myopic?”, in B. Dahlbom (ed.), *Dennett and his Critics*, Oxford, Blackwell, 1993, p. 128.

¹² Ivi, p. 129.

¹³ Language is never neutral and terms such as «boring» and «myopic» inevitably imply evaluation and hierarchization. Akins’ terminology for bats is always negatively connoted and dismissive.

¹⁴ K. Akins, “What is it Like to be Boring and Myopic?”, cit., p. 129.

originate, like most natural light, from one reliable, principal source (the sun); sounds emanate from multiple directions and of numerous frequencies and intensities; an organism that uses sound to retrieve spatial information must actively produce its own sound instead of relying on a passive receptive system, must wait for the echo to return, and must face the problems of interference; sound waves have a high absorption rate and cannot travel very far; the characteristics of the signal that the organism sends out will determine, in part, the kind of signal that the organism gets back; etc. For all these reasons, Akins claims, one can see «why evolution failed to fasten upon sound as its central strategy for spatial perception: compared to the relative compliancy of light, sound presents many problems».¹⁵

Akins proceeds then to analyze the way the bats' brain processes acoustic information and takes the hunt as a paradigmatic activity. But the premise of the whole analysis is that the hunting bat follows «a stereotypic sequence of activities performed over and over again»; hence, a bat is *boring*.¹⁶ The hunting is broken into three phases – search, approach, and catch – during which the bat's sonar signal is altered to meet the informational needs of the moment, reducing the frequency of their cry as they get closer to the prey. However, Akins' premise (and presupposition) is again a negative and dismissive one: in any case the bat's sonar signal cannot travel very far and the furthest that most bats can *see* is about 3 meters; hence, a bat is *myopic*.¹⁷ Akins' analysis is moreover focused on «several strong negative constraints» and on the «information the bat lacks» in its spatial perception,¹⁸ that is, she consciously *looks* for the bats' limitations and frames the bat as intrinsically *limited*. The end-point of the whole effort is in fact to conclude that, «in all likelihood» (Akins is careful to premise all of her conclusion with «plausibly», «probably», etc.), a bat does not *see* the way we see, it does not use its sonar system to construct representations of the objects around it: «the bat's sonar experience is probably neither imagistic nor – more importantly – an experience of a world of objects and properties. *Hence it seems plausible that the bat may not have a point of view at all*».¹⁹ This would (or rather is intended to) disprove Nagel's main premise, that there is

¹⁵ Ivi, pp. 129-33.

¹⁶ Ivi, p. 134. I fail to grasp the difference with the standard behavioral patterns of other species (including humans) in the (necessarily repetitive, recurrent, and standardized) activity of harvesting for food.

¹⁷ Ivi, p. 135.

¹⁸ Ivi, p. 139.

¹⁹ Ivi, p. 146-47. Emphasis in the original.

a bat point of view (a bat consciousness) which constitutes the “what it is like” of being a bat: if, as Akins surmises, there is no bat point of view, then there is nothing that it is like to be a bat.

To illustrate her point, Akins asks the readers to imagine themselves as «the bat’s wingflapper located in the frontal cortex», a sort of «bat homunculus» or rather a pilot whose job is to man the motor controls and to steer the bat-machine given the instruments on the control panel. The point Akins wants to make with her story is to emphasize how small the gap is between the bat’s sonar input and its motor output, and how little intermediary processing is required to translate the auditory information of the primary cortex into motor commands: the story does not require «an intelligent hand on the controls, an intentional agent who attempts to determine what is out there (the state of the external world) and then, on that basis, decides what ought to be done». Fastidiously following Morgan’s Canon,²⁰ Akins concludes that «there is no need to attribute to the bat any intermediary processing steps nor any of the representational capacities that would thereby be required». But the story is also very telling of Akins’ mechanomorphic bias: the bat is for her not only a machine with no conscious mental states, no point of view, no agency, and no intentionality, but it is also a fairly rudimentary one.²¹

From the analysis of one single activity, the hunting, and in one single species of bats, the Mustached bat (*Pteronotus parnellii*, native to Central and South America), Akins extrapolates a series of conclusions that reduce the bat to a rudimentary, boring, unconscious, *lacking* machine. But in order to do so she must abstract from the complexity and variety of bat lives, from all the rest of their activities, from their rich social life, from the fact that they combine sight and echolocation,²² and from the

²⁰ Morgan’s Canon is a precept formulated in the nineteenth century by the British ethologist and psychologist Conwy Lloyd Morgan, according to which in no case is an animal activity to be interpreted in terms of higher psychological processes if it can be fairly interpreted in terms of processes which stand lower in the scale of psychological evolution and development. This principle of parsimony has been traditionally used, for example by behaviorism, to dismiss the attribution of higher capacities to nonhuman animals.

²¹ K. Akins, “What is it Like to be Boring and Myopic?”, cit., p. 147-49. Though the context, the philosophical background, and the terminology are very different, Akins ultimately reproduces and recalls the Western typical understanding of nonhuman animals as always *lacking* that peaked in Heidegger’s definition of them as «poor in world» (see M. Heidegger, *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*, trans. by W. McNeill and N. Walker, Bloomington, Indiana University Press, 1995).

²² Akins acknowledges that in bats vision and sonar probably work together in a symbiotic relation (see K. Akins, “What is it Like to be Boring and Myopic?”, cit., p. 156n9), i.e., she *knows* the «scientific facts», and yet she insists on dismissing bats and using a negative and derogatory vocabulary.

enormous diversity in the order of Chiroptera.²³ Her «scientific» analysis has clearly an agenda: to disprove Nagel’s assumption that bats have a point of view and conscious mental states. So, her conclusion is written in advance: «what science suggests» to her is that «to attribute a point of view to the bat – a species-specific perspective from which to view the world – only imposes an ontology where there is little evidence that one exists»²⁴ (where with «ontology» she probably means a conscious existence, the fact of being more than a machine).

It is not my intention to turn Akins into a whipping boy (or rather girl) for the anthropocentric shortcomings of Western «science»; moreover, her text was published in 1993 and in the past thirty years not only the understanding of bat neurophysiology and behavior has certainly advanced, but also the way of looking at nonhuman animals has importantly changed (and perhaps also have Akins views). However, I nonetheless take Akins as paradigmatic of a certain approach to nonhuman otherness and the world, one to which I want to counterpose a different way of looking.

II. The Inquisitor’s Gaze and the Poet’s Gaze

Akins begins her text with a vignette: she sits in a laboratory in front of a preserved human brain, readied for dissection and with pins and red flags stuck into it, in an anatomy exam session together with thirty other students in front of thirty other brains, and wonders about the question of embodied consciousness: how is consciousness related to the materiality and physiology of the brain?²⁵ The vignette not only sets the tone for her

²³ The order of Chiroptera, the second largest order of mammals after rodents, includes minuscule, nocturnal, insectivores mini-bats as well as giant, diurnal, fruit-eating flying foxes (who do not use echolocation, and whose brain is bigger than an aspirin tablet), so that talking about bats and their sense-modalities in general makes little sense (see e.g., T. Laird, *Bats*, London, Reaktion Books, 2018, pp. 7-8). Richard Dawkins stated that speaking of bats as though they were all the same would be like speaking «of dogs, lions, weasels, bears, hyenas, pandas and otters all in one breath, just because they are all carnivores» (R. Dawkins, *The Blind Watchmaker*, cit., p. 23). Nagel’s bat is however the character in a thought-experiment about consciousness, and thought-experiments are precisely devised in such a way as to abstract from the complexity of real-life situations and isolate a single issue in order to make a specific point, so that, as such, Nagel’s bat is not in any way intended to provide an accurate representation of bat reality (see S. Mulhall, *The Wounded Animal: J.M. Coetzee and the Difficulty of Reality in Literature and Philosophy*, Princeton, Princeton University Press, 2009, p. 24).

²⁴ K. Akins, “What is it Like to be Boring and Myopic?”, cit., p. 151.

²⁵ Ivi, p. 124.

«scientific» and allegedly dispassionate way of looking at bats (as one looks at a preserved human brain), but is also paradigmatic of the way of looking at nonhuman otherness characteristic of Western science. The gaze of the scientist not only reduces natural otherness to dead matter, to a machine-like combination of parts and organs, but also proceeds to «interrogate» it with the scalpel and the electrode, by probing, disassembling, and taking apart the «machine».

Jean Baudrillard compared modern scientific praxis to the «experimental ferocity» of the Inquisition: like the Inquisition, science tries to «extort a confession» from nature using torture machines and torture techniques.²⁶ One year before Baudrillard, the historian Carolyn Merchant supported this thesis by analyzing the history and foundations of the scientific method and showing the link between modern science and inquisitorial torture techniques: Francis Bacon, one of the fathers of modern science, in his *Novum Organum* (1620) explicitly uses a language and a vocabulary derived from his experience as Attorney General of England and Wales (1613-1617), and in particular from the witch trials he supervised, whereby nature, transformed into a mechanical source of secrets to be extracted for economic advance, is to be submitted to the questions and experimental techniques of the new science.²⁷ Merchant concludes: «The interrogation of witches as symbol for the interrogation of nature, the courtroom as model for its inquisition, and torture through mechanical devices as a tool for the subjugation of disorder were fundamental to the scientific method as power».²⁸

The question of power and control is central to the new scientific method: restructuring reality around the metaphor of the machine, that is, around a rigid, limited, and restrictive structure, reduces phenomena to events that are predictable, regular, and subject to rules and laws, which allows in turn for mastery and domination.²⁹ A machine, Val Plumwood adds, «is made to be controlled, and knowledge of its operation is the means to power over it».³⁰ In order to be reduced to a machine, nature must be framed as passive and inert

²⁶ J. Baudrillard, *Simulacra and Simulation*, trans. by Sheila Faria Glaser, Ann Arbor, The University of Michigan Press, 1994, p. 129.

²⁷ C. Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution*, San Francisco, Harper & Row, 1980, pp. 164-65. The French edition of Baudrillard's *Simulacra and Simulation* will be published one year later, in 1981.

²⁸ Ivi, p. 172.

²⁹ Ivi, p. 230.

³⁰ V. Plumwood, *Feminism and the Mastery of Nature*, London, Routledge, 1993, p. 109.

and defined as «lack», deprived thereby of intelligence, agency, creativity, intentionality, autonomy, freedom and all the other features of the «master» that from then on will be reserved to the human. Importantly, this also entails that no constraints can be imposed on the «master» in his treatment of nature for his own purposes and satisfaction.³¹

The history of the *scientific* research on bats is in this sense exemplary. It was the Italian biologist and physiologist Lazzaro Spallanzani (1729-1799) who first wondered how bats can fly in the complete absence of light, and to search for an elusive «sixth sense» that would compensate for sight, in 1793-1794 he conducted extensive and gruesome experiments designed to «interrogate» the bats' sensory capacity: he blinded the creatures by plucking the eyes from their sockets, inserting hot wire through the cornea, or pouring hot wax over the eye and allowing it to cool and set; he also stuffed the ears with wax and other materials, burned the inner surface of the conchs or cut the conchs off at their base; he introduced red-hot shoe nails into the auditory canals, or put long needles through them until they came out from the neck; and he eliminated the other senses by plugging up the nostrils and cutting out the tongue. Spallanzani moreover asked his correspondents to repeat his many experiments in order to confirm or disprove his theories, and throughout the nineteenth and early twentieth centuries hundreds and hundreds of bats were tortured this way in the futile quest to uncover their «secret», until Griffin and Galambos finally succeeded (through «painless methods», Galambos assures us).³² Nothing indicates that the neurophysiological data Akins consulted were obtained with less cruel methods.³³

To this inquisitorial approach I want to counterpose a different way of looking based on the notion of «attention» that I find in Iris Murdoch's philosophy, who in turn derived it from Simone Weil. The context of Murdoch's argumentation is not the problem of consciousness or the (neuro)philosophy of mind but rather moral philosophy, and attention is here deployed by Murdoch to contest the primacy of the concepts of «will»

³¹ Ivi, pp. 110-11. I intentionally use the masculine possessive determiner «his», since, as both Merchant and Plumwood (among many others) emphasize, a central feature of the scientific revolution was to feminize nature (as passive and inferior) and masculinize science and the human endeavor (as active and superior).

³² See R. Galambos, «The Avoidance of Obstacles by Flying Bats: Spallanzani's Ideas (1794) and Later Theories», in *Isis*, vol. 34, n. 2, 1942, pp. 132-140; S. Dijkgraaf, «Spallanzani's Unpublished Experiments on the Sensory Basis of Object Perception in Bats», in *Isis* vol. 51, n. 1, 1960, pp. 9-20.

³³ Akins actually describes how acoustic stimuli in bats are determined and analyzed by inserting an electrical probe into the brain (K. Akins, «What is it Like to be Boring and Myopic?», cit., p. 143).

and «choice» in ethics. What I find important in this concept is not only that it unmasks the moral failure of the scientist-as-inquisitor, but also that it offers concrete coordinates for a different way of looking at and relating to the other.³⁴ Attention is explicitly opposed to non-attentive looking in a series of binary contrapositions, and though Murdoch never singles out the scientist-as-inquisitor as example of non-attentiveness, that will be my main target. The first categorical opposition in this sense is that between attention and «knowledge»: whereas the latter is abstract, the former is concrete; whereas knowledge is general, attention is individual; whereas knowledge is detached, attention is engaged; whereas knowledge aspires to matter-of-fact-ness and risks thereby to be dull and superficial, attention is imaginative.³⁵

The last point is important because it leads to another central opposition, that between reality and fantasy. Contrary to what it might at first appear, imagination is a necessary faculty for a true, attentive approach to reality, because attention needs an imaginative effort in an encounter with otherness that be really able to take the subject beyond itself. The attentive approach is a sort of «obedience to reality»: «The idea of a patient, loving regard, directed upon a person, a thing, a situation, presents the will not as unimpeded movement but as something very much more like “obedience”». ³⁶ This is the opposite of fantasy, which Murdoch defines instead as a bad use of the imagination, centered on images and projections of the self: «the assertion of self, the dimming of any reflection of the real world». ³⁷ In this sense, the dream of control of and domination over nature of the scientist-as-inquisitor is a fantasy, the imposition of the subject’s possessive desires over a nature framed to this end as passive and inert. ³⁸ Attention, to the contrary, is a sort

³⁴ Neither Murdoch nor Weil explicitly include the nonhuman other in their concept of otherness, but nothing intrinsically prevents their theories to be extended beyond their original humanistic target. In this, as in my reading of Murdoch more in general, I follow the compelling analysis of Silvia Caprioglio Panizza, *The Ethics of Attention: Engaging the Real with Iris Murdoch and Simone Weil*, London, Routledge, 2022.

³⁵ In this series of contrapositions, the status of «looking» is not always clearly defined: if at times Murdoch equates attention with looking («the idea of *attention*, or looking»), at other times she slightly differentiates them («I would like on the whole to use the word ‘attention’ as a good word and use some more general term like ‘looking’ as the neutral word»; I. Murdoch, *The Sovereignty of Good*, London, Routledge, 2014, pp. 35, 36).

³⁶ Ivi, p. 39.

³⁷ Ivi, p. 58.

³⁸ The following seems an *ante litteram* reply to Akins: «what is at stake here is the liberation of morality, and of philosophy as a study of human nature, from the domination of science: or rather from the domination of inexact ideas of science which haunt philosophers and other thinkers. Because of the lack until fairly recently of any clear distinction between science and philosophy this issue has never presented

of «unselfing»,³⁹ a withdrawal of the self and a restraint of the ego and of its compulsive and possessive will of knowledge/power. And only this unselfing allows to bring out, or rather let emerge, the «truth» of the object. That is how Silvia Caprioglio Panizza defines unselfing: «the recognition of a reality that is not ours to distort, even if only in imagination. [...] A non-attached desire for truth comes with a giving up of our claims on it».⁴⁰ Realism is «a suppression of self».⁴¹

The definition of attention that I find most interesting is hence the following: attention is «the idea of a just and loving gaze directed upon an individual reality».⁴² The attentive gaze must combine justice towards and love for the object, where both are to be intended as selfless and non-possessive. Love as a just and true gaze at the object of attention amounts thus to «the extremely difficult realization that something other than oneself is real»,⁴³ and is therefore also the recognition that the object of attention has a value, that it is worthy of attention. «To attend is to care, to learn to desire to learn»,⁴⁴ Murdoch writes, but this «desire to learn» is not the inquisitorial, possessive, self-centered, and ultimately «fantastic» desire of the scientist approaching the object with scalpel and electrodes, but rather a desire that empties out the self and let the other be. In a recent essay on Murdoch, Martha Nussbaum adds an important point to this definition of the gaze. Recounting an encounter with Murdoch in which she felt somehow pierced by Murdoch's intense gaze, Nussbaum adds: «But I think that there is something more to loving vision than just seeing. There is, for example, a willingness to permit oneself to be seen. There is also a willingness to stop seeing, to close one's eyes before the loved one's imperfections. There is also a willingness to be, for a time, an animal or even a plant, relinquishing the sharpness of creative alertness before the presence of a beloved body».⁴⁵

itself so vividly before. Philosophy in the past has played the game of science partly because it thought it was science» (ivi, p. 26).

³⁹ Ivi, p. 82.

⁴⁰ S. Caprioglio Panizza, *The Ethics of Attention*, cit., p. 38.

⁴¹ I. Murdoch, *The Sovereignty of Good*, p. 64.

⁴² Ivi, p. 33.

⁴³ I. Murdoch, «The Sublime and the Beautiful Revisited», in *Yale Review*, vol. 49, 1959, p. 261, qtd. in S. Caprioglio Panizza, *The Ethics of Attention*, cit., p. 41.

⁴⁴ I. Murdoch, *Metaphysics as a Guide to Morals*, London, Penguin, 1992, p. 179.

⁴⁵ M. Nussbaum, «'Faint with Secret Knowledge': Love and Vision in Murdoch's *The Black Prince*,» in J. Broackes (ed.), *Iris Murdoch, Philosopher*, Oxford, Oxford University Press, 2014, p. 152.

From this passage Christopher Cordner extrapolates the essential features of the «just and loving gaze»:⁴⁶ not an objectifying and penetrating gaze (that of the scientific tradition, or of the Western tradition more in general), but, on the contrary, a gaze that also includes «a willingness to permit oneself to be seen», «a willingness to stop seeing», and even a «relinquishing [of] the sharpness of creative alertness» before the presence of another body. An «increased sense of reality» is produced by attention as an «attending on» the other, as a «waiting on» the other, which, instead of trying to grasp and possess the object, is even capable and ready, at times, to relinquish alertness and stop looking.

A final point: Murdoch and Weil often take the artist and the poet as paradigm of the attentive gaze: «Virtue is *au fond* the same in the artist as in the good man in that it is a selfless attention to nature»,⁴⁷ Murdoch writes; and even the creative power of the artist she articulates as a sort of «active passivity» or «conscious waiting and periods of attention».⁴⁸ And Weil concurs: «The poet produces the beautiful by fixing his attention on something real. It is the same with the act of love».⁴⁹ I will therefore define the gaze of the poet, in contraposition to that of the scientist-as-inquisitor, as that «just and lovely gaze» that offers a different and more respectful approach to otherness.

III. Flying on the Bat's Back

The argument has been put forward that only poetry – unlike philosophy – can aspire to properly engage with the animal embodied singularity. Derrida, for example, at the beginning of *The Animal That Therefore I Am* wrote: «For thinking concerning the animal, if there is such a thing, derives from poetry. There you have a thesis: it is what philosophy has, essentially, had to deprive itself of. It is the difference between

⁴⁶ C. Cordner, «To See 'Justly and Lovingly': What Did Iris Murdoch Mean by Attention?» in *ABC Religion & Ethics*, 19 July 2019, available at: <<https://www.abc.net.au/religion/iris-murdoch-and-the-meaning-of-attention/11301690>>, accessed 20 May 2022.

⁴⁷ I. Murdoch, *The Sovereignty of Good*, cit., p. 40.

⁴⁸ I. Murdoch, *Metaphysics as a Guide to Morals*, cit., p. 323. See also S. Caprioglio Panizza, *The Ethics of Attention*, cit., p. 28.

⁴⁹ S. Weil, *Gravity and Grace*, trans. by E. Crawford and M. von der Ruhr, London, Routledge, 2002, p. 119, qtd. in S. Caprioglio Panizza, *The Ethics of Attention*, cit., p. v.

philosophical knowledge and poetic thinking».⁵⁰ Only poetry can authentically «think» the animal (perhaps, we may elaborate, because it can engage with the animal's individuality and physicality), whereas philosophical knowledge, in order to arrive at an abstract «concept» of the Animal, must precisely deprive itself of this kind of thinking.⁵¹ Elizabeth Costello, the main character of J.M. Coetzee's novella *The Lives of Animals*, analogously argues that, unlike philosophers and their lifeless and disembodied abstractions, only poets are able to return «the living, electric being» of human and animal lives to language.⁵² Coetzee's novella has inspired a number of studies that explore the peculiar relationship between poetry and animality, and since Elizabeth Costello explicitly singles out Nagel's thought experiment with bats as an example of the failure of philosophy, Nagel and bats prominently figure in these works.

Unlike other literary genres, the argument goes, poetry offers an engagement with language that allows for peculiar encounters with nonhuman animals. In a nutshell, thanks to the use of metaphors and similes and the manipulation of sound and rhythm (the «music» of poetry);⁵³ the resistance to rules and codes (poetry's «inherent playfulness») and the openness of forms of expression;⁵⁴ the gesturality that allows to re-enact, recreate, mimic, or respond to the gestures of animals,⁵⁵ poetry allows for truer and deeper encounters with animality. This linguistic freedom allows to invent new forms of contact with the nonhuman other, with the embodied reality of the individual being – «a shock of surprise, recognition, joy, or fear» – which in turn involves a transcending of one's individual humanity.⁵⁶ Importantly, in the true successful shaping of this contact, the poetic animal is allowed to remain itself, as opposed to become a symbol for something else.⁵⁷ Such contact can, at times, produce, shape, and feed forms of sympathy and care

⁵⁰ J. Derrida, *The Animal That Therefore I Am*, trans. by D. Wills, New York, Fordham University Press, 2008, p. 7.

⁵¹ See also e.g., H.M. Strømmen, «Animal Poetics: Marianne Moore, Ted Hughes and The Song of Songs,” in *Literature & Theology*, vol. 31, n. 4, 2017, p. 408; O. Oerlemans, *Poetry and Animals: Blurring the Boundaries with the Human*, New York, Columbia University Press, 2018, pp. 16-17.

⁵² J.M. Coetzee, *The Lives of Animals*, Princeton, Princeton University Press, 1999, p. 65.

⁵³ M. Malay, *The Figure of the Animal in Modern and Contemporary Poetry*, Basingstoke, Palgrave Macmillan, 2018, p. 3. Randy Malamud (*Poetic Animals and Animal Souls*, Basingstoke, Palgrave Macmillan, 2003, p. 59) also writes that «poetry is in some ways closer to music than to speech» and with its rhythm, like music, establishes connectedness and flow.

⁵⁴ O. Oerlemans, *Poetry and Animals*, cit., p. 20.

⁵⁵ A.M. Moe, *Zoopoetics: Animals and the Making of Poetry*, Lanham, Lexington Books, 2016, pp. 11-12.

⁵⁶ O. Oerlemans, *Poetry and Animals*, cit., p. 152.

⁵⁷ Ivi, p. 31.

for the live presence of other bodies, human and nonhuman alike. And this is not an exclusive feature of poems as such, as Malay emphasizes:⁵⁸ the «poetic» is an attitude, a sensibility, a mode of *attention*, a special aesthetics as an open-ended relationship with the world and with other beings which involves unpredictability, wonder, surprise, perhaps also fear, but most of all self-estrangement and a desire to reach beyond the self.

Of course, there are many types of poetry, many different kinds of poetic intention, and many levels of success or failure, and bats in poetry (as in Western culture more in general) have rarely aroused much sympathy. This is indeed one of the reasons why Nagel chose bats for his thought experiment: As Wendy Doniger remarked, Nagel chose bats «to make the point of noncommunication more dramatic, because we don't *love* bats» and thus we *don't want* to understand them.⁵⁹ He could have chosen dolphins, who, like bats, are also mammals using echolocation to move around and hunt, and moreover live in water and sleep with only one brain hemisphere at a time. But, unlike dolphins, bats evoke unconscious images of darkness, frenzy, fright, and even fantasies of blood-sucking vampires (although of the 1,331 known species of bats only 3 feed on blood),⁶⁰ so that we psychologically not only refuse to bridge the gap between us and them but even widen it.

And this is the image of the bat that we also find in much of Western poetry: from William Blake, who, though sympathizing with the other creatures of God, of the bat writes: «The bat that flits at close of eve / Has left the brain that won't believe»;⁶¹ to Rilke, who picks up the stereotype of an excited, terrified, and alien form of life, writing in the Eight Duino Elegy: «And how bewildered is any womb-born creature / that has to fly. As if terrified and fleeing / from itself [*Wie vor sich selbst / erschreckt*], it zigzags through the air, the way / a crack runs through a teacup. So the bat / quivers across the porcelain of evening»;⁶² to D.H. Lawrence, who in his long poem “Man and Bat” recounts his encounter in his room in Florence with a scared bat using a vocabulary full of

⁵⁸ M. Malay, *The Figure of the Animal in Modern and Contemporary Poetry*, cit., p. 3.

⁵⁹ W. Doniger, “Reflections,” In J.M. Coetzee, *The Lives of Animals*, Princeton, Princeton University Press, 1999, p. 102.

⁶⁰ T. Laird, *Bats*, cit., p. 40.

⁶¹ “Auguries of Innocence” (c. 1803), qtd. in *ivi*, p. 51.

⁶² R.M. Rilke, *Duino Elegies and The Sonnets to Orpheus*, ed. and trans. by Stephen Mitchell, New York, Vintage, 2009, p. 42. This is the same stereotype that Nagel also reproduces when he writes that «anyone who has spent some time in an enclosed space with an excited bat knows what it is to encounter a fundamentally alien form of life» (“What Is It Like to Be a Bat?”, cit., p. 438).

derogatory terms, such as «disgusting bat», «With a twitchy, nervous, intolerable flight, / And a neurasthenic lunge, / And an impure frenzy», «In an impure haste», and «obscene».⁶³ There exists however also a more sympathetic tradition, which starts at least with Shakespeare's Ariel in *The Tempest*, who sings: «on the bat's back I do fly» (Act 5, Scene 1), and includes for example Emily Dickinson, who saw the bat as an «Elate Philosopher» and, perhaps sensing the secret of their ultrasounds, wrote: «And not a song pervade his lips – / Or none perceptible».⁶⁴ The progress in ethological knowledge during the twentieth and twenty-first centuries has (partially) changed our attitude towards bats, and from the more sympathetic poetic tradition I want to briefly present here two poems that attempt to capture the embodied, kinetic presence of the animal (what Costello called «the living, electric being»): Ted Hughes' "Karlsbad Caverns" and Les Murray's "Bats' Ultrasound."

Hughes' poem recounts a visit to the Carlsbad Caverns in New Mexico during a trip through the US the poet took in 1959 with his wife Sylvia Plath. In the cavern the two watch a swarm of bats – «an upward torrent / Of various millions of bats. A smoky dragon / Out of a key-hole in earth, / A great sky-snake writhing away southwards» – flying out of the cavern at dusk and then coming back to avoid a storm. The bats are «presumably» happy – «So happy they didn't know they were happy, / Thew were so busy with it, so full of it, / Clinging upside down in their stone heavens» – and in Hughes' primitivistic shamanism they represent the fullness of Nature:

The bats were part of the sun's machinery,
Connected to the machinery of the flowers
By the machinery of insects. The bats' meaning

Oiled the unfailing logic of the earth.
Cosmic requirement – on the wings of a goblin.
A rebuke to out flutter of half-participation.⁶⁵

⁶³ D.H. Lawrence, "Man and Bat," in M. Baron (ed.), *On a Bat's Wing: Poems About Bats*, Nottingham, Five Leaves Publications, 2007, pp. 75-80.

⁶⁴ E. Dickinson, "The Bat," in *ivi*, p. 73.

⁶⁵ Ted Hughes, "Karlsbad Caverns," in *ivi*, pp. 47-48.

Though less than in other poems by Hughes about individual animals (e.g., the hawk, the jaguar), here too the swarm of bats expresses a concentrate of powerful and unbounded energy that attempts to let the animal emerge as a concrete, living being. In his poems, Costello argues (talking about “The Jaguar”), Hughes «is feeling his way toward a different kind of being-in-the-world [... and] ask[s] us to imagine our way into that way of moving, to inhabit that body». ⁶⁶ Hughes attempts to grasp the powerful bodily presence of the animal, its materiality, sounds, movements, and his language «strains towards a verbal sensuousness in his attempts to figure the animal in verse, a rhythmic tactility» intended to «conjure up animal life by becoming expressive instances of the energies they invoke». ⁶⁷

Les Murray’s “Bats’ Ultrasound” belongs to his collection of speaking animal poems “Presence: Translations from the Natural World,” a subsection of the book *Translations from the Natural World* (1992), where the poet uses the concept of translation as a way to emphasize the communicative kinship and the intentionality of all languages, human and nonhuman alike. The assumption of a common linguistic intentionality between humans and nonhumans aims at producing a hybrid space in which languages affect and transform each other. «Speaking as an animal», Onno Oerlemans explains, «can work if the speaker actually tries to meet the animal halfway, producing a language that defamiliarizes the human as it makes the strangeness of the animal seem familiar». ⁶⁸ So, after two descriptive stanzas, in which nonetheless the description in common English metaphorically and ironically mixes human and nonhuman – «radar bats are darkness in miniature, / their whole face one tufty crinkled ear / with weak eyes, fine teeth bared two sing» – the final stanza modulates into «bat language»:

*ah, eyrie-ire, aero hour, eh?
O'er our ur-area (our era aye
ere your raw row) we air our array,
err, yaw, row wry – aura our orrery
our eerie ü our ray, our arrow.*

⁶⁶ J.M. Coetzee, *The Lives of Animals*, cit., p. 51.

⁶⁷ M. Malay, *The Figure of the Animal in Modern and Contemporary Poetry*, cit., pp. 99-100.

⁶⁸ O. Oerlemans, *Poetry and Animals*, cit., p. 177.

*A rare ear, our aery Yahwey.*⁶⁹

The stanza, Oerlemans argues, «is simultaneously human and bat, language and a rough approximation of bat music, enacting hybridity as literally as possible».⁷⁰

Both poems obviously fail, Hughes' because it still allegorizes the animal, reducing it to a romantic vision of uncontrollable chthonic forces and the «logic of the earth», and Murray's because the translation cannot but remain merely symbolic. But the limits of language to which this poetry points are not lamented as a loss but rather celebrated as a more authentic engagement with otherness. These poetic engagements always leave a remainder, a mystery,⁷¹ and ultimately question the ability of representation and state the impossibility of capturing objective reality in language. But this kind of poetry embraces this impossibility with a way of seeing animal presence that exceeds the limits of language, acknowledging the ways in which it eludes us: these poems do not pretend to fully understand what they see and to transform it into an object of knowledge, but try to meet its embodied presence halfway. They frustrate the power of the human observer over the animal, the domination of the seeing subject over the seen object, not privileging knowledge as the final arbiter of our relationship with animal presence but rather situating our encounters in an interplay of knowledge and ignorance. Acknowledging the “excess” of animal presence, these poems bring us in contact with – and simultaneously keep alive – the *vitality* of other lives.⁷²

IV. For a Poetic Ecology

This is what I would like to call «poetic ecology»: an engagement with animal life that goes beyond the traditional idea of knowledge as mastery that marks the Western tradition. Randy Malamud has particularly insisted on this point: in the arts as in the other realms of knowledge, nonhuman animals are mostly seen according to a paradigm of exploitation, an «imaginatively impoverished discourse» that is imposed onto all living

⁶⁹ L. Murray, “Bats’ Ultrasound,” in M. Baron (ed.), *On a Bat’s Wing*, cit., p. 18, italics in the original.

⁷⁰ O. Oerlemans, *Poetry and Animals*, cit., p. 178.

⁷¹ Ivi, p. 26.

⁷² M. Malay, *The Figure of the Animal in Modern and Contemporary Poetry*, cit., pp. 18-20, 223-24.

and nonliving beings alike.⁷³ Nagel's question is, for Malamud, paradigmatic in this sense: knowing what it is like to be a bat for Nagel means to master the experience of batness in the way we master (or think we master) our own experience, but the question forecloses this very knowledge instead of giving access to the fullness of this experience.⁷⁴ The same holds for the arts, including most poetry, which approach animal life as an «object» to be described, explained, known, mastered – even to death.⁷⁵ Knowledge in this tradition, as we have seen, equals control, «knowing all there is to know», a «heroic march toward omniscience and unbounded experiential conquest», which inevitably becomes exploitation and constraint – even in the arts, which are also guilty of the presumption of aesthetic-cognitive entitlement and mastery (they aim to *capture* the animal, even if figuratively).⁷⁶

A better ecological vision can be nonetheless offered by poems which make explicit their *inevitable failure* to represent the animal. Poems such as Hughes' and Murray's acknowledge, in their incessant recalibration of words, images, and sounds, that their subject is «always seemingly one pace ahead» of them,⁷⁷ that it cannot be «captured» and fully «possessed» as an *object* of knowledge. But their point is precisely that what is at stake is not success or failure, but the ethics of the imaginative effort itself: «There is a richness to the attempt which stands independent of its success»,⁷⁸ and thus, Malamud emphasizes, «simply the expression of wanting to know what it is like to be a bat is the beginning of actually achieving that knowledge», it is a step towards experiencing batness.⁷⁹ This is however a knowledge that does not grant the human subject power and control over the object, but rather brings the subject *outside itself*, outside the sphere of power and control, and into a contact zone with the nonhuman other.

Poetry is more amenable to this kind of experience than the novel or other literary genres: poetry is the farthest from «normal» human modes of expression and thereby can bring us outside our everyday kind of experience and towards a different, more open and

⁷³ R. Malamud, *Poetic Animals and Animal Souls*, cit., p. 9.

⁷⁴ Ivi, pp. 9-10.

⁷⁵ Ivi, pp. 34, 39.

⁷⁶ Ivi, pp. 39, 40, 42.

⁷⁷ M. Malay, *The Figure of the Animal in Modern and Contemporary Poetry*, cit., p. 129.

⁷⁸ Ivi, p. 2.

⁷⁹ R. Malamud, *Poetic Animals and Animal Souls*, cit., p. 7.

equitable encounter with nonhuman otherness.⁸⁰ Poetry offers a more ecological, more sustainable kind of encounters precisely because it is willing to acknowledge the limitations and hubris of human knowledge, because, to use Nussbaum's intuition about Murdoch's mode of attention, it understands the relation with the other as also including modalities of relinquishing: «to let oneself be seen», «to stop seeing» and «to relinquish the sharpness of creative alertness». The gaze of the poet can be «just and loving» when it is also willing to stop seeing, to compromise, to accept less than we have become accustomed to have, and to come to terms with a necessary retrenchment of our cultural expectations.⁸¹ Attentiveness is a stretching toward something else (this is the meaning of the Latin verb *ad-tendere*),⁸² a going out of oneself to «attend on» the other, on its embodied presence, on its needs, which also implies a waiver of the hubris of complete knowledge. What the challenge of otherness primarily demands is respect, a forsaking of colonizing modes of knowledge which constrain the other within the cage of our knowledge system. Honoring the opaqueness of other lives involves a *caring* that also means knowing when to be satisfied with not knowing.⁸³

⁸⁰ Ivi, p. 58.

⁸¹ Ivi, p. 41.

⁸² A.M. Moe, *Zoopoetics*, cit., 24.

⁸³ A final note on method: in counterposing the gaze of the scientist-as-inquisitor to that of the poet I am aware of simplifying these two categories for the purpose of establishing a paradigmatic alternative. I do not intend to dismiss scientific inquiry as such – as in the worn-out contraposition between hard-sciences and humanities – and would argue to the contrary that much of the ethological research of the past forty years or so (though certainly not all of it), such as the work of Jane Goodall, Barbara Smuts, Mark Bekoff or Frans de Waal, just so mentions some famous names, is inspired by a «poetic» attitude that looks at nonhuman animals with respect and care; not with the scalpel and the electrode but rather with justice and love. This kind of ethological literature constitutes indeed an invaluable component that informs and nurtures the poetic attitude towards the nonhuman world.

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