Introduction

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Introduction: The Animal in Renaissance Italy

STEPHEN BOWD AND SARAH COCKRAM

Until the publication of Charles Darwin’s *On the Origin of Species by Means of Natural Selection* (1859) the belief that human beings were created in the image and likeness of God and that all animal life was the result of divine creation *ex nihilo* shaped the general understanding of the relationship between humans and animals. In particular, humans were separated from other animals on the basis of their capacity for a high level of reason, and during the Renaissance it was even argued that humans could grasp something of the divine intellect by means of contact with angelic intelligences. The question of how humans could rise above the level of other animals, even that of the ape despite their shared characteristics, strongly marked discussions in history, philosophy, natural philosophy and other fields of human culture. Indeed, the question, ‘what does it mean to be human?’ was probably one of the most urgently and productively explored matters for scholars, writers, and artists throughout the premodern era. The men and women who engaged in this question generally employed a common language drawing on religion, philosophy, and history that only began to fragment during the seventeenth and eighteenth centuries in a complex process of specialization of knowledge about humans and animals.

Recent developments in medicine and technology, from brain imaging to biotechnology, have again thrown up the problem of what it is to be human and have helped to decentre humanity. An era during which humanity was defined in relation to non-human animals may now be giving way to one in which it is defined in relation to
artificial intelligence. It is therefore no coincidence that an increasing number of researchers have been looking at the question of ‘being human’ from a variety of perspectives, not least historical. The history of animals is attracting increased attention and some scholars now speak of an ‘animal turn’ reflected in numerous specialized publications including book series such as *Animalibus: Of Animals and Cultures* (edited by Nigel Rothfels and Garry Marvin, and published by Pennsylvania State University Press). This turn was most precocious, and has been especially notable in medieval studies. However, since the publication of Keith Thomas’s seminal *Man and the Natural World: Changing Attitudes in England 1500-1800* (1983), there have appeared a number of valuable edited collections addressing the early modern period, along with work in English literature, and studies on the history of ideas and science. Surprisingly, the production of literature on the animal turn in the context of the Italian Renaissance has so far remained relatively limited with the publication of studies on animals in art history, on beasts from specific continents or cities, and on animals in the domestic sphere.

The best work on animals in the Renaissance draws from, and speaks to, both the fields of Renaissance studies and animal studies, and the endeavour to write animals back into historical experience has been accompanied by a number of important debates with broader historical and cultural resonances. First, should historians focus on animals as symbols, and as mirrors for humanity, or should the lived experience of animals be a priority in our research? The former approach is clearly anthropocentric but the latter produces an even thornier problem: do we need to accept that a gulf exists between ourselves and non-human animals that means that we cannot write the history of animals in and of themselves, and are forced by our sources and perception solely to write the history of human-animal relations? How
much of a problem is our species-bias (and, it might be asked, how different is this to
the trap of subjectivity that all historians must face when trying to understand the
interior life of another human being)?\textsuperscript{14} In turn, these problems raise questions about
methodologies and approaches; the animal in our sources may be plain to see, or
hiding in the margins. Some scholars have been methodical and imaginative in their
pursuit of animal lives through documentary evidence (for example, wills, account
books, diaries), others through literature or art, and many apply fruitful theoretical
perspectives or collaborate with zooarchaeologists, scientists, ethologists.\textsuperscript{15}

Consequent to the issue of finding the real animal in our evidence is that of
agency. While compelling monographs have demonstrated how animals have shaped
environments and human historical experience in profound ways,\textsuperscript{16} questions of
animal agency remain prominent. As the recognition and growth of historical animal
studies is compared with efforts to give a historical voice to other dominated or
silenced groups, scholars may consider the extent to which animals were able to resist
their orders (through recalcitrance, running away, biting) or to control humans in turn
(through fear or indeed through affection). Alongside animals fighting back, we
should also recognise the immense contribution of animal co-operation in farming and
other human enterprises including warfare. We must continue to think about how
animals experienced the past and the significance of this to animal lives and to the
lives of the humans with whom they lived. Questioning the human-animal past, as it
might be expressed, also adds to how we understand our relationship with the natural
world today, for instance in terms of the boundaries discussed above, as well as in
relation to current concerns about exploitation or companionship, which turn out to
have been matters for lively debate in Renaissance Italy.\textsuperscript{17}
The aim of this special issue on the animal in Renaissance Italy is to bring the fields of animal and Renaissance studies into closer dialogue and to consider ways in which human and non-human categories and relationships were constructed and redefined in relation to the question, posed recently by Benjamin Arbel: ‘Did animals have a Renaissance?’.

It is especially appropriate for a collection of essays addressing this topic to appear in Renaissance Studies since it was Italian humanists who considered early, extensively and with considerable European influence the nature of humanity, especially the ‘dignity of man’, and the human relationship with animals. Renaissance humanists recovered ancient texts (such as Lucretius’ *On the Nature of Things*, Plutarch’s works on vegetarianism, and on the intelligence of animals; and Porphyry of Tyre’s *On Abstinence from Killing Animals*) and with them discovered a range of ethical stances towards animals that may have aided the eventual emergence and spread of new sensibilities and sensitivities towards animals. These discussions were influenced by colonization or contact with other peoples around the world, and they have significantly contributed to many modern concerns with, and categorizations of, humans and animals.

Renaissance Italians were heavily influenced by ancient Greek and Biblical traditions that differentiated humans from other animals and assumed an unequal relationship. Unlike other animals man was created in God’s image and likeness (Genesis 1: 27) and possessed a rational soul. Man and woman’s possession of an immortal soul and religious instinct, as well as a reasoning capacity, erect posture, hands, and the ability to laugh or express themselves through spoken language were all presented as proof of human difference to, and superiority over, other animals. The brute beast lacked a mind or soul and in the view of René Descartes, men were the ‘lords and possessors of nature’. This hierarchical view of the human relationship
with nature, and the belief that animals were simply lacking souls or a religious
instinct, often followed the medieval bestiary tradition in a projection of the bestial
onto censured aspects of human behaviour such as lust or gluttony.\textsuperscript{20} As Alamanno
Rinuccini wrote of the corruption of Florence in \textit{c.} 1480, taxes were spent not on the
common good but on ‘horses, dogs, birds, actors, sycophants, and parasites.’\textsuperscript{21}
Nakedness or long hair were also considered bestial traits while clothing was
presented as an essentially human attribute. The close proximity of peasants to farm
animals also reinforced social prejudices about rustic backwardness and as Cecilia
Muratori points out in her essay it was facetiously noted that hunters became savage
and bestial as a result of prolonged periods in the woods with the animals.

The association of evil and irreligiosity with the bestial also helps to explain
the horror with which monstrous births were often viewed, as well as the presentation
of the devil as half-man and half-beast and his \textit{succubi} and \textit{incubi} as animals.\textsuperscript{22} In a
similar fashion Jews were frequently characterized by Christian writers as ‘swine’,
pigs, or dogs and associated with the devil.\textsuperscript{23} Humanists concerned with the behaviour
and virtues proper to man drew on such traditional Christian views of Jews and they
sought to sustain their universalizing claims about humans in relation to the animal
and the Jewish exception. As Andrew E. Benjamin has argued, both Jews and animals
could represent external threats to the human since they were quite different in nature,
imperfect, unnatural, and requiring subjugation.\textsuperscript{24} They were also indispensable to the
process of definition of what was properly human, a definition based on
differentiation according to both incorporeal and bodily characteristics. The medieval
idea of the ‘perfidious’ or faithless Jew stubbornly impervious to conversion was
therefore reinforced by natural philosophical presumptions about Jewish physiology.
The menstruating male Jew and the ‘blood libel’, by which it was thought that Jews
murdered Christians and consumed their blood in order to remedy bodily stench, both conferred bestial traits on Jews and cast them more forcefully outside of the scope of humanity, effectively unassimilable by the love of Christ.

Given the way the debate about humanity relied on animals and bestial traits it is no coincidence that the sixteenth century saw the birth of natural history as a discipline, and a veritable explosion of books dedicated to the description and cataloguing of all species of animals and plants. Firmly rooted in Renaissance culture, the emergence of natural history demanded knowledge of a broad range of classical authors and the mastery of observation and description. These skills constituted the methodological foundations of the discipline, and yet the examination of some of the most remarkable works of natural history of the sixteenth and seventeenth centuries reveals the existence of a considerable number of ‘unreal’ or unusual animals. The analysis of how these liminal or hybrid animals were studied—either through observation and dissection, or through verbal and visual description when they were not physically ‘accessible’—allows us to investigate how early-modern humans advanced knowledge of their environment and discussed species that did not quite fit into familiar narratives. Once again, the key to this discipline was the process of ‘ensoulment’ and the perfection of God’s creation, two aspects at the core of what it meant to be human in the Renaissance. However, the ‘tentative’ and ‘contested’ nature (to quote Monica Azzolini in her contribution to this volume) of many observations, enquiries, and debates in this field is a useful reminder of the contested and incomplete state of knowledge about humans and non-human animals in this period.

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In addressing the evidence of human-animal interaction and the place of the animal in Renaissance Italy, the contributors to this special issue consider a range of key questions about the ways in which Renaissance men and women understood themselves in relation to the animal kingdom. They offer striking and original conclusions which provide a fuller and more nuanced picture of the human and the animal in the Italian Renaissance and will stimulate and guide future research. The coherence of the areas of investigation covered in this volume and their congruity with each other lies not only in their relationship to the question of human-animal relations but also in their Italian and Renaissance foci. As so often in Italian Renaissance history, a single well-focused area of investigation can uncover a wealth of religious, political, intellectual, social, and economic themes. This diversity reflects the tremendously rich nature of Italian archival material but also the complex and interconnected reality of Italian society, as well as the well-developed relationship of Italy with the rest of the world. Contributions cover the period c. 1350-c. 1700 in order to aid comparison of long-term trends in Italian animal history and to allow for the possible revision of traditional chronologies of the Renaissance.

The focus of the first four contributors is human-animal boundaries. Benjamin Arbel’s essay, which is the fruit of a larger research project on Renaissance attitudes to animals, addresses the ways in which comparative anatomy influenced Renaissance discussions concerning the nature and capacities of animals compared to those of humans. Arbel’s essay concentrates on the writings of Leonardo da Vinci, Andrea Vesalius, Girolamo Fabrici di Acquapendente, and Pierre Belon du Mans, all of whom can be considered as pioneers in the field of comparative anatomy and it raises questions of periodization by suggesting how empathy for non-human animals grew
during the Renaissance. The insights that his chosen figures derived from their experience in dissections of animal bodies are examined against the background of changing sensitivities with regard to animals, which have already been observed in other writings of the same period, particularly literary works. Rather than going into a detailed comparison of anatomical findings, Arbel’s paper focuses on perceptions that transcended strictly anatomical knowledge, particularly on reflections concerning the possibilities of an animal soul, animal intelligence and animal language.

The men studied by Arbel sometimes broke the barrier of skin or fur in their practical investigations or scholarly deliberation in order to cross the divide that traditionally separated human and non-human animals. In doing so they had to challenge deeply-held assumptions. Leonardo da Vinci questioned the idea that the possession of hands elevated humans above other animals and he recorded with fascinated horror the bestial in cannibals who might stoop to consuming the genitalia of their fellow creatures. Four decades later in Padua, Andrea Vesalius’ studies of the brain produced no physical evidence for the immortal ‘rational soul’ thought to distinguish humans from animals, while Girolamo Fabrici, who held the chair of anatomy and surgery at Padua from 1565 claimed that non-human animals possessed a form of language. The rudimentary natural language of animals may have been restricted to voiced expressions of passionate feeling but, he argued, it might be understood by those humans with a sufficiently developed sense of empathy.

The following article, by Cecilia Muratori, also shows some apparently unconventional attitudes to animals from Renaissance thinkers. In her study of the place of animals in Italian utopian literature Muratori shows how animals populate a range of texts, including works dealing with ideal cities and imagined parallel worlds. She investigates the ways in which the narratological device of displacing the human-
animal relationship into an imaginary world enabled an approach to the theoretical question about the difference between humans and animals, as well as to the ethical one regarding human attitudes towards, and use of, animals. The presence of animals is a neglected aspect of such texts despite the extensive body of scholarship on utopian literature. Muratori argues that it is this specific combination of ontological issues and very practical remarks which makes these texts a particularly important case study for reconstructing Renaissance philosophical discussions on the status of animals. The problem of the human-animal divide and the question about human uniqueness thus appear alongside the discussion of topics such as how to preserve health in an ideal city or suggestions about the best diet for its citizens (and how this might be based on animals as food, for instance). Such concerns directly involve the assessment of human relations to the world of animals, included in these imaginary cities or worlds as co-inhabitants, as sources of calories, as living beings which share in various ways the same space as humans, and also as mirrors onto which the definition of humanity as a special animal is projected.

This Renaissance ‘thinking with animals’ (to paraphrase the anthropologist Claude Lévi-Strauss) brings the real into sharper focus by considering the ideal or utopian. Muratori’s article moves from the ironic comments of Ortensio Lando in a volume of funeral sermons for animals, in which beloved companion animals become material for human medicine, to reflections on the division between human and non-human. The broader implications for Renaissance Italian history may be noted here. For example, the violent or cruel treatment of animals deplored in Thomas More’s Utopia (translated into Italian by Lando in 1548) raises questions about the debilitating effects on humans of this behaviour and calls to mind the horrified reactions of Italians to the atrocities of the Italian Wars. For example, the historian
Francesco Guicciardini suggested that the year 1508, in which the League of Cambrai against Venice was formed, marked a new phase of the Italian Wars as the violence spread more widely among the people and reached its apex in 1527, when Rome was sacked by imperial troops:

But now the door opening to new discords in the future, there followed throughout Italy, and against the Italians themselves, the cruelest accidents, endless murders, sackings and destruction of many cities and towns, military licentiousness no less pernicious to their friends than to their enemies, religion violated, and holy things trampled under foot with less reverence and respect than for profane things.28

The alleged cannibalism exhibited by soldiers during these wars demonstrated a failure of human reason and a descent into the bestial.29 In turn, soldiers could be regarded as the lowest of earthly creatures; at the siege of Metz in 1552 the Emperor Charles V compared them to ‘caterpillars, insects and grubs which eat buds and other fruits of the earth.’30

In Anton Francesco Doni’s utopian I mondi [The Worlds] (1552-3) the bestial nature of men is further highlighted and the conventional hierarchy of rational human animal and irrational non-human animal reversed with reference to recovered classical ideas of the transmigration of souls. The passage of a soul through incarnation as a frog, a horse, and the philosopher Pythagoras might encourage an ethical abstinence from meat eating in humans while the ensouled horse, described by Doni, could overturn traditional hierarchies by virtuously committing suicide like an equine Lucrezia following its mistreatment by a human rider. In Francesco Patrizi’s La città felice [The Happy City] (1553) beasts and their labours are offered up for appreciation – they contribute sustenance and sweat to support the basic needs and
happiness of human society. However, the service they supply is secondary to the
civilized association of humans in cities. As Patricia Lurati observes of the ‘wild men’
evident in Renaissance art and literature: ‘[A] wild nature was ascribed to his living
outside humanity’s civilized order and to his hairy body, the latter being the most
evident mark of his untamed temperament.’ Conversely, the human pursuit of
happiness, which is the exercise of virtue in the ideal city, reveals the divine origins of
humans. As Muratori concludes: ‘As food, animals project onto the utopian society
the violence of exploitation that they suffer in this world; as backdrop for the
conception of happiness, they prompt a re-assessment of human uniqueness.’

The dynamics of this unequal but polar relationship offer new insights into
Renaissance cultural production.\textsuperscript{31} For example, in what may constitute a commentary
on this animal/human split between body and spirit, Titian’s \textit{Young Woman with a Fur} (Fig. 1) juxtaposes soft fur with smooth flesh, white skin with dark sable. Like
the possession of live exotic animals, the ownership of wild animal furs in
Renaissance Italy was a sign of prosperity and status. In addition to great expense,
these furs signified the owner’s station in exemption from sumptuary restrictions on
luxurious items of clothing. Though the wearing of fur was standard for Renaissance
elites (and was often proudly displayed in portraits) there has been very little work on
its relationship to the international trade in animals and their skins; on the cultural
meanings of different types of fur; or, indeed, on what donning the fur of an animal in
the first place may indicate about the wearer.

INSERT FIGURE 1 HERE
In her essay Patricia Lurati reveals that the messages projected by the wearing of fur are ambiguous, potentially combining status with sexuality and vice. Lurati tells us why valuable skins were often used as linings for clothing with the fur on the inside rather than on prominent show, as might be natural to a modern sensibility attuned to ‘bling’ or conspicuous display. Lurati suggests that visible fur on the outside of the garment could raise an alarming series of moral questions concerned with the animal origin of fur and the wearer’s relationship to the animal world. She demonstrates the contemporary connections between fur, hairiness, eroticism and sin, and the concomitant links between base sexual appetites and the bestial.

In a culture that portrayed sinister, carnal creatures such as satyrs, centaurs, wild men, and devils with hairy bodies, fur-covered clothing was therefore a suggestive addition to the body. Giving evidence from an array of sources including images and literature such as Giovanni Boccaccio’s Decameron (1353) and Lorenzo de’ Medici’s Canti carnascialeschi [Carnival Songs] (c. 1470-90), Lurati’s essay delves into the complex meanings attributed to fur beyond its magnificence and practical significance. In particular, she explores the visual and symbolic associations with animality and sex that inhibited its open display, and draws attention to the equations of fur with male and female genitalia (as in the pelisse of the essay’s title) in the hints of fur provocatively revealed by slits in clothes described by a preacher as ‘finestrelle dell’inferno’, or ‘windows of hell’. It is little wonder that respectable people would wear fur on the inside of their attire (as they might also have a companion animal, such as a cat or lapdog carried within their sleeve or clothes), and that the sensuality of the proximity of that fur – live or dead – to their skin might arouse a range of feelings from moral discomfort to tactile pleasure and warmth to pride in magnificence.
While in the Middle Ages viewing or experiencing such displays of magnificence was often considered decidedly sinful, the Renaissance revival of neo-Platonism valorized beauty as perceived through the eye. Renaissance medical and humanistic texts considering the anatomy, appearance and functionality of the eye therefore represent a productive site for examining contemporary conceptions of the relationship between humans and animals. Many of these texts repeat the dictum that the eyes are the windows of the soul. Eyes thus make visible humankind’s immortality and connection to God, and debates concerning the eye permitted writers to frame the human as a liminal zone between the celestial realm and the animal world. Human eyes might also be distinguished from those of animals in aesthetic terms. The Pisan humanist Simone Porzio, for instance, following Aristotle’s discussion of eyes in the *Generation of Animals*, argued that humans, unlike animals, possessed a variety of eye colours. This trait could only be found in one other species, according to Porzio, and this, unsurprisingly, was the noble horse. Nonetheless, when Porzio and other sixteenth- and seventeenth-century writers set out to classify distinct eye colours and to define their associated characteristics, they relied upon the anatomical and natural historical treatises of Galen and Aristotle, developing these categories with reference to various animal species, including sheep, goats and lions. In fact, the latter two species lent their names to distinct hues of eyes, *caprino* and *lionato*. The significance of this linkage between eye colour and animal species gave rise to considerable debate, as physiognomists argued, for example, about whether or not those with goat-coloured eyes, *occhi caprini*, appropriated goat-like behaviour (either intelligence or stupidity). At the same time, humanist writers and physicians examined the question from the perspective of humoral medicine and human difference. The Sienese physician, Giulio Mancini, departing from the
physiognomical theories of writers such as Giambattista della Porta, loosened the association between a specific eye colour and the animal it resembled to provide a more subtle account of the relationship between eye type and character. He argued that in humans goat-coloured eyes constituted a sign of a universal aesthetic and biological superiority, yielding greater powers of vision and longevity of eyesight. At the same time he believed that this hue revealed that the brain possessed a qualitatively better temperament.

If examination of human eyes offered insights into the nature of their owners, what of the eyes of the other animal whose eye colour varied? In her essay Frances Gage considers the 1692 treatise by the Venetian Marino Garzoni, L’arte di ben conoscere e distinguere le qualità de’ cavalli, d’introdurre, e conservare una razza nobile, e di resanare il cavallo da mali . . . [The Art of Knowing and Distinguishing the Qualities of Horses Well, and Introducing and Conserving a Noble Race, and of Healing the Horse of Sicknesses . . .]. In this work Garzoni suggests that an owner should seek a horse with eyes that are ‘black, large, clear, jovial, placid and human’. Gage demonstrates that the aesthetics of the perfect horse eye reflected perceived desirable national and ethnic identities in the human realm. Like several other contributions to this volume, Gage’s essay also shows the porosity of the human-animal boundary, revealing of intimate and practical real-life relationships with horses. The buyer might use the horse’s eye as a channel by which to rate a prospective purchase and find the right steed for war or peacetime. The horse was a subordinate who was able to be understood and to understand what was required of him or her. This quasi-humanity was also recognized in the individuality of horses and in their temperaments and feelings, while the potential for human-animal
understanding was contained in the equine eye, which was able to show ‘the quality of its heart’.

The two final contributors to this special issue develop Gage’s questions about the human-animal divide and attempts to understand or explain the natural world and apply its secrets to human society. The communication of knowledge about animals and its application is central to Sarah Cockram’s essay about the historiographically-neglected role of handlers of exotic animals in Renaissance Italy. The expertise of the animal handler was highly valued by Italian rulers such as the Gonzaga of Mantua whom Cockram has studied in previous work.33 Exotic animal handlers, like the servants sent to make notes on whales discussed by Monica Azzolini in her essay, were part of a ‘plurality of oral sources’ (as Azzolini puts it) and international ‘brokers of knowledge’ (as Cockram prefers) travelling across great distances with cheetahs, lions, giraffes, elephants, and other charismatic megafauna. The globalized nature of the Renaissance world revealed by this trade is especially clear in the celebrated example of Hanno the elephant who arrived in Rome in 1514 with Moorish mahout and Saracen guide. In this way, Cockram’s essay contributes to the work of microhistorians and historians of trading diasporas, including Francesca Trivellato, who have recently sought to bring local and global scales of historical interpretation together.34

The market in Italy for such demanding and expensive beasts from around the world is not hard to explain: they were symbols of power, evidence of wealth, and tokens of prestige for rulers jockeying to establish or to extend their shaky authority. At the highest level these animals acted as tools for international diplomacy along lucrative east-west trading routes. Here the animal handler may be compared to another neglected figure, the ambassador’s secretary who was a repository of vital
information and subtle power. Ocem, who accompanied a rhinoceros from Goa to Portugal in 1514, was a richly rewarded royal servant, while the cheetah keeper (*pardero*) Battista da Bataino travelled from Ferrara to the French court in 1479 with a beast requested by the king and furnished with the expectation of political rewards for Ercole d’Este. On important diplomatic occasions animals like the cheetah could be set running or hunting and the *pardero* was responsible for ensuring no diplomatic incident arose as a result of a lack of bestial cooperation.

The handler’s ability to communicate with his exotic charges, and theirs with him, was indispensable to the success of this relationship. It is worth speculating about the extent to which their example might have contributed to discussions about human-animal communication, which had a venerable pedigree.\(^{35}\) For example, Pliny the Elder stated of the elephant in his *Natural History*: ‘It understands the language of its country and obeys orders, remembers duties that it has been taught … They are also believed to understand the obligations of another’s religion in so far as to refuse to embark on board ships when going overseas before they are lured by the mahout’s sworn promise in regard to their return.’\(^{36}\) The claim that elephants understood human speech was also made about Hanno the elephant in 1514 on the basis of observation of his interaction with his mahout, and further research may reveal other examples of the way in which such interspecific relationships informed and shaped debates about human-animal understanding, empathy, or communication during the Renaissance.\(^{37}\)

Like the skin of the Medici giraffè kept for its wondrousness, exotic specimens might posthumously make their way into collections of *naturalia* and drive natural historical investigations. In the past two decades a rich historiography of science has flourished around works such as Conrad Gessner’s monumental *Historiae animalium* [*The Histories of Animals*] (first published in 1551-8), Ulisse Aldrovandi’s
encycopedic studies of animals, and the Academy of the Lynxes’s *Thesaurus Mexicanus* [*Mexican Treasure*] (published only in part in 1628, and then in a complete but revised edition in 1651). Each of these works took as its point of departure the exploration of the animal kingdom and is notable for the number of its illustrations. Yet, what makes these printed sources remarkable and, to a degree, surprising, is that this scientific enterprise—seemingly based on the accurate and detailed study of an unprecedented number of animals—includes a series of ‘unreal’ animals in the midst of the real. Gessner’s *monocerote* (or unicorn), Aldrovandi’s *chimera* or *gallus monstrificus* (four-footed cock), Cassiano del Pozzo’s fearful *lamia* (an anthropophagous fish) or two-headed *amphisbaena* (a type of snake) are only some of the animal oddities that populate late sixteenth- and early seventeenth-century books. Freak animals and hybrids are also reported in the work of the seventeenth-century Jesuit Athanasius Kircher, while the bones of a giant feature prominently in the Roman collection of Cavaliere Francesco Gualdi, and a seaman skin (likely to be a mermaid-like male specimen) appears in descriptions of Francesco Angeloni’s Roman museum.

The European encounter with new, exotic, and remote cultures generated a vast amount of literature, mostly penned by travellers, naturalists, and missionaries reporting back to Europe. This experience encompassed people, animals, plants and landscapes that had not been previously seen. New animals opened the possibility that others that had been discussed in the classical sources like Pliny the Elder’s *Natural History*, but never seen before, might actually exist and they revitalized the field of natural history in unprecedented ways. At the same time exploration introduced a whole new range of ‘unlikely’ animals that most Europeans had not seen with their own eyes. With their liminal status, ‘unlikely’ animals represented a challenge to
early modern ways of knowing; these may not have been treated by classical authors, and yet appear in the accounts of newly discovered lands. They may have been rendered visually and verbally, through drawings or first- and second-hand accounts, and yet remain ambiguous and mysterious. When visible, like the *dracunculus monoceros*, a supposed dragon owned by Maffeo Barberini (later Pope Urban VIII), they may have appeared as unique specimens or jokes of nature, and presented challenges of comprehension and classification. To this group one should add further animals that represented a puzzle to natural philosophers and anatomists: hermaphrodite rats, hyenas (also believed to be hermaphroditic), two-headed calves, and animals like the armadillo that were believed to be hybrids (according to Kircher this was the result of a porcupine and a turtle mating). In short, the ontological status of a considerable body of Renaissance animals was problematic. But why, exactly? Was it because of their rarity? Was it because of the lack of direct experience? Or was it because they did not fit into what was known already from classical sources? More importantly, did the study of these animals have an important heuristic function, did it ‘produce knowledge’, or should we consider it one of those dead alleys that punctuate the history of science? In short, the study of these animals provides a privileged point of entry into the proto-scientific mentality of the time and allows us to map early modern ways of knowing onto the natural world, helping us to understand why some forms of authentication and scientific ‘proof’ were considered more significant than others.

In her essay Monica Azzolini demonstrates how local context and information exchanged orally came together with networks and written authorities to drive natural investigation and Renaissance knowledge about animals. Azzolini highlights the case of a whale discovered in 1624 dead in the sea near Santa Severa, north of Rome. This
whale, heaved onto land, examined and dissected, was discussed by Giovanni Bricci in his *Relatione della Balena ritrovata morta vicino a Santa Severa ...* [Account of the Whale Found Dead Near Santa Severa ...]. Bricci’s *Relatione* was a patchwork of information – derived from diverse sources, written and spoken, as well as examination of parts of the whale – and continued with a broader *discorso* on the topic of cetaceans. The Santa Severa whale is also discussed by the Lyncean Giovanni Faber in a section of his *Novae Hispaniae Animalium Expositio in Rerum Medicarum Novae Hispaniae Thesaurus* [Exposition of the Animals of New Spain in the Treasury of Medical Matters of New Spain], and Azzolini again draws out the importance of orality and a range of informants in the composition of this source in ways which contribute to current research in the field of oral communication in Renaissance Italy.39

The investigation of natural historians into cetaceans gives evidence of interaction between whales of the same species, for instance with their young, and with other species, such as the dangerous orcas. Above all, it shows the relationship of people with living and dead whales: sailors repelling whales with castor oil or encouraging whales to play; teams of men strenuously cutting up whales for blubber and oil; as well as the activities of the scientists themselves, studying whale behaviour, investigating news of beached whales (or having their servants do so), and receiving for analysis specimen whale parts, including the fins and baleen of the Santa Severa whale sent to the hospital of Santo Spirito in Rome. Azzolini also shows us the ways in which natural historians speculated about the origins of ambergris (was this whale sperm, vomit, excrement? Or an external product brought by whales from the depths?). This is another reminder of how animal products that human culture deemed valuable – such as ambergris, civet musk (see Cockram) or fur (Lurati), that could be
obtained either from a live animal or only from a dead one – dictated the interests and behaviours of humans towards certain species.

In conclusion, these essays offer new ways of looking at the Italian Renaissance and point towards paths for future research. They provide insights into perceptions of human-animal boundaries and their permeability, for good or ill, opportunity or danger. Arbel suggests an empathetic crossing into the animal world. Cockram shows that proximity and understanding across the species boundary did not necessarily render humans bestial but could be valued, while by contrast Lurati highlights the moral perils of slipping over into the hairy animal state. Gage invites us to consider qualities of human and animal, and how such characteristics can be the same (ox eyes, submissiveness) or different between and among species (eye colour, temperament). The theoretical animal is here, as in Muratori’s utopian examples, but across this volume so is the animal as an identifiable individual: Frate Cipolla’s donkey; Hanno the elephant; or the Santa Severa whale. The essays seek to remind the reader of the relationship of Renaissance Italians to the animals all around them, of the significance of inter-dependence and of living alongside and among animals. Human attitudes to animals here range from the sympathetic, affectionate, interested, or awe-struck, to the patronizing, exploitative and dominating. Animal feelings towards humans are naturally harder for us to fathom, but also range from displays of affection to collaboration to rejection to aggression. Communication is a key theme: human to human communication about animals (through the spoken or written word or through images) as well as human communication with animals, and it will be fruitful to reflect further on how these animals communicated with humans as well as on communication between animals.
Sowing the seeds for other future work, the essays also strongly suggest how human violence might have been understood by Italians in relation to the non-human world during the Renaissance. Human cruelty was compared to the behaviour of animals and produced a range of texts and images which pessimistically bestialized humans and optimistically empathized with beasts. For example, in the light of his apparent empathy for animals it may be possible to understand why Leonardo da Vinci could write of the ‘most bestial madness’ of battles and elsewhere outline the way in which an artist should depict the corpses, blood, and death agonies of battle, concluding: ‘And see to it that you paint no level spot of ground that is not trampled with blood.’ \textsuperscript{40} As Benjamin Arbel has observed: ‘The criticism against Man’s cruelty to animals often came from the same scholars who also criticized other aspects of their societies, such as war, slavery, and the attitude to other human races.’ \textsuperscript{41} More research on the relationship between conflict and culture, and the social history of war may provide more nuanced insights by an examination of the role of animals in warfare, as symbols or mirrors of humanity and inhumanity, as active participants and as victims of violence. \textsuperscript{42}

Future research will also increasingly find fertile ground where the animal turn meets the ‘global turn’ in historical studies (as suggested by Cockram’s essay in this volume) since both animals and knowledge of animals could cross large distances during the Renaissance. Such cultural exchange provides further evidence for the study of the ways in which the local and global met in Renaissance courts and cities and may also form the basis for comparative studies of European and non-European attitudes towards animals. \textsuperscript{43} As Benjamin Arbel has pointed out, European travel writers during the Renaissance sometimes remarked admiringly on the favourable treatment of animals in the East and cited these examples as a way of encouraging
improved attitudes in Europe. Knowledge and expertise about animals have emerged in these essays as important commodities, in courtly and scholarly contexts and beyond, and as drivers of the intellectual movements that underpin much work on Renaissance Italy.

The study of the animal in Renaissance Italy can contribute to debates about the continuity between Renaissance and early modern concerns in natural philosophy and developing sciences. As Cecilia Muratori and Gianni Paganini have stated in a forthcoming volume of essays on this topic, it may be valuable to

[...] shift the weight from the problem of assessing the ‘modernity’ of Renaissance philosophers to the creation of a space of interaction between Renaissance and early modern thinkers in the spirit of ‘conversation’ [...] By adopting this particular perspective it will be possible to cast light on the profound continuities that still remain between the two ‘periods’ despite the various elements of discontinuity that are also manifest.

It is evident from the essays here that the study of the animal in historical terms can reveal striking continuities and discontinuities in human attitudes and non-human experiences and the debate about the chronology – or indeed existence – of a growth in human empathy for animals, to mention one key area, is far from settled.

Finally, the problem of periodization unavoidably raises the question of definitions in any consideration of the Italian Renaissance. In this respect it is interesting to note that Pierre Belon, the sixteenth-century French naturalist whose work Arbel (as well as Cockram and Gage, in passing) considers in his essay is sometimes quoted by modern historians for his use of the term ‘renaissance’. In the dedicatory epistle for Les Observations de Plusieurs Singularitez et Choses

22
Memorables ... [Observations on Many Singularities and Memorable Matters ...]
(first published in Paris in 1553) Belon wrote of the reawakening of the spirits of men
after a ‘deep sleep of ancient ignorance’ and the ‘happy and desirable rebirth
[renaissance]’ of ‘all sorts of good disciplines’ following the establishment of a seat
of learning at Tournon. Belon’s grandiose claims were intended to flatter his
powerful dedicatee, the Cardinal of Tournon, but natural historical ideas of the birth
and rebirth of knowledge about human and animal have contributed to our modern
understanding of the flux of time and they have shaped the origins and meaning of the
term ‘Renaissance’ itself. The dialogue between animal and Renaissance studies, to
which this volume contributes, may therefore lead to a new way of looking at that
powerful and contested idea.

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1 Lorraine Daston, ‘Intelligences: Angelic, Animal, Human’, in Lorraine Daston and
Gregg Mitman (eds.), Thinking with Animals: New Perspectives on

2 For an overview, which focuses on the ape-human comparison and provides a list of
further reading, see Kenneth Gouwens, ‘Human Exceptionalism’, in John Jeffries

3 Joseph Campana and Scott Maisano (eds.), Renaissance Posthumanism (New York:
Fordham University Press, 2016); Carey Wolfe, What is Posthumanism?
(Minneapolis: University of Minnesota Press, 2009).

4 Joyce Salisbury, The Beast Within: Animals in the Middle Ages (London: Routledge,
1994); Aleksander Pluskowski (ed.), Breaking and Shaping Beastly Bodies: Animals
as Material Culture in the Middle Ages (Oxford: Oxbow, 2007); László Bartosiewicz,


10 Juliana Schiesari, *Beasts and Beauties: Animals, Gender, and Domestication in the Italian Renaissance* (Toronto: University of Toronto Press, 2010).


12 On this issue, and for insightful perspective on other debates in historical animal studies, see Sandra Swart’s review of Brantz, *Beasty Natures*, on H-Environment


19 René Descartes, *Discours de la Methode pour bien conduire sa raison, et chercher la verité dans les sciences* (Leiden: Jan Maire, 1637), Ch. 6.


Cockram, ‘A Cat in a Sleeve’.


Francesca Trivellato, ‘Is there a Future for Italian Microhistory in the Age of Global History?’, *California Italian Studies*, 2 (2011) at


37 Cummings, ‘Pliny’s Literate Elephant’, 169. On understanding of the equine mind see Gage’s contribution to this volume.


39 For example, Stefano Dall’Aglio, Brian Richardson and Massimo Rospocher (eds.), Voices and Texts in Early Modern Italian Society (London: Routledge, 2017).


41 Arbel, ‘Renaissance Transformation’, 75

42 Stephen Bowd shall address these questions in more detail as part of a Leverhulme Trust-funded project on mass murder during the Italian Wars.


46 For example, the challenge to conventional periodizations and conceptualizations of the Renaissance lies at the heart of Guido Ruggiero, The Renaissance in Italy: A Social and Cultural History of the Rinascimento (Cambridge: Cambridge University Press, 2015).