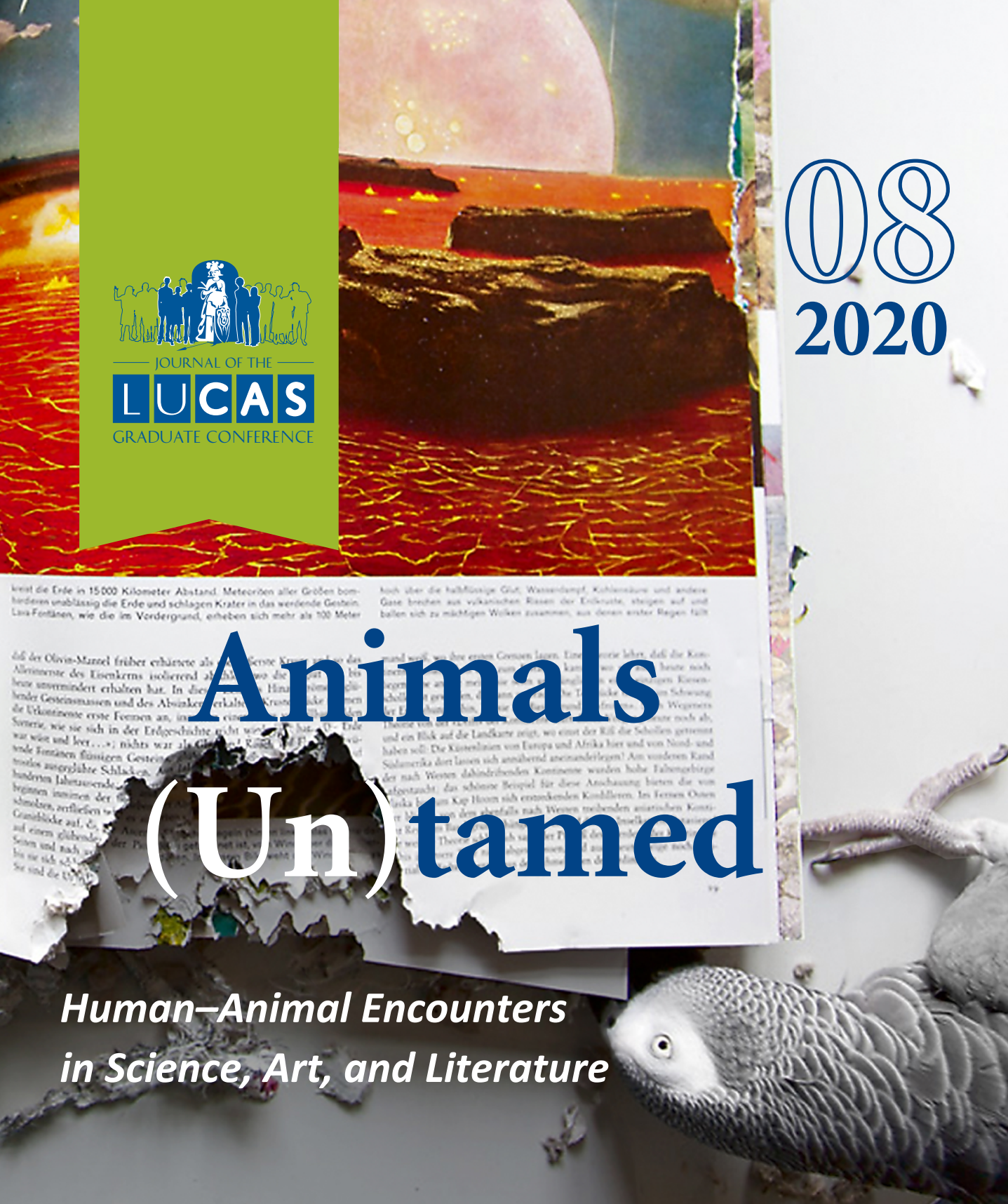

JOURNAL OF THE
LUCAS
GRADUATE CONFERENCE

08
2020

Animals (Un)tamed

Human–Animal Encounters in Science, Art, and Literature

The *Journal of the LUCAS Graduate Conference* was founded in 2013 to publish a selection of the best papers presented at the biennial LUCAS Graduate Conference, an international and interdisciplinary Humanities conference organized by the Leiden University Centre for the Arts in Society (LUCAS). The peer-reviewed journal aims to publish papers that combine an innovative approach with fresh ideas and solid research, and engage with the key theme of LUCAS, the relationship and dynamics between the arts and society.

COVER IMAGE
Clara reworking an edition of *The World We Live In.*
CMUK Interspecies Collective, 2015. Photo: Hörner/Antlfinger.

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INTRODUCTION

Animals in laboratories or as pets; animals in films, literature and art; animals as food or as entertainment; domesticated animals and animals in the wild. No matter in which role we cast them, animals play a significant part in our lives and have always done so, just as we play a part in theirs. We co-exist and collaborate with animals, exploit them, care for them, conceptualize them, and study them. The field of animal studies poses perhaps the most important questions of human society: What is our relationship to animals and vice versa; and what do we want this relationship to be? Do animals have agency in their interactions with us, and should they? What are the demarcations between ourselves and animals, and how alike are we? Do we collaborate with or exploit animals, and are we stewards, equals, or masters to the animals with which we interact? In recent decades animal studies flourished, focusing on the commodification of animals as food; as a source of labour; or as objects of study and entertainment. Pressing topics are the degradation of nature and environment resulting in extinction and loss of habitat for various species, and our growing awareness of the need to co-exist with animals not only in the context of human society but also in nature.

Scholars operating in the field of animal studies tackle the questions which arise when scholarly inquiry considers animals as subjects or objects of thought and activity. In short, these are questions relating to the definition of humanity in relationship to animals, and to our representation and understanding of animals as different species, anthropomorphism, agency, and our observation of animals. In the context of the demarcation between ourselves and other species, animal studies has coined the term “non-human animals” in recognition of the growing awareness of the similarities between our and other species. In highlighting such issues, animal studies have challenged traditional ethical

and political views in regard to animals, have fed a growing respect for animal life, and have served reflections on human identity, knowledge, and society.

These issues are explored from various disciplines including sociology, anthropology, political science, history, literary studies, philosophy, geography, ethology, ecology, veterinary studies, and (comparative) psychology. The very nature of animal studies consequently invites interdisciplinary research by scholars who employ a range of theoretical perspectives. Those who engage in animal studies seek to understand human–animal relations as they are in the present, as they were in the past, and as they might be in the future, to understand animals independently from us, in their interactions with us, and as a means to reflect on our own humanity. Animal studies have only recently been recognised as an independent field of study. Different fields turned to animals as a crucial topic of study at different points in history and for different reasons; as such the histories of these diverse fields have shaped the approach of animal studies. Animal studies is in part associated with the animal liberation movement, and therefore grounded in ethical questions about our interactions with the animals around us. In addition, scholars occupied with animals in culture, art, and literature tend to reflect on how interactions with animals affect our definition of humanity and the self.

The articles included in the present issue of the Journal of the LUCAS Graduate Conference, titled *Animals (un)tamed. Human–animal encounters in science, art, and literature,* are the result of the diverse and interdisciplinary research on our multifaceted relationship with animals which is currently taking place. The fifth biennial LUCAS Graduate Conference, held in April 2019, shared this same theme. This conference on "Animals: Theory, Practice, and Representation" gave PhD and Master students the opportunity to present, exchange and discuss their research relating to animal studies with participants from diverse backgrounds. The resulting exchange focussed on a re-examination of the relationship between humans and animals, and the definitions involved. Many of

the articles in the present issue are result of the lively debate which took place during this conference. The contributions to this issue of JLGC reflect the wide variety of approaches in animal studies.

Christine Kleiter and Maike Riedinger focus on animals as objects of research in respectively the sixteenth and twentieth century. Kleiter examines how knowledge about the Brazilian tanager — a South American songbird — was transferred and transformed in various ways in the early modern period. In particular, she looks at its representation in Pierre Belon's 1555 treatise on birds, discussing how he would have collected information from an already dead and preserved specimen, and how he struggled with creating a "truthful" and "natural" image for his book. Kleiter further explores how Belon's tanager then underwent changes in its subsequent appearance in a work of natural history by Ulisse Aldrovandi in 1600. In her study, Kleiter focuses on aspects of the bird which were difficult to capture in image (such as its colouring or a life-like appearance) or to preserve (such as its feet). She situates the case of the Brazilian tanager within the broader context of the production and circulation of knowledge in the wake of early colonial projects.

Maike Riedinger explores debates in the German-language field of animal psychology at the turn of the twentieth century on the question if animals — and more specifically, ants — were endowed with minds, and if so, of what kind. Riedinger focuses on two representatives of this scientific field: Albrecht Bethe and Auguste Forel. Their debate centred around the validity of the epistemological tool of analogy in animal psychology, which led to discussions on anthropomorphism. By tracing the discussions of these two scientists throughout their works and linking them to other contemporary strands of philosophical thought, Riedinger demonstrates that uncovering animal minds was only secondary to the broader debate on the validity of animal psychology as a science. Drawing comparisons between humans and other animals was not simply a tool to approach animal minds; rejecting or (partially) accepting this tool became the very cornerstone of sound research in animal psychology.

Efi Mosseri and Dorothee Fischer consider animals as participants in human activities and endeavours in the Middle Ages and our present time. Mosseri examines depictions of dogs in medieval illuminated books of hours, focusing in particular on a manuscript from the early fourteenth century, the *Margaret Hours*, which includes depictions of a dog alongside the devotee in prayer. She traces the iconography of dogs throughout several books of hours, drawing attention to the differences between pet dogs and hunting dogs, and discusses how these dogs are usually interpreted as symbols for human virtues or vices by modern scholars. Through careful visual analysis of the manuscript and consideration of emerging ideas about the relationship between humans and animals in the context of devotion, Mosseri wishes to move beyond such an anthropocentric approach and suggests instead that in the *Margaret Hours*, the pet dog participates in prayer together with the devotee.

Dorothee Fischer focuses on artistic collaborations between human and non-human artists to analyse the contemporary phenomenon of interspecies art and the role of agency within this discussion. Drawing from a variety of fields — including art history, praxeology, and action theory are the most prominent — Fischer adapts an innovative approach to the creative abilities of animals, combining Lisa Jevbratt's and Jessica Ullrich's notion of interspecies art with Mieke Roscher's concepts of entangled and relational agency. Aaron Angell's *Gallery Peacetime* and its artworks inhabited by axolotls, as well as *CMUK* — an interspecies collective consisting of humans and parrots — are considered as case studies to show that a revision of the concept of agency and interspecies art is needed, to support an art world that includes non-human artists.

Finally, Tim Vergeer examines the role of animals in Early Modern theatre. Specifically, Vergeer deals with the reception of Pedro Calderón's drama of Circe and Ulysses in Dutch seventeenth-century theatre. He asks the question to what extent theatre-makers were able to introduce animals onstage, and

highlights the way in which both the original and the Dutch adaptations challenge the border between fiction and reality by questioning the distinction between human reason and animal instinct. In particular, the article focuses on Adriaen De Leeuw's *De toveres Circe* (1670) to illustrate that animal transformations, although logistically or artistically challenging, could provide a meaningful revelation of human flaws and miscommunication.

As the editorial board we hope that this issue will spark further debate within the field of animal studies. This issue would not have been possible without the help of various colleagues at LUCAS and elsewhere. First and foremost, we are grateful to our publisher, the Leiden University Library. Furthermore, we thank all the authors who contributed to this volume. We thank Paul Smith for writing the foreword of this issue, Joy Burrough-Boenisch for guiding us in our editing work and kindling our enthusiasm for the editing process, our peer reviewers, and Tatiana Kolganova for designing this issue's layout. Finally, we thank the LUCAS management team, Sybille Lammes, Rick Honings, Jan Pronk, and Ylva Klaassen, for their continued support in producing this eighth issue of the Journal of the LUCAS Graduate Conference.

The editorial board,
Zexu Guan, Sophia Hendrikx, Andries Hiskes, Leanne Jansen, Glyn Muitjens, Jun Nakamura, Merel Oudshoorn, Liselore Tissen

BIRDS, COLOUR, AND FEET: A "NAÏF PORTRAIT" OF THE BRAZILIAN TANAGER IN PIERRE BELON'S *L'HISTOIRE DE LA NATURE DES OYSEAUX* (1555)

Christine Kleiter
University of Göttingen, Germany

This article examines the transformations that the Brazilian tanager, a South American songbird, underwent as it crossed the Atlantic Ocean and was represented by the traveller and naturalist Pierre Belon in his bird treatise L'Histoire de la nature des oyseaux *(1555). I show that Belon carefully chose his vocabulary and modes of depiction in order to address the constraints of his project, especially in showing colour; and I trace how subsequent representations further modified the imagery of the bird. As this article argues, the case of the Brazilian tanager reveals how Belon's true-to-nature rhetoric of his vocabulary and modes of depiction were meant to offset difficulties of using flawed or incomplete information in the case of descriptions, drawings, and physical evidence when it comes to preserved birds. Furthermore, I show that the red colour of the bird's feathers worked as a symbol of access to "exotic" commodities. In comparing Belon's text and representation to the ones in Ulisse Aldrovandi's bird treatise* Ornithologiae *of 1600, I examine the mechanisms of early modern "collective empiricism" through various layers of knowledge transfer.*

INTRODUCTION

In 1555 one of the first ever illustrated natural history treatises on birds was published by the French traveller and naturalist Pierre Belon (b. 1517 Souletière near Le Mans – d. 1564 Paris, Fig. 1): *L'Histoire de la nature des oyseaux, avec leurs descriptions et naïfs portraicts retirez du naturel*. Having studied botany and medicine in Wittenberg, Padua, and Paris, he travelled to the Middle East

Voy ce portraict, & di qu'en le voyant
Tu vois encor de celluy la semblance
Qui seul fait voir ores en nostre France
Tout ce qu'en soy voit le ciel tournoyant.
PAR G. A.

ANNO ÆT. 36.

AV ROY.

SONNET DE G. AVBERT.

Belon passant, Sire, par le trauers
Des flots glacéz, & des mers alterées,
Pour embellir tes terres bienheurées,
Aporte icy par maints aſpres deſerts
Ores des rocs les arbres touiours verds,
Or' les poiſſons de leurs bleues marées,
Puis les oyſeaux des celeſtes contrées,
Ne laiſſant plus rien libre en l'vniuers.
De ſes trauaux il remenace encores
L'Inde emperlée, & les arenes Mores,
Mais il ne peut plus rien ſans ton ſecours.
Rechaſſe donc, Sire, celle ſouffrance:
Ainſi touiours la couronne de France
Viue immortelle en ſes rares diſcours.

Fig. 1. Anonymous
Printed page with portrait of Pierre Belon. 37,5 x 24,0 cm, Coloured Woodcut.
Pierre Belon, *L'Histoire de la nature des oyseaux avec leurs descriptions et naïfs portraicts retirez du naturel…* (Paris: G. Corrozet et G. Cavellat, 1555).
Paris, Bibliothèque nationale de France, département Réserve des livres rares, RES-S-160

between 1547 and 1549, visiting Constantinople and Sinai among other places. After these journeys, he codified his collected knowledge in several treatises and publications. The first traces of his ornithological interests can be found in his travel account *Les Observations de plusieurs singularitez et choses memorables, trouvees en Grece, Asie, Judee, Egypte, Arabie & autres pays estranges*, published in 1553, in which he describes the avian fauna. Part of his main work on birds was reused in 1557 in his *Portraits d'oyseaux, animaux, serpens, herbes, arbres, hommes et femmes d'Arabie et d'Égypte…*.[1]

His treatise on birds appeared in a period that has been described as the first "scientific revolution", when several scholars and naturalists such as Nicolaus Copernicus, Andreas Vesalius, and Leonhart Fuchs published groundbreaking books in astronomy, anatomy, and botany.[2] They compiled both old and new knowledge, using antique sources alongside their own first-hand observations. As Giuseppe Olmi notably put it, this was the age of "cataloguing nature".[3] Included in this ordering were birds. This revolutionary intellectual tendency marked a crucial moment when unknown species from the newly discovered parts of the world and an expanding awareness of varieties of birds intersected with questions of classification in accordance with ancient systems codified by Aristotle and others. Within these new practices Belon himself played a crucial role in gathering information and translating it into the medium of a printed book with woodcut images. His bird treatise is divided into seven books with a total of 159 woodcuts,[4] and was published in the same year as Conrad Gessner's *De avium natura*, while Ulisse Aldrovandi's three-volume publication on birds, entitled *Ornithologiae*, would follow in 1599, 1600, and 1603. The works by Belon and Gessner are the first printed publications with illustrations showing various bird species, where Belon attempts a broad summary of the human knowledge of birds, describing about 200 distinct species. Visual material in the context of early modern natural history treatises (and beyond) has been analysed with a particular focus on the use of language in regards to visual representations.[5] Scientific images, such as representations of

1 For general information about Belon's biography and his oeuvre see Oreste Trabucco, "Pierre Belon viaggiatore e naturalista: dalle observations des singularités alla histoire de la nature," *Schede umanistiche* 2 (2004), 53–87; Monica Barsi, *L'énigme de la cronique de Pierre Belon. Avec édition critique du manuscrit Arsenal 4651* (Milan: LED, 2001); Paul Delaunay, "L'aventureuse existence de Pierre Belon," *Revue du seizième siècle* IX.1922, 251–268; X.1923, 1–34, 125–47; XI.1924, 30–48, 222–32; XII.1925, 78–97, 259–68. See also the critical introduction by Philippe Glardon in the facsimile of Belon's book on birds (Geneva: Ph. Glardon, 1997).

2 Guy Freeland and Anthony Corones, eds, *1543 and All That. Image and Word, Change and Continuity in the Proto–Scientific–Revolution* (Dordrecht/Boston/London: Kluwer Acad. Publ., 2000).

3 Giuseppe Olmi, *L'inventario del mondo. Catalogazione della natura e luoghi del sapere nella prima età moderna* (Bologna: Il Mulino, 1992).

4 In the case of Belon's woodcuts we have little information about the artists involved in the production of drawings for woodcuts. Belon himself gives the name of one painter in his epistle to the reader, Pierre Goudet who is generally identified with Pierre Gourdelle.

plants and animals from the thirteenth century onwards are often accompanied by phrases such as the Latin *ad vivum*, the French *au vif*, the English *from life*, the Italian *(d)al vivo* etc.[6] Belon also engaged with aspects of reproduction and truthfulness in his treatises, offering insight into the early history of the problem,[7] perhaps most prominently in the use of the adjective "naïf" in the book's title to specify the kind of portrayal he wanted to reproduce. This leads at the same time to the problem of truthful representations in cases where the material, i.e. the bird in question, could not be examined "from life".

Visual information in its various forms was collected and disseminated amongst communities of natural historians in early modern Europe to shape a shared general picture, or as Lorraine Daston and Peter Galison put it, a "collective empiricism".[8] This transregional and epoch-spanning community significantly exchanged and developed new knowledge. Specifically, knowledge about unknown bird species initially depended heavily on the description of their feather colour. Consequently, in such treatises of the sixteenth century, it is worthwhile to better understand the motives and the processes of colouring; this issue is particularly difficult to assess in Belon's case. The implications of how Belon's illustrations of birds were coloured, are important, because colour was one of the most distinctive features used to determine a bird species until the eighteenth century. Only later did morphological features become the principal criteria of identification.[9]

Focusing on a South American songbird, the Brazilian tanager, I will show how an exotic bird which was completely new to the Europeans at this moment in time was received and how the condition of the bird influenced the production of visual material in Belon's treatise. In fact, the Brazilian tanager arrived in Europe already dead, conditioning its way of depiction — its "naïf" portrait, as I claim in this essay. Beginning with its earliest appearance in Belon's treatise of birds I will trace how the bird's colouration, feet, and their representation in visual material reflect concerns with accurate description of birds, and

Moreover, in his bird book he cites a painter working for Daniele Barbaro from Venice, who could be identified with Plinio Scarpello. See Joseph Roman, *Le peintre Pierre Gourdelle, 1555–1588* (Paris: Typ. de E. Plon, Nourrit, 1888); Michel Hochmann, "Plinio Scarpelli, pittore di Daniele Barbaro e dei Grimani di Santa Maria Formosa," *Arte Veneta* 67 (2010), 43–53.

5 José Ramón Marcaida Lopez, "Rubens and the bird of paradise. Painting natural knowledge in the early seventeenth century," *Renaissance Studies* 28.1 (2013), 112–27; Gianna Pomata and Nancy G. Siraisi, eds, *Historia. Empiricism and Erudition in Early Modern Europe* (Cambridge, MA: MIT Press, 2005); Sachiko Kusukawa, *Picturing the book of Nature. Image, Text and Argument in Sixteenth–Century Human Anatomy and Medical Botany* (Chicago: University of Chicago Press, 2012).

6 Boudewijn Bakker, "Au vif – naar 't Leven – ad vivum: The Medieval Origin of a Humanist Concept", in *Aemulatio. Imitation, emulation and invention in Netherlandish art from 1500 to 1800. Essays in honor of Eric Jan Slujter*, ed. Anton W.A. Boschloo (Zwolle: Waanders Publishers, 2011), 37–52; Dominic Olariu, "Miniaturinsekten und bunte Vögel. Naturbeobachtungen und Tierdarstellungen in Manuskripten des 13. Jahrhunderts," in *Similitudo.*

address the demands of a "good" scientific image in the eyes of the authors themselves. Moreover, this article will shed light on the particularity of the red-feathered songbird as a symbol of an attempt at the colonization of the Americas.

THE "NAÏF PORTRAIT"

At the beginning of his treatise, Belon talks about the importance of images as part of the understanding of biological species. At the same time, he warns the reader to not only look at the visual representations but to view them in relation to their corresponding textual descriptions. Otherwise, he states, the "chapter" would be incomplete or defective.[10] This gives quite a good idea of how important the author considers the intertwining of text and image for a successful reading of his book, which means that neither part can function without the other. The insertion of reproducible images into the text made possible by the new media of print and woodcut allowed a new approach to the study of such material.[11] Woodcuts of the specimens in question paired with descriptions allowed readers who did not have direct access to the object to better understand the material under examination. To underline the veracity of those images, a particular vocabulary was employed. Phrases such as *au vif*, *from life*, *ad vivum*, or *(d)al vivo* which accompany these images in the context of natural history treatises hint at their epistemic virtues — norms, pictorial or otherwise, which drive forward knowledge and truth and are shared by a scientific community in a certain period.[12] This does not mean, however, that the image was actually drawn from life as the vocabulary suggests.[13]

Thus, in Belon's case, the full title of the book *L'Histoire de la nature des oyseaux, avec leurs descriptions et naïfs portraicts retirez du naturel* (The Natural History of Birds, with their descriptions and natural portraits made from life) includes a kind of pleonasm or tautology — a natural portrait made naturally — a rhetorical figure that enhances the attempt to deliver new and important

Konzepte der Ähnlichkeit in Mittelalter und Früher Neuzeit, ed. Martin Gaier, Jeanette Kohl, and Alberto Saviello (Paderborn: Fink, 2012), 59–76.

7 Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2010), ch. 2.

8 Daston and Galison, *Objectivity*, 19–27.

9 David Freedberg, "The Failure of Colour," in *Sight and Insight: Essays on Art and Culture in Honour of E.H. Gombrich*, ed. John Onians (London: Phaidon Press, 1994), 245–62; David Freedberg, *The Eye of the Lynx. Galileo, His Friends, and the Beginnings of Modern Natural History* (Chicago/ London: Univ. of Chicago Press, 2002).

10 Pierre Belon, *L'Histoire de la nature des oyseaux* (Paris: Cavellat, 1555), f. ã iiij r. (All translations of Belon and other contemporary sources by Christine Kleiter.)

11 Bruce T. Moran, "Preserving the Cutting Edge: Traveling Woodblocks, Material Networks and Visualizing Plants in Early Modern Europe," in *The Structures of Practical Knowledge*, ed. Matteo Valleriani (Cham: Springer, 2017), 393–419.

12 Lorraine Daston, "Bilder der Wahrheit, Bilder der Objektivität," in *Einbildungen*, ed. Jörg Huber (Wien: Springer, 2005), 117–153, 118; Daston and Galison, *Objectivity*, 39–42.

information about the subject in question. Belon thus engaged aspects of naturalistic and truthful representation, weighing the benefits of reproducing an actual vs. ideal specimen.[14] Most intriguing in this case is the heretofore relatively unexamined use of the adjective "naïf" in the book's title to specify the kind of portrayal he wanted to reproduce (Fig. 2). Early traces of the adjective's meaning can be found in a French–Latin dictionary by Robert Estienne, published in 1539. Here the word "nayf" is given as the equivalent for Latin *genuinus*, "natural/authentic".[15] The *Thresor de la langue francoyse tant ancienne que moderne* (1606) gives again "nativus, genuinus, germanus" and follows therefore Estienne's model. *Le Dictionnaire de l'Académie française* of 1694 gives the meaning "naturel, sans fard, sans artifice".[16] Consequently, the term in its sixteenth-century use of "natural/imitating nature" suggests the author's attempt to create lifelike representations of avian subject matter.[17] This use of the adjective can also be found in his descriptions of birds in the treatise such as in the case of the bee-eater, where "naïf" stands for natural because of the true-to-scale image.[18] "Naïf" has to be seen, therefore, as an important indication of the quality of an image specifying its epistemic virtue. We can find similar expressions as well in the titles of Belon's fish treatises, such as "avec la vraie peincture" (with the true painting/image) in 1551 or "avec leurs portraicts, representez au plus pres du naturel" (with their portraits represented in the most natural manner) in 1555. The latter title suggests that naturalistic representations were attempted but not always achieved, thus providing insight into the author's self-awareness and the continuing challenge of image-making. These phrases, seen as a semantic field, mirror Belon's attempt to underline the epistemic virtues which he claimed in his images and his first steps towards a scientific objectivity.[19]

THE PRESERVED BIRD

One of the earliest printed descriptions of the technology of preserving birds in order to "transport them from one land to the other" is found in Belon's

13 Claudia Swan, "Ad vivum, near het leven, from the life: defining a mode of representation," *Word&Image* 11.4 (1995), 353–373. On the same topic regarding Jacopo Ligozzi see Michael Thimann, "Image and Objectivity in Early Modern Ornithology", in *Images Take Flight: Feather Art in Mexico and Europe 1400–1700*, eds Alessandra Russo, Gerhard Wolf and Diane Fane (München: Hirmer, 2015), 241–249.

14 Freedberg, *The Eye of the Lynx*, ch. 10, esp. 284; Daston and Galison, *Objectivity*, 55–63.

15 Robert Estienne, *Dictionnaire francois latin contenant les motz et manières de parler francois, tournez en latin* (Paris: R. Estienne, 1539), 326.

16 All dictionaries can be found on http://artfl-project.uchicago.edu/node/17.

18 Belon, *L'Histoire de la nature des oyseaux*, 226.

19 Still in the seventeenth century, French natural history books use the term "naïf" to attest to the veracity of representation. An example can be found in Claude Perrault's *Histoire des animaux* published in 1671/1676 and composed at the court of Louis XIV, where the expression "peinture naïve" was used in the preface of the work, which mainly focuses on the dissection and description of

animals. See Anita Guerrini, "The 'Virtual Menagerie': The Histoire des Animaux Project," *Configurations* 141–2 (2006), 29–41; on scientific objectivity see Robert, Felfe, "'Naer het leven': between image-generating techniques and aesthetic mediation," in *Ad vivum? Visual materials and the vocabulary of life-likeness in Europe before 1800*, ed. Thomas Balfe, Joanna Woodall, and Claus Zittel (Leiden: Brill, 2019), 44–88; Robert Felfe, "Ad vivum – nach dem Leben," in *Naturform und bildnerische Prozesse. Elemente einer Wissensgeschichte in der Kunst des 16. und 17. Jahrhunderts* (Berlin: De Gruyter, 2015), 77–111; Michael Thimann, "'Idea' und 'Conterfei'. Künstlerisches und wissenschaftliches Zeichnen in der Frühen Neuzeit," in *Disegno. Der Zeichner im Bild der Frühen Neuzeit*, ed. Hein–Th. Schulze Altcappenberg and Michael Thimann (München: Deutscher Kunstverlag, 2007), 15–30; Daston and Galison, *Objectivity*, 55–63; Peter Parshall, "Imago contrafacta: Images and facts in the Northern Renaissance," *Art History* 16.4 (1993), 554–79.

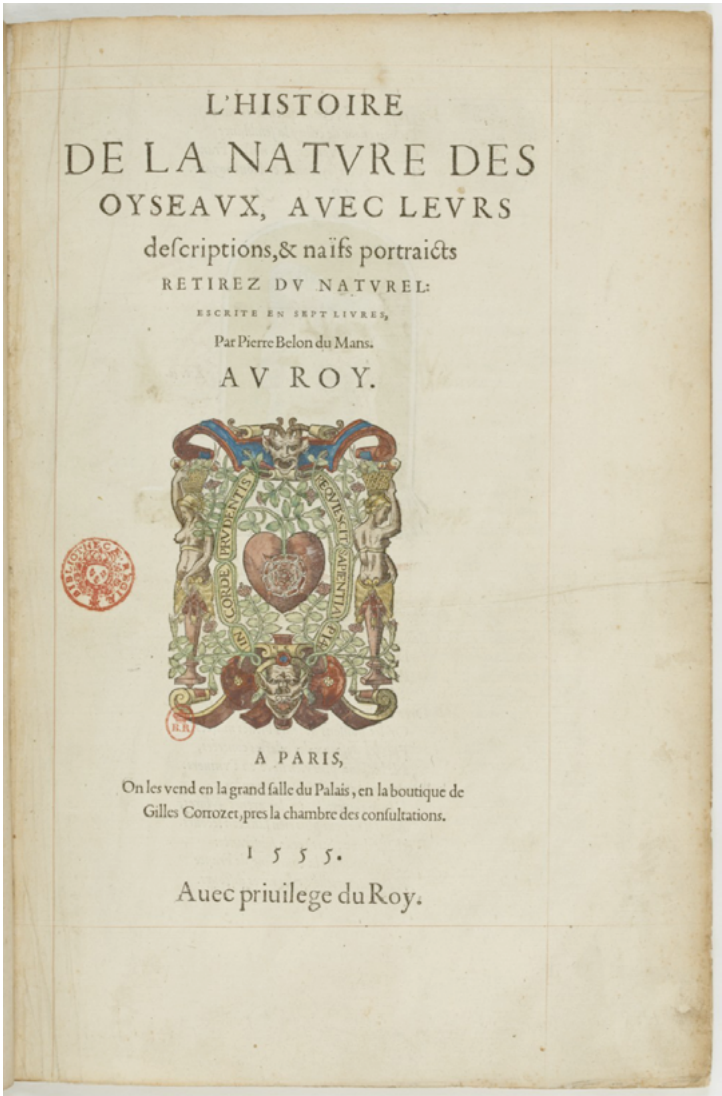
L'HISTOIRE
DE LA NATVRE DES
OYSEAVX, AVEC LEVRS
descriptions,& naïfs portraicts
RETIREZ DV NATVREL:
ESCRITE EN SEPT LIVRES,
Par Pierre Belon du Mans.
AV ROY.
CORDE PRVDENTIS POSSIDEBIT SCIENTIAM
A PARIS,
On les vend en la grand salle du Palais, en la boutique de Gilles Corrozet, pres la chambre des consultations.
1555.
Auec priuilege du Roy.

Fig. 2. Frontispiece. 37,5 x 24,0 cm, Print with coloured woodcut Pierre Belon, *L'Histoire de la nature des oyseaux avec leurs descriptions et naïfs portraicts retirez du naturel…* (Paris: G. Corrozet et G. Cavellat, 1555). Paris, Bibliothèque nationale de France, département Réserve des livres rares, RES-S-160 © Bibliothèque nationale de France

book, demonstrating his intertwined work of using text and image to display the actual study object "from life".[20] He describes a method of bird mummification in which the entrails are removed, the cavity of the belly and throat are rubbed with salt, and the body is then hung by the feet. In this way, the skin should arrive intact with its feathers.[21] Such a description shows an expertise in this early embalming technique and its practical motives. Belon also did dissections, and in his second book on fish he refers to a lecture on fish anatomy given before a group of doctors in Oxford in 1550.[22] Thus, his practical experiences directly influenced his written works. Images of bird skins or dead birds were consequently part of the common scientific imagery in the middle of the sixteenth century.[23] However, earlier literature often returned to the hypothesis that dead specimens from the Americas and Indies were the starting point for people in Europe to think about more elaborate preservation methods of bird skins; recent studies show that there was an ongoing tradition of perfecting the techniques for preserving bird bodies, mainly for hunting purposes with falcons such as for lures at least since medieval times.[24] This leads us to another role of preserved specimens in cabinets, collections, and other spaces as objects of aesthetic value or ornament and their use for study or hunting purposes.[25] The cabinets and *Wunderkammern* of the sixteenth century presented mounted birds or other animals in prominent positions in order to show them properly as objects of discussion and finally to attest the truth of their existence,[26] an idea Belon refers to in his text.[27] Belon's bird compendium, though, does not show any concrete images of preserving techniques or dissections, but the comparison of a human and an avian skeleton reflects Belon's deep analysis of the avian body and the underlying anatomical studies.[28] The inclusion of the description of the process of embalming and his clear use of anatomized specimens in his book were epistemic virtues that elevated his reliability and credibility.[29]

The case of the Brazilian tanager (Fig. 3, *Ramphocelus bresilius*, or according to Linnaeus' binomial nomenclature from 1766, *Tanagra bresilia*), a bird species

20 Belon, *L'Histoire de la nature des oyseaux*, 8.

21 Belon, *L'Histoire de la nature des oyseaux*, 8. For further readings on the methods used, see Paul Lawrence Farber, "The Development of Taxidermy and the History of Ornithology," *Isis* 68.4 (1977), 550–566; Harold J. Cook, "Time's Bodies: Crafting the Preparation and Preservation of Naturalia," in *Merchants & Marvels. Commerce, Science, and Art in Early Modern Europe*, ed. Pamela H. Smith and Paula Findlen (New York/London: Routledge, 2002), 223–247; Karl Schulze–Hagen et al., "Avian taxidermy in Europe from the Middle Ages to the Renaissance," *Journal of Ornithology* 144 (2003), 459–478; Angelica Groom, "Collecting Zoological Rarities at the Medici Court: Real, Stuffed and Depicted Beasts as Cultural Signs," in *Collecting Nature*, ed. Andrea Gáldy and Sylvia Heudecker (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014), 19–35.

22 Belon*, La Nature et diversité des poissons* (Paris : C. Estienne, 1555), 287–288; Barsi, *L'énigme*, 20.

23 Katharina B. Springer and Ragnar K. Kinzelbach, *Das Vogelbuch von Conrad Gessner (1516–1565): Ein Archiv für avifaunistische Daten* (Berlin: Springer, 2009).

24 Schulze–Hagen et al., "Avian taxidermy."

Fig. 3. Brazilian Tanager (male) in the Tiergarten Schönbrunn (Austria).
© Photo: Norbert Potensky

from eastern Brazil, in Belon's bird compendium (Fig. 4) is revealing because in his description Belon hints at the bird skins of this exotic bird that arrived from the New World. An already dead and embalmed bird, most probably preserved as described above, was part of his examination: "Because likewise they [the merchants] cannot bring the birds alive on their vessels from these lands, they skin them to bring the dead bodies. […] One cannot bring these birds alive to our shores. There [on the shores] you can find many complete skins, which may be compared with the portraits that we provide [in this book], so perfect, that the bird is full of life".[30] Such bird skins resemble lying birds with their wings folded, a taxidermic practice still used today (Fig. 5).[31] Belon mentions in his description of the Brazilian tanager that many skins were sold directly by sailors in the harbour;[32] thus, we must consider that there was a large market for exotic animals — including their preserved remains such

25 Lorraine Daston and Katherine Park, *Wonders and the Order of Nature: 1150–1750* (New York: Zone Books, 1998); Thimann, "Image and Objectivity,"; Paula Findlen, "Die Zeit vor dem Laboratorium: Die Museen und der Bereich der Wissenschaft 1550–1750," in *Macrocosmo in Microcosmo. Die Welt in der Stube. Zur Geschichte des Sammelns 1450–1800*, ed. Andreas Grote (Opladen: Leske + Budrich, 1994), 191–207.

26 Thimann "Image and Objectivity," 245; Daniela Bleichmar, "Seeing the World in a Room: Looking at Exotica in Early Modern Collections," in *Collecting Across Cultures. Material Exchanges in the Early Modern Atlantic World*, ed. Daniela Bleichmar and Peter C. Mancall (Philadelphia: Univ. of Pennsylvania Press, 2011), 1–30; Dominik Collet, *Die Welt in der Stube. Begegnungen mit Außereuropa in Kunstkammern der Frühen Neuzeit* (Göttingen: Vandenhoeck&Ruprecht, 2007), 332; Daston and Park, *Wonders*, 147.

27 Belon, *L'Histoire de la nature des oyseaux*, 8. There he hints on the fact that in case of missing images or new species, the collectors could compare their own specimen with the text.

28 Belon, *L'Histoire de la nature des oyseaux*, 40–41.

29 Daston and Galison, *Objectivity*, 39–42; Sachiko Kusukawa, "'Ad vivum' images and knowledge of

DES OYSEAVX, PAR P. BELON. 319

son nid, comme auſsi la contenance ainſi que le Merle, & la couleur du plumage telle qu'à dit Ariſtote, auons facilement conclud, que c'eſt luy qu'Ariſtote à entendu pour la tierce eſpece de Merle. Soudain qu'on à laiſſé la montagne d'Ambrun, & qu'on eſt deualé en la plaine, lon n'en trouue plus: & toutesfois eſtants là hault il y en à ſi grande quantité, que les hoſtes feſtient les paſſans au lieu d'autre gibbier. On les trouue de meſme gouſt, qu'on fait noz Merles noirs, & viuent de telles viandes.

Du Merle de bresil.

CHAP. XXVII.

CEVX qui font le traffic de marchandiſes es terres neufues, ne perdent les occaſions de recouurer les ſingularitez, qu'ils pretendent vendre par deça: Car meſmemẽt ne pouuants apporter les oyſeaux de ce païs là en vie dedens leurs vaiſſeaux, les eſchorchent pour en auoir les peaux: & principalement ceux qui ſont de plus belles couleurs, deſquels eſt celuy que deſcriuons maintenant, & duquel les mariniers font leur profit, luy ayants donné le nom de Merle de bresil. Il n'eſt du tout ſi gros qu'vn Merle, ayant les plumes de tout le corps, excepté la queuë, & les ælles (qui ſont de fin noir) plus rouges, que n'eſt toute autre couleur rouge. Il eſt impoſsible que l'artifice humain puiſſe faire vne couleur rouge, qui n'en ſoit effacée, la mettant en comparaiſon de ſes plumes. Sa queuë eſt longue: ſes pieds, & iambes ſont noirs. Son bec eſt court de la façon de celuy d'vn Moyneau: ſes plumes rouges ſont noires à la racine. Il en ont peu aporter en vie iuſques en noz riuages. Lon en trouue pluſieurs peaux toutes entieres, leſquelles lon pourroit conferer auec le portrait qu'en donnons, auſsi parfait, que ſi l'oyſeau eſtoit plain de vie.

Merle de bresil.

Merle du bresil.

Deſcription du Merle de bresil.

E iiii

Fig. 4. "Du Merle de Bresil". Printed page with coloured woodcut 37,5 x 24,0 cm. Pierre Belon, *L'Histoire de la nature des oyseaux avec leurs descriptions et naïfs portraicts retirez du naturel…* (Paris: G. Corrozet et G. Cavellat, 1555): 319. Paris, Bibliothèque nationale de France, département Réserve des livres rares, RES-S-160 © Bibliothèque nationale de France

nature in early modern Europe," in *Ad vivum? Visual materials and the vocabulary of life-likeness in Europe before 1800*, ed. Thomas Balfe, Joanna Woodall, and Claus Zittel (Leiden: Brill, 2019), 89–121.

30 Belon, *L'Histoire de la nature des oyseaux*, 319: "Car mesmement ne pouvants apporter les oyseaux de ce pais là en vie dedens leur vaisseaux, les eschorchent pour en avoir les peaux […] Il en ont peu aporter en vie iusques en noz rivages. Lon en trouve plusieurs peaux toutes entieres, lesquelles lon pourroit conferer avec le portrait qu'en donnons, aussi parfait, que si l'oyseau estoit plain de vie".

31 For techniques of preservation see Farber, "The Development of Taxidermy"; Schulze–Hagen et al., "Avian taxidermy."

32 Belon, *L'Histoire de la nature des oyseaux*, 319.

Fig.5. Photograph of a study skin of a Fulvous Shrike-Tanager Leiden, Naturalis Biodiversity Center. © CC0 1.0 Universal

as skins, wings, single feathers, beaks, bones, etc. Traces of this commerce, especially with bird skins, can be found in another contemporary author, the French Franciscan friar and explorer André Thevet, who brought embalmed birds from the *France Antarctique* as gifts to the French king. He makes reference to this in his travel account, published for the first time in 1557 after his short trip to the New World in 1555/56,[33] the same year in which Belon published his book on birds: "and for many others of them I brought the skins with feathers, yellow, red, green, purple, blue, and many other colours, which were given as gift to the King, as singular things".[34] Later, in his book *La cosmographie universelle* (1575) he talks again about skins:

> another bird, which the Natives call Suuiath, as big as a blackbird and of which we know two species, one is completely black and the other is red as scarlet, and in my cabinet I have various such skins that these people flayed.[35]

33 *Les singularitez de la France antarctique, autrement nommée Amérique, et de plusieurs terres et isles découvertes de nostre temps* (Paris: Maurice de la Porte, 1557).

34 Thevet, *Les singularitez de la France antarctique*, 92r. : "don't j'ay apporté quelques corps garniz de plumes, les unes iaunes, rouges, vertes, pourprées, azurées, y des plusieurs autres couleurs: qui ont esté presentez au Roy, comme choses singulieres".

35 Thevet, *La cosmographie universelle* (Paris: Guillaume Chaudiere, 1575), 938v.: "vn autre oyseau, que les Sauuages apellent Suuiath, lequel est de la grandeur

The description by Thevet very likely refers to the Brazilian tanager and makes it evident that colour was an important means of description to differ unknown species; furthermore, it states that these skins (at least as reported by Thevet) were already prepared by the indigenous people who sold/gifted them to the Europeans, along with other products such as feather hats, capes, etc. The Europeans, as quoted above by Belon*, in primis* the merchants and sailors, could then sell the products directly at the harbours, or as in the case of Thevet, provide them directly to the collectors or as gifts to the king.

Regardless of the bird's attested status as an embalmed bird, in Belon's treatise it is depicted as most other birds in his book: in profile, sitting on a branch imitating a "natural" and rather lively pose. The red bird is placed before a grassy mound suggesting a certain habitat. Belon calls the Brazilian songbird "Merle du bresil", translated literally "blackbird from Brazil". The bird is discussed in the sixth book, dedicated to the group of birds that finds food everywhere such as the crow, the parrot and the "European" blackbird. Belon's statement that the accompanying image would show the bird "plain de vie" (full of life) could consequently refer to the skills of the taxidermist whose product of a mounted bird he probably studied in a cabinet, or to the imagination of the artist using the bird skin as model for his depiction. These are possible scenarios when we look at the 'wrong' form of the pointed, falcon-like beak or, in general, the body shape of the depicted bird. Even though the first examples of embalmed specimens could not be preserved for long periods — insects could quickly destroy them or the colours of the feathers could fade when exposed to too much UV light — they could at least offer sixteenth-century Europeans a first glance at rare species, fulfilling the owner's desire for marvels and exotic specimens. The picture serves, therefore, as a substitute for a type of object that deteriorated very easily. Such images functioned beyond the context of printed books. They were collected in cabinets or paper museums and used for study purposes by other naturalists.[36]

d'vn Merle, duquel s'en voyent deux especes, l'vn tout noir, & l'autre aussi finement rouge que Escarlatte, tel que encor i'en ay dans mon Cabinet diuerses peaux que ce peuple escorche". For references regarding Belon's *merle du bresil*, see also Dante Martins Teixeira and Nelson Papavero, "Os Animais do Brasil nas Obras de Pierre Belon (1517–1564)," *Arquivos de Zoologia* 45.3 (2014), 45–94.

36 The two most famous collections in this context are those by Ulisse Aldrovandi and by Cassiano dal Pozzo. See Freedberg, *The Eye of the Lynx*, esp. on Aldrovandi 369–340. On "paper museums" see Peter Burke, "Images as Evidence in Seventeenth–Century Europe," *Journal of the History of Ideas* 64 (2003), 273–96; Andrea Carlino, *Paper Bodies: A Catalogue of Anatomical Fugitive Sheets, 1538–1687* (London: Wellcome Institute for the History of Medicine, 1999).

RED: IDENTITY IN COLOUR

Belon praised the red-feathered "Blackbird from Brazil" as a "singularity",[37] a wonder ready to be inserted into a *Wunderkammer* context,[38] brought back from the transatlantic endeavours in the *France Antarctique* — today's Guanabara Bay in Rio de Janeiro. The *France Antarctique* was an attempt of the French crown to colonize a part of what is today Brazil but comprised only a very small area under French control. Despite the short and unsuccessful period (1555–1567) of this endeavour, it nevertheless resulted in several travel accounts such as those by André Thevet and the French author and traveller Jean de Léry,[39] which testify to the French crown's interest in specific American goods: *exotica* and brazilwood (*Paubrasilia echinate*), a source for red dye.[40] Consequently, when talking about a bird named "Merle du bresil" and Brazil it should be noted that in its sixteenth-century use, the word *bresil* referred firstly to the name of a red dye. *Bresil* comes from Medieval Latin *brasillum* to originally denote the red woods used for dying clothes.[41] It is a kind of red that had been produced for centuries and was known and imported from the East. Indications of its use can be found, for instance, in London at the beginning of the thirteenth century.[42] When Pedro Álvares Cabral arrived in 1500 near Bahia, the area previously known as *Terra de Santa Cruz* was already known for carrying the brazilwood and named therefore *terra do brasil*, land of the brazilwood.[43] After the fall of Constantinople in 1453 the supply of redwood was interrupted until the discovery of its substitution species from the Americas.[44] Jean de Léry also noted that the red dye was used in Brazil by the Tupinambá to colour white chicken feathers for colourful feather ornaments on their bodies.[45] This relates to the need for red-coloured feathers for various purposes such as the featherworks mentioned by Thevet,[46] as well as the extended uses of brazilwood itself, which became part of the production of colouring red feathers, helping to create artificial substitutes for a commodity of high demand.[47] "Bresil" does triple duty as a signifier of an export good, the extracted colour, and finally the place.

37 Belon, *L'Histoire de la nature des oyseaux*, 319.

38 See Daston and Park, *Wonders*, 148–149.

39 *Histoire d'un voyage fait en la terre du Brésil, autrement dite Amerique* (La Rochelle: Antoine Chuppin, 1578).

40 John Hemming, *Storia della conquista del Brasile*, trans. Paola Montager (Milan: Rizzoli, 1982), 27–9; and for a more detailed account of the French colonisation of the Guanabara Bay, 149–69. See also Michael Wintroub, "Taking Stock At the End of the World: Rites of Distinction and Practices of Collecting in Early Modern Europe," *Studies in History and Philosophy of Science* 30.3 (1990), 395–424; see also Cameron J.G. Dodge, "A Forgotten Century of Brazilwood: The Brazilwood Trade from the Mid–Sixteenth to Mid–Seventeenth Century," *e–JPH* 16.1 (2018), 1–27.

41 Helmut Genaust, *Etymologisches Wörterbuch der botanischen Pflanzennamen* (Basel: Springer, 1996), 106.

42 Spike Bucklow, *Red. The Art and Science of a Colour* (London: Reaktion Books, 2016), 43. For the reference, see E.M. Carus–Wilson, "The English Cloth Industry in the Late Twelfth and Early Thirteenth –Century," *The Economic History Review* 14.1 (1944), 32–50.

When we look closely at Belon's text about this bird from Brazil, it is very clear that the description focuses on the bird's predominantly red plumage, in which the quality of the shade of red is admired most because — according to the author — this kind of red could not be created by human hands.[48] The inability to reproduce the tanager's red conflicts with Belon's insistence on the necessity of accurate colouring in representing birds. According to Belon, multiple species of small birds could be represented by the same woodcut, since colour was the only distinctive element. Belon writes:

> Consequently, if there are such strong similarities between the beings, how should the Reader then make distinctions between one and the other only with a picture but without colour? He who makes a portrait of a little bird, can easily use it for 30 others, if he uses the right colours: because, almost all have the same legs, claws, eyes, beaks, and feathers, which don't differ if not for the colour. This thought brought us to the decision to colour the portraits.[49]

The issue of colouring woodcuts is indeed particularly important in the case of natural history illustration in the early modern period, where colour was often a factor in the failure of images, as David Freedberg has argued for the Italian context.[50] Belon's wish to represent the tanager's colour failed because of the small number of actual coloured books, the irreproducibility of this particular shade of red, and the unreliability to the hand-coloured woodcut. Only with a real specimen or other "living" material such as preserved specimens in cabinets was it possible to give a rather "complete picture".

Indeed, in various coloured copies of Belon's bird treatise the red of the Brazilian tanager is one of the most intense and brilliantly coloured.[51] Upholding Belon's point in his epistle to the reader, the colourist of the copy at the Bibliothèque nationale de France in Paris seems to take the accentuation of the red too

43 Genaust, *Etymologisches Wörterbuch der botanischen Pflanzennamen*, 106; Brazilwood was not only used as dye for cloth, but also as a lake pigment for colouring manuscripts and prints. In general, red pigments such as madder, red lead, carmine/cochineal and the expensive vermilion were more valued alternatives for brazilwood, since due to its lack of durability, it was not entirely adequate for use in making high quality artist's pigments, see Tatiano Vitorino et al., "New insights into brazilwood lake pigments manufacture through the use of historically accurate reconstructions," *Studies in Conservation* 61.5 (2016), 255–73; on the variety of red pigments in use for colouring prints see Thomas Primeau, "The Materials and Technology of Renaissance and Baroque Hand–Colored Prints," in *Painted Prints. The Relevation of Color in Northern Renaissance & Baroque Engravings, Etchings & Woodcuts*, exhibition catalogue, ed. Susan Dackerman (University Park, PA: Pennsylvania State Univ. Press, 2002), 49–78; Jo Kirby and Raymond White, "The Identification of Red Lake Pigment Dyestuffs and a Discussion of their Use," *National Gallery Technical Bulletin* 17 (1996), 56–80.

44 Judith H. Hofenk de Graaf, "Zur Geschichte der Textilfärberei," in *Documenta Textilia. Festschrift für Sigrid Müller–Christensen*, ed. Mechthild Flury–Lemberg and Karen Stolleis (München: Deutscher

Kunstverlag, 1981), 23–36; Kirby and White, "The Identification of Red Lake," 64. Brazilwood was also used in Meso-America to colour manuscripts. 'Brazilwood' in *Pigment Compendium. A Dictionary and Optical Microscopy of Historical Pigments*, ed. Nicholas Eastaugh et al. (Amsterdam: Elsevier, 2008), 66–7; for a broad discussion of the transatlantic use of colour and pigments, see Gerhard Wolf and Joseph Connors, eds, in collaboration with Louis A. Waldman, *Colors between two worlds. The Florentine Codex of Bernardino de Sahagún* (Milan: Officina Libraria et al., 2011).

45 De Léry, *Histoire d'un voyage*, 128. See Mariana Françozo, "Beyond the Kunstkammer. Brazilian featherwork in early modern Europe," in *The Global Lives of Things. The material culture of connections in the early modern world*, ed. Anne Gerritsen and Giorgio Riello (London: Routledge, 2016), 105–127.

46 Amy Buono has studied this aspect in depth, with respect to the cultural phenomenon of the artisanal feather alteration practices in Brazil by the Tupi people, see "'Their Treasures Are the Feathers of Birds': Tupinambá Featherwork and the Image of America," in *Images Take Flight: Feather Art in Mexico and Europe 1400–1700*, ed. Alessandra Russo, Gerhard Wolf, and Diane Fane (München: Hirmer, 2015), 179–188;

seriously, and also colours the legs in red, although the text explicitly says that they should be black, along with the wings and tail. This example further legitimizes Belon's statement on the problems of colouring.[52]

It is noteworthy that the representation of a mostly red-feathered bird in a natural history treatise on birds, which according to its author should bear coloured woodcuts, became a symbol for the conquest of a small French part of the Americas. "Bird of Brazil" was synonymous with "Bird of Red" and consequently evoked the usage of and access to brazilwood for dying purposes. A coloured version of Belon's woodcut of the red bird thus gained an even more special meaning, although it "failed" in the first place for the reasons mentioned above. The tiny red songbird became a convenient metonymy for Brazil, because it could represent a place of origin, its commodity, the resulting products, and their attendant wealth.

COLOUR AND (LACK OF) FEET

The discussions regarding the extraordinary red colour of the Brazilian tanager and the bird in general did not finish with Belon's treatise. Such an exotic bird was the object of further admiration, trading, and collecting, and consequently also research and discussions among other scholars of the sixteenth century. Among these I want to highlight one case in particular: an uncoloured version of Belon's treatise with Aldrovandi's own comments. It is obvious that Aldrovandi studied Belon's writings in depth, given that he provided his own translation of Belon's bird compendium into Latin.[53] Furthermore, an intermediary coloured drawing (Fig. 6), after Belon's woodcut, is part of the *Tavole*, the collection of coloured drawings consisting mostly of animals, monsters, and plants, bound in several albums which served study purposes and eventually as model drawings for the woodcuts in Aldrovandi's publications. Lastly, Aldrovandi gives direct reference — as was good scientific practice — to Belon's "Merle du bresil" in his second volume of the *Ornithologiae*, published

Fig. 6. "Merula Bresiliana". Coloured Drawing
Biblioteca Universitaria di Bologna, Ms. 124, Tavole di Animali, vol. I, c. 60

Amy Buono, "Crafts of Color: Tupi Tapirage in Early Colonial Brazil," in *The Materiality of Color: The Production, Circulation, and Application of Dyes and Pigments, 1400–1800*, ed. Andrea Feeser, Maureen Daly Goggin, and Beth Fowkes Tobin (Farnham: Ashgate 2012), 235–246.

47 Françozo, "Beyond the Kunstkammer," 110.

48 Belon, *L'Histoire de la nature des oyseaux*, 319.

49 Belon, *L'Histoire de la nature des oyseaux*, f. ã iiij r.: "Si donc il y'a si grande affinité entre les naturels, comment pourroit le Lecteur les discerner l'un de l'autre par le seul portrait, sans la peinture? Qui coucheroit le portrait d'un Oysillon, pourroit facilement le faire servir à trente autres, moyennant qu'on y adioustast les couleurs propres: car touts ont quasi les iambes, ongles, yeux, bec, & plumes de mesmes: & n'apparoissent differents à la veuë, qu'en la seule couleur. Ceste consideration nous à esmeu de faire que les couleurs seront mises sure les portraits".

50 Regarding ornithological treatises, see Freedberg, "The Failure of Colour," 252–3; Freedberg, "The Eye of the Lynx," 349–56.

51 So far, the present author has identified eleven coloured versions in various collections. The colouring is not always homogenous throughout, and the quality of it varies.

in 1600. Like Belon, Aldrovandi placed the Brazilian tanager among the blackbirds in his treatise (Fig. 7). He added a second woodcut of a red-feathered songbird with accompanying text on the following page of the double-opening (Fig. 8), affording this bird an entirely new chapter and nomenclature. The second image represents a presumably dead specimen of the Brazilian tanager, this time without feet. As can be deduced from the text, a drawing of the specimen was sent to Aldrovandi from the botanical garden in Pisa.[54] Two letters, written in the summer of 1599, provide relevant data about the bird and how it came to Pisa. The first delivers the information that Ferdinand I de' Medici, an avid collector of exotica from America such as featherworks and the initiator of a widespread network of trade in those commodities,[55] received two red-coloured birds. The two birds should be depicted by "messer Daniele", referring to Daniel Fröschl (b. Augsburg, 1573 – d. Prague, 1613), a German painter working at the Medici court between 1594 and 1603/04.[56] The second letter, written a few weeks later, confirms that the plan to depict the two birds by Fröschl had been executed and that the two little birds arrived from the Isle of Cape Verde — "regione indiana" (Indian region) — one dead, the other still alive. Furthermore, the letter contains the information that a coloured drawing (*pittura*) is attached to it: "the form of which I do not describe because the picture speaks for itself".[57] The living bird is identified as a red cardinal, whereas the information about the dead bird is more restricted: it arrived without feet, although in the letter it is stated that it should have had them. The bird's skin was stored in the garden's *studiolo* in a little box,[58] already one of the wonders of a collection of *naturalia*.

Since Aldrovandi was not quite sure if the bird described by Belon and the one without feet whose drawing (Fig. 9) and description he had been sent, were the same, he gave the bird a new name: *Merula apus indica* (Indian blackbird without feet). A bird without feet was not without precedent. In 1522 the first specimens of birds of paradise, also called *manucodiata,* "birds of God", arrived from the Moluccas in Europe. For conservation reasons, almost all of

52 Indeed, four of the examined versions follow Belon's description in the text and they even show the red stripe on the wing in the same manner as in Aldrovandi's coloured drawing.

53 Aldrovandi's personal copy of Belon's treatise is kept at the Biblioteca Universitaria di Bologna, A.IV.H.I.57 (n. inv. A/5992) as is a Latin (manuscript) translation of Belon's bird treatise "Petrus Bellonius, de historia et natura avium" (ms. 55/III). The latter is mentioned in Laurent Pinon, "Entre compilation et observation: l'écriture de l'Ornithologie d'Ulisse Aldrovandi," *Genesis (Manuscrits–Recherche–Invention)* 20 (2003), 53–70.

54 The garden was founded as one of the earliest botanical gardens in 1544 by the Medici Family. See Anatole Tchikine, "Gardens of mistaken identity: The Giardino delle Stalle in Florence and the Giardino dell'Arsenale in Pisa," *Studies in the History of Gardens & Designed Landscapes* 33.1 (2013), 39–50; and Irina Schmiedel, *Pompa e Intelletto. Formen der Ordnung und Inszenierung botanischen Wissens im späten Großherzogtum der Medici* (Berlin: De Gruyter, 2016), 59–63; Lucia Tongiorgi Tomasi, "Arte e natura nel Giardino dei Semplici: Dalle origini alla fine dell'età medicea," in *Giardino dei Semplici. L'Orto botanico di Pisa dal XVI al XX secolo*, ed. Fabio Garbari, Tongiorni Tomasi, and Alessandro Tosi (Ospedaletto: Pacini, 1991), 115–212.

Fig. 7. “De Merula Bresilica”. Printed page with colored woodcut
Ulisse Aldrovandi, *Ornithologiae tomus alter*, Bononiae 1600: 628.
Biblioteca Universitaria di Bologna, A.IV, H. III, 8/2

55 Lia Markey, “Stradano’s Allegorical Invention of the Americas in Late Sixteenth–Century Florence,” *Renaissance Quarterly* 65.2 (2012), 385–442; Lia Markey, “‘Istoria della terra chiamata la nuova Spagna’: The History of Sahagún’s Codex at the Medici Court”, in *Colors between two worlds*, ed. Wolf, Connors, and Waldmann, 199–218; it is likely that these red-feathered birds were also a source for featherworks.

56 BUB, ms. 136, XXVIII, cc. 124r. – 124v. Fröschl sees himself (just like Jacopo Ligozzi) as a “miniatore”. Tongiorgi Tomasi, “Arte e natura nel Giardino dei Semplici,” note 79; for more information about his career see Thomas DaCosta Kaufmann, *L’École de Prague. La Peinture à la cour de Rodolphe II* (Paris: Flammarion, 1985), 218–220. Here we find also the birth year 1563; Helmut Trnek, “Jacopo Ligozzi,” in *Prag um 1600, Kunst und Kultur am Hofe Rudolfs II*, exhibition catalogue, ed. Eliška Fučíková (Freren: Luca-Verlag, 1988), 138-40; Lucia Tongiorgi Tomasi, “Daniel Froeschl before Prague: his artistic Activity in Tuscany at the Medici Court,” in *Prag um 1600. Beiträge zur Kunst und Kultur am Hofe Rudolfs II*, ed. Eliška Fučíková (Freren: Luca Verlag, 1988), 289–98; Helmut Trnek, “‘kaiserlicher miniatormahler und antiquaries’. Überlegungen zur geistigen Urheberschaft von Konzept und Gliederung des Inventars der Kunstkammer Kaiser Rudolfs II. von 1607–1611,” *Jahrbuch des Kunsthistorischen Museums Wiens* 3

(2001), 221–230. Tongiorgi Tomasi in her article of 1988 speaks about two (!) cardinal-birds being native to Cape Verde. In her article from 1991 (note 83) she identifies the dead bird as a Scarlet tanager (*Piranga olivacea*). This is already criticized in Herbert Haupt and Manfred Staudinger, eds, *Le bestiaire de Rodolphe II. Cod. min. 129 et 130 de la Bibliothéque nationale d'Autriche* (Paris: Éditions Citadelles, 1990), although here the identification of the dead bird as *Piranga olivacea* has also been confirmed. See ibid., 376. I would suggest identifying it with the bird Belon describes as a Brazilian tanager. There are two more drawing collections of the sixteenth century where presumably the same bird is represented, one belonging to the sixteenth-century Lyonnaise doctor and botanist Jacques Daléchamps, and the other one to Marcus zum Lamm.
I assume that the first coloured drawing refers to Belon's woodcut and is a direct copy from the woodcut and the latter one was again made after the skin of a tanager. For an overview of the two albums today stored at the BnF in Paris, see Baudoin van den Abeele, "Les Albums ornithologiques de Jacques Daléchamps, médecin et naturaliste à Lyon (1513–1588)," *Archives internationals d'histoire des sciences* 52 (2002), 3–45 and Ragnar K. Kinzelbach and Jochen Hölzinger, *Die Vogelbücher aus dem Thesaurum Picturarum,* (Stuttgart: Ulmer, 2000), 304.

57 "la cui forma non descrivo per esser chiara in pittura".


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DE MERVLA APODE INDICA.
Cap. XVII.

Fig. 8. "De Merula Apode Indica". Printed page with coloured woodcut
Ulisse Aldrovandi, *Ornithologiae tomus alter*, Bononiae 1600: 629.
Biblioteca Universitaria di Bologna, A.IV, H. III, 8/2

them were without feet, sometimes even without wings, and mostly stored in wooden boxes,[59] a practice which continued into the seventeenth century. One of these skins in a storage box was depicted as part of the *Thesaurus Picturarum* made under the patronage of Marcus zum Lamm (1544–1606) in Heidelberg, a compendium containing many bird drawings made by several artists. This coloured drawing (Fig. 10) shows the skin of a bird of paradise that was gifted by Count Philipp von Hohenlohe to Friedrich I, Duke of Württemberg in a box richly ornamented with tendrils and the coat of arms of Württemberg,[60] testifying to the high value of this wondrous footless bird to collectors. Several accounts by travellers such as Antonio Pigafetta attested the absence of feet, leading to the idea of the bird as a natural wonder — a marvellous creature coming from terrestrial paradise which lives only in the heavens, and flies permanently subsisting entirely on air.[61]

The little red-feathered songbird without feet stored in a presumably tiny box in Pisa's botanical garden was no such bird. Yet Aldrovandi, though having doubts about this, described and denominated what he saw on the drawing and read in the description he received from Pisa, and eventually published the woodcut based on the drawing by Fröschl in his *Ornithologiae*. The bird in the woodcut is shown hovering over a rather barren mound; its open beak seems to angle for a light purple flower. This relatively free interpretation, with the artist adding a kind of habitat, shows on the one hand the impact or intervention that the artist could have on the final image, but also the artist's or Aldrovandi's possible desire to reanimate the dead bird. Several birds of paradise were represented in the same way in Aldrovandi's bird compendium.[62] As Dániel Margócsy has argued, the number of images one included per species in a treatise was a crucial testament to good scientific practice.[63] Aldrovandi individually numbered the images in his own copy of Belon's bird treatise in order to arrive at a total image count.[64] Indeed, Belon gives only one image per species or sometimes no image at all. Aldrovandi and other naturalists later tried to give multiple images in case there were doubts or there was

58 BUB, ms. 136, XXVIII, cc. 60v–61v.; both letters are reproduced in Alessandro Tosi, ed., *Ulisse Aldrovandi e la Toscana. Carteggio e testimonianze documentarie*, (Florence: Olschki, 1989), 428–30 and Garbari, Tongiorgi Tomasi, and Tosi, eds, *Giardino dei Semplici. L'Orto botanico di Pisa dal XVI al XX secolo*, 283–4.

59 Brian W. Ogilvie, *The Science of Describing. Natural History in Renaissance Europe* (Chicago: Univ. of Chicago Press, 2006), 248–52.

60 *Bildwerke des Wissens. Ein Querschnitt durch 450 Jahre Universitäts– und Landesbibliothek Darmstadt*, exhibition catalogue, (Darmstadt: Hessisches Landesmuseum Darmstadt, 2017), 31; Kinzelbach and Hölzinger, eds, *Die Vogelbücher aus dem Thesaurus Picturarum*, 219–23.

61 On birds of paradise, see Claudia Swan, "Exotica on the move. Birds of Paradise in Early Modern Holland," *Art History* 38.4 (2015), 620–635; José Ramón Marcaida, *Arte e ciencia en el Barocco Espanol. Historia natural, coleccionismo y cultura visual* (Sevilla: Fundación Focus–Abengoa, 2014); Marcaida, "Rubens and the bird of paradise"; Erwin Stresemann, "Die Entdeckungsgeschichte der Paradiesvögel," *Journal of Ornithology* 95.3 (1954), 263–91.

62 Ulisse Aldrovandi, *Ornithologiae hoc est De auibus historiae libri 12.*

Fig.9. Daniel Fröschl
Coloured drawing of a red cardinal and a dead and feetless Brazilian Tanager
Biblioteca Universitaria di Bologna, Ms. 124, Tavole di Animali, vol. II, c. 155

misleading information about the species in question. In the case of the bird of paradise he gave a total of five images.[65]

Finally, Aldrovandi's woodcut based on Fröschl's drawing raises the question of why Belon chose to represent his tanager with a more "conventional" bird sitting on a branch in profile. This image contradicts his statement in the text that the birds arrived as skins, which would imply that the bird´s depiction should be similar to that by Fröschl.[66] Was it to display a certain set of taxidermic skills that made the animal appear as if it was still alive? Was it to give reference to a certain mounted bird in a prominent collection he had access to? Or was it

... Cum indice septendecim linguarum copiosissimo (Bononiae: Franciscum de Franciscis, 1599), 806–16.

63 Dániel Margócsy, "The camel's head: Representing unseen animals in sixteenth-century Europe," *Nederlands Kunsthistorisch Jaarboek* 61 (2011), 61–85.

64 Maria Cristina Bacchi, "Ulisse Aldrovandi e i suoi libri," *L'Archiginnasio. Bollettino della*

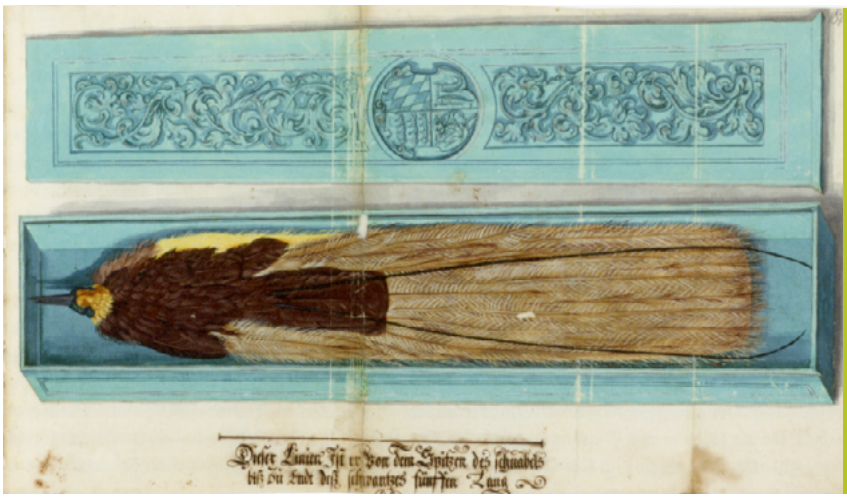

Fig. 10. Anonymous Artist
Coloured drawing of a wooden box with dead specimen of a bird of paradise. 17,1 x 30,0 cm
Universitäts- und Landesbibliothek Darmstadt, *Thesaurus Picturarum*, vol. 31, fol. 167. © Universitäts- und Landesbibliothek Darmstadt

to build up a homogeneous corpus of bird images in his treatise? Based on the scarcity of sources regarding the tanager, we cannot fully answer this question, but it shows the complexity of the problem of representing and describing an unknown exotic bird which arrived already in an altered condition. The choice by Aldrovandi to represent Belon's tanager and his footless bird side by side could also be an invitation to the reader to compare and discuss the two types of representations of apparently similar birds. Text, images, and finally the lay-out of the pages were not incidental, but rather served scientific purposes.

CONCLUSION

From the analysis of the representation and description of the Brazilian tanager in Belon's bird treatise we have seen the difficulties and various layers of depicting a "singularity", an exotic animal which already arrived in Europe dead and in an altered state. By examining the specific meaning of the adjective "naïf" and the broader semantic field around true-to-nature portraits in Belon's book, it can be demonstrated that the claim of "naïf portraits" depended greatly on the objects Belon was dealing with (bird skins or mounted

Biblioteca Comunale di Bologna 100 (2005), 255–366.

65 Aldrovandi, *Ornithologiae*, 806–16. It is significant that these five birds are shown as if in flight: in four cases there are clouds behind them and in the fifth the background is left blank.

66 On the complexity of traveling knowledge via woodcuts see Moran, "Preserving the Cutting Edge."

birds) or other factors such as accessibility to the materials. The method of preservation described in his treatise demonstrates, moreover, that he, much like other naturalists of this time, was an expert in this field. Such a method, already in use for centuries in a hunting context, was highly in demand in this specific moment when new, exotic birds such as the Brazilian tanager had to be transported back from overseas endeavours. Thus, a "naïf" portrait of an already dead and presumably mounted bird must be seen as an imaginary (re-)construction and as a product of the available methods.

Given the fact that colour in the case of the Brazilian tanager was more than a trivial matter, and that the colouring of the woodcuts was a concern of Belon, the question of colour resulted in a multi-layered metonymy where colour and bird bear witness to how sixteenth-century France was successful in gaining access to brazilwood and colourful feathers. Nevertheless, as Belon himself states, it was impossible to reproduce the colour of the Brazilian tanager´s red feathers in his treatise, given that no such pigment produced by a human hand could display the exact colour and the iridescence of the shimmering feathers. In this way, Belon's coloured versions of his treatise are also the perfect example of the failure of scientific images in this period where the expectations of a scientific image, its epistemic virtues, and the limitations of woodcut images and later hand-colouring conflict constantly.

In comparing Belon's description of the exotic bird with Aldrovandi's work, this article has sought to demonstrate that preserved specimens, descriptions, and drawings of the tanager circulated in ways that transformed the bird's meaning and its critical apparatus. Central to these exchanges and transformations of knowledge were its bright red colour and its missing feet, as has been shown in Aldrovandi's example and its analogies in footless birds of paradise. Both its colour and its feet were inconstant aspects in preserved specimens and their representation, leading to confusion when knowledge was transferred from one party to another. Belon's *merle du bresil* is thus a kind of marvellous

creature, a much desired *singularité*, testifying not only to the representation of power through colonial endeavours and their outcomes, but also the fascination with exceptional colour — with its multiple layers of meaning in the case of *bresil* — and finally unknown bird species. The bird, whether an embalmed and stuffed carcass or a two-dimensional image on paper, was — and still is — part of a vast visual archive of nature. Representations of birds in art and their at times seemingly ornamental use should therefore be analysed in relation to wider practices: the encyclopaedic display of birds and the pictorial "taxonomy" found in early modern treatises. Belon's treatise is one of the earliest examples of this phenomenon and the reception of Belon's work in its various manifestations is crucial, offering insights into the process of creating and gathering knowledge and its transfer.

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CONSTRUCTING THE MIND OF ANTS

THE ROLE OF ANTHROPOMORPHISM IN GERMAN-LANGUAGE ANIMAL PSYCHOLOGY AROUND 1900

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Anthropomorphism is a recurring and contested topic in the scientific study of animal behaviour. This article aims at gaining a deeper understanding of anthropomorphism and its function for animal behaviour science by examining the study of ants in the German-language discourse of animal psychology around 1900. By analysing the works of physiologist Albrecht Bethe and entomologist Auguste Forel it is demonstrated that the use of analogy as a method in the study of animals led to a debate on anthropomorphism, resulting in the demarcation of scientific approaches from unscientific ones. As the production of knowledge in animal psychology relied heavily on human judgement of scientific methods and philosophical ideas, it can be concluded that the mind of ants is not only conceptually, but socially constructed in these studies.

In the past as well as today, anthropomorphism is one of the most disputed topics in the study of non-human animals. There is a general agreement on a broad definition of anthropomorphism as an attribution of humanlike traits to animals in a description of their behaviour. However, the extent to which a given description of animal behaviour is anthropomorphic or not results in divergent answers. The answer to this question is important insofar as there is hardly a scientist who would like to be associated with anthropomorphism, as it is widely understood in science as being unscientific. To illustrate this, primatologist Frans de Waal coined the contrasting term "anthropodenial". With this term he refers to "the a priori rejection of humanlike traits in other animals or animal-like traits in us".[1] He adds that a critical attitude to anthropomorphism

1 Frans de Waal, *Are we smart enough to know how smart animals are?* (New York City: W.W. Norton & Company, 2016), 25.

"for the sake of scientific objectivity often hides a pre-Darwinian mindset, one uncomfortable with the notion of humans as animals".[2] De Waal thus connects anthropomorphism to an understanding of science, but also to an understanding of the relation between humans and animals in a broader sense. Both vary historically and among cultures and complicate a more specific definition of anthropomorphism. Accordingly, anthropologist Pamela Asquith argues that "we cannot assume that anthropomorphism carries exactly the same connotations at all times or for all scientists",[3] and further expands the idea that a definition of humanness is necessary in order to declare something anthropomorphic.

Based on Asquith's assumption that a precise definition of anthropomorphism applicable to all contexts is impossible, this article takes a closer look at anthropomorphism in a specific context: the study of ant behaviour in the German-language discourse of animal psychology around 1900. It will be demonstrated that the divergent evaluations of analogy as a scientific method led to an accusation of anthropomorphism, and that anthropomorphism was taken to imply a demarcation of scientific approaches to animals from non-scientific ones. Thereby, it will become apparent that the production of knowledge in animal psychology relied on the scientists' judgement of scientific tools and philosophical ideas and not only resulted out of studying ant behaviour.

Whereas today animal psychology is often understood as mental therapy for animals, around 1900 German-language animal psychology dealt with the study of animal behaviour and its possible intrinsic motivation. The word "possible" reveals the complicated relationship of behaviour and mind. A study of behaviour does not necessarily link to a "mind" — that is to say, with an intrinsic motivation for behaviour and an internal processing of information. Thus, terms such as *intention*, *consciousness*, and *thinking* are associated with the term *mind*.[4] The explanation of behaviour, as will be demonstrated in this article, often leads to a discussion of a possible internal motivation,

2 Ibid., 26

3 Pamela J. Asquith, "Why Anthropomorphism Is *NOT* Metaphor: Crossing Concepts and Cultures in Animal Behavior Studies," in *Anthropomorphism, Anecdotes, and Animals*, ed. Robert W. Mitchell, Nicholas S. Thompson, and H. Lyn Miles (Albany: State University of New York Press, 1997), 23.

4 Markus Wild, *Tierphilosophie. Zur Einführung* (Hamburg: Junius, 2008), 11–15.

but not necessarily to the conclusion that a mind is responsible for such behaviour (or even exists). Besides the focus on animal behaviour, German-language animal psychology can be characterized by certain recurring topics. These topics were the notion of the inaccessibility of other minds, a discussion of anthropomorphism and analogy, and the scientific character of animal psychology, which were tightly interwoven with one another and strongly influenced each other. Animal psychology thus offers an opportunity to gain an understanding of anthropomorphism and its relevance within a scientific field. Moreover, most historians of science place the beginning of German-language animal behavioural studies in the work of the ethologists Konrad Lorenz and Oskar Heinroth, as well as in the institutionalization of ethology around 1930. The precursor of ethology, animal psychology, is less studied from a discourse analysis perspective. A close study of it will therefore provide useful insights into the discourse of the historical study of animal behaviour.[5]

The common understanding of the terms "animal" or "animals" encompasses a variety of different species, but leaves out a particular one: humans.[6] In order to avoid the vagueness of the term "animal(s)", and to acknowledge the diversity of animal species, this article chooses to take a look at studies focusing on one group of animals: ants. The reason for this choice is twofold. Firstly, ants were popular animals to study around 1900. Literary scholar Niels Werber, for example, explains the interest in insects through discussions of political questions around that time: the terminology used in entomology — e.g. *monarchy*, *worker ants*, and *queen* — offers a first insight into that connection.[7] Secondly, ants are exemplary of what Michael Tye calls "the simple minds". These concern:

> [s]impler beings than ourselves [about which] we are left with nothing physical or structural that we could plausibly take to help us determine whether they are conscious. The Problem of Other Minds, as it applies to the consciousness of such creatures, is without solution.[8]

5 An overview of publications in the field is given, for example, in Britt von den Berg, *Die "neue Tierpsychologie" und ihre wissenschaftlichen Vertreter (1900-1930)* (Bristol u.a.: Tenea, 2008). Focusing only on the crucial experiments done with animals which were believed to able to speak by tapping in the beginning of the twentieth century: Henny Jutzler-Kindermann, *Können Tiere denken? Ein Buch vom Verstand und Wesen der Tiere* (St. Goar: Reichl, 1996).

6 See, for example: Birgit Mütherich, "Die soziale Konstruktion des Anderen: Zur soziologischen Frage nach dem Tier," in *Tierethik Grundlagentexte*, ed. Friederike Schmitz (Berlin: Suhrkamp, 2014), 445–477; Markus Wild, *Tierphilosophie*, 7.

7 Niels Werber, *Ameisengesellschaft* (Frankfurt am Main: Fischer, 2013).

8 Michael Tye, "The Problem of Simple Minds: Is There Anything It Is like to Be a Honey Bee?" *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 88, no. 3 (Dec., 1997): 289.

Tye's statement represents creatures that are physically very different from humans and, moreover, are "simpler", a psychological mystery that cannot be solved. Consequently, one can assume that scientific papers that focus on animals with "simple minds", such as ants, will reveal more controversies and therefore provide deeper insights into the debate on the mind of non-human animals. Although this article focuses on one specific group of animals, it uses in some cases the term "animal(s)" instead of "ants". This is mainly because the studies about ants which will be examined used the term "animal(s)" as well.

This article understands animal psychology as a scientific discourse and draws its methodological approach from Foucauldian discourse theory.[9] This means that the production of knowledge about animal behaviour in animal psychology is considered a negotiation of rules on how to approach non-human animals and on how to pursue animal psychology as a science. In other words, in order to participate in the discourse of animal psychology and to be recognized as scientific, scientists had to follow certain rules in their contributions to the field. As will be demonstrated in this article, the avoidance of anthropomorphism represents such a rule. To illustrate this, contributions by German physiologist Albrecht Bethe and Swiss entomologist Auguste Henri Forel will be analysed in regard to their responses to one another's ideas.

These two scientists are taken as representatives of two different schools of studying ant behaviour and pursuing animal psychology around 1900. Bethe was a physician and physiologist, who in 1937 was banned by the Nazis from carrying out his profession.[10] Bethe's work included an examination of the nervous system of animals and his approach to ant behaviour followed this physiological approach and thus focused on physical processes. This research approach resulted in attempts to find a formal terminology for the behaviour of animals and provided a rather machine-like understanding of it. His studies therefore led him to a very sceptical view of the cognitive abilities

9 As Foucault never wrote a coherent methodological description, ideas were derived from Achim Landwehr, *Historische Diskursanalyse* (Frankfurt am Main: Campus: 2009); Reiner Keller, *Diskursforschung. Eine Einführung für SozialwissenschaftlerInnen* (Wiesbaden: VS, 2011); and Siegfried Jäger, *Kritische Diskursanalyse. Eine Einführung* (Münster: Unrast, 2012).

10 For a detailed account of his biography see: Ernst August Seyfarth, *Albrecht Bethe. Naturforscher, Mediziner und liberaler Patriot* (Frankfurt am Main: Societäts, 2018).

of animals, especially of ants. This article mainly focuses on his book *Dürfen wir den Ameisen und Bienen psychische Qualitäten zuschreiben?* (Are we allowed to ascribe mental abilities to ants and bees?) (1898). Forel, on the other hand, was an entomologist, psychiatrist, neuroanatomist, and social reformer promoting pacifism and social morality among other topics. He was not only interested in the behaviour of ants, but also became famous for his description of ant species. His book *Les Fourmis de la Suisse* (The ants of Switzerland), written in 1874, was one of his most famous works, and in it, he combined descriptions of ant species with a study of their behaviour.[11] In contrast to Bethe, Forel discussed the behaviour of ants less rigorously and presumed a mind in ants. In his book *Das Sinnesleben der Insekten. Eine Sammlung von experimentellen und kritischen Studien über Insektenpsychologie* (The sensory life of insects. A collection of experimental and critical studies on insect psychology) (1910) he wrote that it would not be possible to understand behaviour without knowledge of sensory organs and their functions.[12] This work, as well as *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten* (The psychic power of ants and some other insects) (1907), are of primary interest in this article.[13]

Other minds: access denied?

That only an exterior view on the inner life of a non-human animal is possible is what philosophers Markus Wild and Dominik Perler consider the basic methodological problem when trying to approach the mind of other animals.[14] This methodological problem is also key to understanding the discussion of anthropomorphism in the work of both Bethe and Forel.

To introduce the difficulty of accessing the mind in general, Forel began *Die psychischen Fähigkeiten von Ameisen und einiger anderer Insekten* (1907) with a distinction between consciousness and unconsciousness and explains that consciousness made up only a small part of the total mental activity, while the bigger part was unconscious. For Forel, this division meant that a psychology

11 Stephan Osiro et al., "August Forel (1848-1931): a look at his life and work," *Child's Nervous System* 28, no. 1 (2012): 1–2. See also: Charlotte Sleigh, *Six Legs Better: A Cultural History of Myrmecology* (Baltimore: Johns Hopkins University Press, 2007), 11.

12 August Forel, *Das Sinnesleben der Insekten. Eine Sammlung von experimentellen und kritischen Studien über Insektenpsychologie* (München: Ernst Reinhardt 1910), VII.

13 See for the English translation by William Morton Wheeler: August Forel, *Ants and Some Other Insects. An Inquiry into the Psychic Power of these Animals. With an Appendix on the Peculiarities of their Olfactory Sense* (Chicago and London: Open Court, 1904). The first edition of the German version was published in 1901.

14 Dominik Perler and Markus Wild, "Der Geist der Tiere – eine Einführung", in *Der Geist der Tiere. Philosophische Texte zu einer aktuellen Diskussion*, ed. Dominik Perler and Markus Wild (Frankfurt am Main: Suhrkamp Verlag, 2005), 13.

based on introspection only allowed for insights into consciousness and left out most mental activities, because of their unconscious nature — in other words, they were inaccessible. Forel found a solution to this problem in the process of drawing analogies between different species and concluded that analogy was the only existing tool to access the mind and therefore necessary. Furthermore, he added that a comparison of the five senses was fundamental to infer information on the mind of human and nonhuman animals likewise.[15] Although precise definitions of the terms *comparison*, *analogy*, and *induction* are missing in Forel's work, it can be inferred from his studies that a *comparison* means, for example, that the senses of ants were compared with that of other animals such as humans. An *analogy* goes further and indicates that the compared subjects have similar features. These similarities can be used to gain insights into a certain subject, thereby inferring information from the process of comparison. An example of this would be Forel arguing that an injury of the cerebrum causes a similar shift in behaviour in ants as in pigeons.[16] This comparison — actually used to justify the study of brain morphology for psychological studies — demonstrates that a comparison of pigeons and ants finds analogies in the brain structure and further justifies assuming that these structures are related to the same behaviour in ants and pigeons.

In agreement with Forel, Bethe wrote that one knew sensation only from oneself and thus no direct access to other minds was possible. This also led him to consider analogy as a tool to access other minds. Yet this "unscientific tool" of inference, as he called it in a paper published in 1899 with physiologist Jakob von Uexküll and Theodor Beer, could not be applied to "ascribe sensation to lower animals and lower centres of man".[17] His reference to analogy as "unscientific" and not applicable to "lower animals" points to the first difference between Forel and Bethe. Whereas both agreed on analogy as the only method to gain insights into other minds, they differed in their assessment of the extent to which analogy could be used to determine how valid the results of this method were. According to Bethe's paper, drawing

15 August Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten* (München: Ernst Reinhardt 1907), 7–8.

16 August Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten,* 18.

17 Albrecht Bethe, Theodor Beer and Jacob Uexküll, "Vorschläge zu einer objektivierenden Nomenclatur in der Physiologie des Nervensystems," *Zoologischer Anzeiger* 22 (1899): 275. [trans. Maike Riedinger]. Original: "den niederen Thieren wie den niederen Centren des Menschen Empfindungen zuzuschreiben". What is meant by lower animals and lower centres of men remains unanswered. Based on evolutionary theory and the terminology Darwin used, "lower animals" could be translated as not closely related to humans. Since Bethe, Uexküll, and Beer were scientists with a strong physiological background, lower centres of men could mean physical processes that were seen as unrelated to complex cognitive ones such as digestion.

analogies was no valid method to infer information about the motivation of behaviour shown by "lower animals" such as ants. Forel, on the other hand, used analogies to approach the behaviour of ants and regarded it as scientifically valid. Moreover, Bethe, Uexküll, and Beer's general consideration of analogy as being "unscientific" led them to develop a nomenclature in an attempt to standardize an approach to the study of non-human animals.[18] Their paper was considered to be influential for the development of behaviourism and as the link between the German-language discourse of animal psychology and behaviourism.[19] In accordance with this paper, Pamela Asquith described it as part of what she calls the "first objectivist movement",[20] by which she refers to the increasing number of attempts to ban subjectivisms from science, similar to the aim of Behaviourism.

As analogy depends on similarities between different species, the difference in Forel and Bethe's opinions is also mirrored by their different takes on evolution-based explanations in the behavioural study of ants. Around 1900, some studies of animal behaviour were explicitly influenced by evolutionary theory. This can often be seen in works by biologists who were also interested in the study of the animal mind, such as Ernst Haeckel and George Romanes.[21] The evolutionary theory was first applied to the study of animal minds in *The Descent of Man* (1871) by British naturalist Charles Darwin. In this work, Darwin states that the difference between the human and the animal mind is one of degree and not of kind.[22] However, some approaches to the study of animal behaviour remained rather unaffected by Darwin's argument. Psychologist Robert Boakes notes that two distinct scientific traditions collided in German-language discourse in the period from Darwin's evolutionary theory to the beginning of behaviourism: the evolutionary and the physiological. He writes that "experimental physiologists, mainly working in German universities, had been making a series of important discoveries about the nervous system".[23] Furthermore, he adds that: "A general theoretical concept for much of this work was the idea of the reflex [. . .] Eventually this concept was extended in

18 Bethe, Beer, and Uexküll, "Vorschläge zu einer objektivierenden Nomenclatur in der Physiologie des Nervensystems," 275–280.

19 Ernst Dzendolet, "Behaviorism and sensation in the paper by Beer, Bethe and von Uexküll (1899)," *Journal of the History of the Behavioral Sciences* 3 (1967): 256–261. See also: Florian Mildenberger, "The Beer/Bethe/Uexküll Paper (1899) and Misinterpretations Surrounding 'Vitalistic Behaviorism'," *History and Philosophy of the Life Sciences* 28, no.2 (2006), 175–189.

20 Asquith, "Why Anthropomorphism is NOT Metaphor: Crossing Concepts and Cultures in Animal Behavior Studies," 25.

21 See, for example: George John Romanes, *Die geistige Entwicklung im Tierreich* (Leipzig: Ernst Günthers Verlag, 1887); Ernst Haeckel, *Die Welträthsel. Gemeinverständliche Studien über monistische Philosophie*, (Bonn: Emil Strauss, 1899), 101–242.

22 Charles Darwin, *Die Abstammung des Menschen* (Wiesbaden: Fourier 1992), 163.

23 Robert Boakes, *From Darwin to behaviourism. Psychology and the mind of animals* (Cambridge: Cambridge University Press, 1984), 2.

a way that many hoped would provide a generally adequate explanation of why animals [. . .] act in the way that they do".[24] Bethe and Forel represent two different interpretations of the evolutionary theory in the study of ants. Following Boake's distinction, Bethe can be described as a representative of the German experimental physiologists. Although Bethe did not reject the use of evolutionary explanations, he used natural selection primarily to claim that no inner life was necessary to explain behaviour and said further that a physiological or mechanistic explanation was sufficient.[25] By labelling a scientific approach "mechanistic", Bethe refers to an explanation of behaviour based on physical processes. Bethe's use of the term "mechanistic" refers to the image of a machine — hence, no mind is necessary to explain behaviour. Jacques Loeb, Bethe's contemporary, can be considered another follower of this school of thought. He became famous for his ideas about tropism — a view that regards animal behaviour mainly as a reaction to an external stimulus. He is therefore also considered a representative of the early stages of behaviourism.[26] In contrast to Bethe, Forel did not interpret evolutionary theory as suggesting a mechanistic explanation. Rather, for him, it legitimized the assumption of similarities in the psychology of different species. He wrote that "evolutionary theory is just as valid in psychology as other research areas studying organisms".[27] Consequently, evolutionary theory led him to the idea that the brain of social insects is comparable to that of humans and that insights into the psychology of social insects are possible.[28] In summary, both Bethe and Forel accepted evolutionary theory but did not agree on its applicability to the study of animal behaviour. Against this background, it can be explained why they had different ideas on the limits of analogy as a scientific method in approaching the behaviour of ants.

ANTHROPOMORPIC ANTS OR REFLEX MACHINES?

The debate between Bethe and Forel on analogy's applicability in studying ant behaviour was not implicit. Forel wrote explicitly in regard to Bethe that

24 Ibid., 2.

25 Albrecht Bethe, *Dürfen wir den Ameisen und Bienen psychische Qualitäten zuschreiben*? (Bonn: Martin Hager, 1898), 5.

26 Sleigh, *Six Legs Better: A Cultural History of Myrmecology*, 43–45; Heiner Fangerau, "Tierforschung unter mechanistischen Vorzeichen: Jacques Loeb, Tropismen und das Vordenken des Behaviorismus, " in *Philosophie der Tierforschung 1. Methoden und Programme*, ed. Martin Böhnert, Kristian Köchy, and Matthias Wunsch (München and Freiburg: Karl Alber, 2016), 183–208.

27 August Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten,* 4. [trans. Maike Riedinger]. Original: "Die Evolutionstheorie gilt genauso gut auf dem psychischen Gebiet als auf allen anderen Gebieten des organischen Lebens".

28 See also Osiro et al., "August Forel (1848-1931): a look at his life and work," 2.

analogy was an inherent part of animal psychology. He further added that animal psychology was a field that could never be exact, and that Bethe and others had missed the fact that knowledge was always relative.[29] This became even more evident shortly thereafter, when Forel responded to a criticism by Bethe in the journal *Biologisches Centralblatt*: "Bethe overestimates the accuracy of physiology in a downright ridiculous way. Even far more rigorous sciences, like for example chemistry, do not disdain using psychological qualities for their experiments, e.g. the qualities of colour or smell".[30] In accordance with this criticism, Forel wrote seven years later in *Das Sinnesleben der Insekten* (1910) that we should be aware that a comprehensive understanding of the "insect soul" was not possible with the current state of scientific knowledge.[31] His ideas were accompanied by a critical attitude towards approaches that were based on what was in his view an exaggerated claim of scientific rigour — referring thereby to studies that focused only on aspects of behaviour that provided certainty. According to Forel's view, this results in leaving out parts which are difficult to prove rigorously such as animals' mental life. For Forel, an example of this type of research is demonstrated by Bethe's physiological approach. By focusing only on aspects that could be proven with certainty, in other words physiological processes and mechanistic explanations, Bethe created a strict separation between mind and body. Forel's accusation is based on an understanding of the mind as inseparable from the body and that the existence of a certain physical structure legitimates the assumption of a mind. As Bethe's explanations of ant behaviour consider only physical structures without deriving psychological qualities from them, Forel accused him of ignoring the unity of mind and body. Consequently, he related Bethe's studies to a mind–body dualism and called this dualism a psycho-physiological parallelism:

> More recently, Bethe, Uexküll, and others have denied the cognitive abilities of invertebrates. They declare the latter to be reflex machines by relying on the so-called psycho-physiological parallelism in order to demonstrate the impossibility of recognizing their soul qualities.[32]

29 Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten,* 11.

30 August Forel, "Nochmals Herr Dr. Bethe und die Insekten-Psychologie," *Biologisches Centralblatt* 23 (1903): 1–3. [trans. Maike Riedinger]. Original: "Bethe überschätze die Exaktheit der Physiologie in geradezu lächerlicher Weise. Selbst viel exaktere Wissenschaften, z.B. die Chemie, verschmähen es nicht, psychologische Qualitäten für ihre Experimente mit zu benutzen, z.B. Farben- und Geruchsqualitäten".

31 Forel, *Das Sinnesleben der Insekten*, VIII.

32 Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten*, 1. [trans. Maike Riedinger]. Original: "In neuerer Zeit haben Bethe, Uexküll und andere die psychischen Fähigkeiten der wirbellosen Tiere in Abrede gestellt. Sie erklären letztere für Reflexmaschinen, in dem sie sich auf den sogenannten psycho-physiologischen Parallelismus stützen, um die Unmöglichkeit der Erkennung ihrer Seelenqualitäten darzuthun".

By associating Bethe's study with psycho-physiological parallelism, Forel intended to depict Bethe's research approach negatively. This becomes even more apparent when Forel contrasted this psycho-physiological parallelism with a monistic approach.[33] Monism was a widely discussed idea around 1900 and referred to the principle unity of mind and body, or of mental life and physiology. In 1906, the influential biologist Ernst Haeckel founded the German Monist League and Forel became one of the board members.[34] The accusation of a scientific approach as not monistic can therefore be seen as a harsh criticism of scientific validity. Not surprisingly, Bethe rejected this criticism and described his research as in accordance with monism. He even added that his views were more justifiably monistic than those of other scientists and explained this by saying that his physiological explanations were purely based on scientifically provable facts. He did not elaborate further on monism and only stressed his point that lacking explanations in the study of behaviour did not justify a hypothesis of psychological qualities, as scientific proof for it was missing.[35]

To summarize, the difficulty of accessing other minds and the reliability of analogy as a scientific tool led to a debate on mind-body dualism and the fundamental question of a definition of animal behaviour studies as a scientific field. According to Forel, the presence of psychological qualities in animals — although not rigorously provable — can be assumed and are therefore a necessary part of behavioural studies. For Bethe, on the other hand, the lack of certainty justifies the omission of psychological qualities. He insisted on relying only on factual, provable aspects, as per the requirements of scientific inquiry.[36] In this debate between Bethe and Forel two different ideas of how to pursue the scientific study of animals arose. This difference is reflected in what primatologist de Waal describes as a common phenomenon in the study of animal behaviour that is still relevant today: "Whereas one school warns against assuming things we cannot prove, another school warns against leaving out what may be there [. . .]".[37] This was also the case with Bethe and

33 Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten*, 1, 9.

34 Osiro et al., "August Forel (1848-1931): a look at his life and work," 4.

35 Bethe, *Dürfen wir den Ameisen und Bienen psychische Qualitäten zuschreiben*?, 5–7.

36 Bethe, *Dürfen wir den Ameisen und Bienen psychische Qualitäten zuschreiben*?, 85.

37 Frans B. M. de Waal, "Foreword, " in *Anthropomorphism, Anecdotes, and Animals*, ed. Robert W. Mitchell, Nicholas S. Thompson, and H. Lyn Miles (Albany: State University of New York Press 1997), XV. See for a further examination also: Elliott Sober, "Comparative Psychology meets Evolutionary Biology. Morgan's Canon and Cladistic Parsimony," in *Thinking with Animals. New Perspectives on Anthropomorphism*, ed. Lorraine Daston and Gregg Mitman (New York: Columbia University Press, 2005), 85–87.

Forel. Their different ideas regarding the pursuit of behavioural studies led to a devaluation of each other's scientific approach.

In order to declare the research of the other scientists as unscientific two terms came up: "anthropomorphism" and "reflex machines". Forel claimed that Bethe, by leaving out psychological qualities in his study of ants, rendered invertebrates reflex machines.[38] On the other hand, although Bethe acknowledged Forel's high degree of scepticism, he also stated that Forel frequently fell into "critical anthropomorphism". As the scientific proof for psychological qualities in ants — based on Bethe's understanding of science — was missing, its attribution could only result out of anthropomorphism, meaning the projection of humanlike traits on ants. Bethe added that, to the extent in which he was familiar with the newly published literature about ants and bees, there was not even one contribution approaching the matter of ant behaviour without bias and with the full scepticism required for their study.[39] Forel reacted to the accusation of anthropomorphism by accusing Bethe in turn of being anthropomorphic, since the latter considered the ability to modify behaviour and therefore a human kind of reason necessary to attribute psychological qualities.[40] He accused Bethe of implicitly assessing the behaviour of ants based on human standards and on the ability of non-human animals to show characteristics which are associated with humans such as reason.

The accusation of being anthropomorphic is linked to the debate on analogy and the different perceptions of analogy as a scientific tool to approach the non-human mind. Philosopher Emanuela Cenami Spade writes about anthropomorphism in general that "the difficulties posed by the use of analogies between humans and animals is the core of the entire puzzle of anthropomorphism".[41] In the case of Bethe and Forel case, an (implicit) use of analogy was enough to lead to an accusation of being anthropomorphic by either transferring attribution, which also occurs in humans to ants, or by implicitly looking for similarities to humans while assessing the psychological qualities of

38 Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten,* 3.

39 Bethe, *Dürfen wir den Ameisen und Bienen psychische Qualitäten zuschreiben*?, 3–4.

40 Forel, *Die psychischen Fähigkeiten der Ameisen und einiger anderer Insekten,* 15.

41 Emanuela Cenami Spada, "Amorphism, Mechanomorphism, and Anthropomorphism," in *Anthropomorphism, Anecdotes, and Animals*, ed. Robert W. Mitchell, Nicholas S. Thompson, and H. Lyn Miles (Albany: State University of New York Press 1997), 41.

animals. Summarized, it becomes apparent that both scientists have a different perception of which aspects — in other words which use of analogy — led to the characterization of a study as being anthropomorphic. While for Forel anthropomorphism meant to assess ant behaviour based on human standards, for Bethe it meant to assume mental abilities in animals for which a proof based on his scientific standards was missing.

AVOIDING ANTHROPOMORPISM AND SEEKING A DEFINTION OF SCIENCE

Their different perceptions of anthropomorphism notwithstanding, Bethe and Forel referred to it with the same rhetorical purpose: to criticize and disqualify each other's approach to animal behaviour, to depict each other's scientific contributions as unscientific. The mutual accusations of anthropomorphism or creation of "reflex machines" aimed at attacking the philosophical underpinnings of the studies. Thus, Bethe and Forel used the term anthropomorphism according to their own understanding of animal psychology as a scientific discipline and their own definition of scientific inquiry. Consequently, these accusations contained an attempt to negotiate the shape of the scientific methods to study animal behaviour. Bethe made this clear by writing that everyone was allowed to attribute to animals as many cognitive abilities as they wanted in their private lives, but not in science.[42]

On the basis of discourse theory, it can be said that by referring to certain approaches as anthropomorphic and thereby as unscientific Bethe and Forel negotiated the scientific character of animal psychology. Moreover, this can be understood as an attempt to demarcate animal psychology as a field from other, "unscientific", approaches to ants. This, in turn, led to a situation in which the avoidance of anthropomorphism had become an implicit rule that scientists had to follow in order to be accepted by the scientific community. This situation was also influenced by other crucial events in animal psychology at the beginning of the twentieth century such as the case of Clever Hans, a horse

42 Bethe, *Dürfen wir den Ameisen und Bienen psychische Qualitäten zuschreiben*?, 8.

that was believed to solve different tasks such as counting by tapping with his hooves. The assumption that the horse could count and solve mathematical tasks was soon explained by the detection of unconsciousness signs made by the experimenter. However, the case of Clever Hans enforced the suspicion that non-human animals could possess psychological qualities and intensified the intention to ban anthropomorphism from the scientific study of animal behaviour.[43]

The topicality of the rule to avoid anthropomorphism in order to participate in scientific discourse is also an issue in the current philosophy of animal behaviour sciences. In his foreword to philosopher Vinciane Despret's book *What Would Animals Say If We Asked the Right Questions?* (2016) Bruno Latour quotes Despret's idea of *academocentrism* and asks: "Is the fight against anthropomorphism so important that it should give way to what she calls a generalized 'academocentrism'?"[44] The term *academocentrism* can be understood as the necessity for scientists to undertake research according to the academic standards such as the accepted scientific methods and theories in order to participate in a scientific discourse. The debate between Bethe and Forel provides an understanding of how the scientific character of theories and methods were negotiated in the past and thus, of how *academocentrism* gained its specific charge. Therefore, it illustrates an ongoing dispute in the discourse of animal psychology and points at underlying aspects of the discussion on anthropomorphism: its importance in the search for scientific standards and for the demarcation of scientific approaches to animal minds from non-scientific ones.

43 For a detailed illustration of the case, see also: Karl Krall, *Denkende Tiere. Beiträge zur Tierseelenkunde auf Grund eigener Versuche. Der kluge Hans und meine Pferde Muhamed und Zarif* (Leipzig: Friedrich Engelmann, 1912).

44 Vinciane Despret, *What Would Animals Say If We Asked the Right Questions?* (Minneapolis: University of Minnesota Press, 2016), viii, (pages vii- xiv: Bruno Latour, "Foreword: The Scientific Fables of an Empirical La Fontaine.").

CONSTRUCTING THE MIND OF ANTS

As was demonstrated, the assumed difficulty to access other minds led Bethe and Forel to a methodological discussion on analogy. While Bethe did not think of analogy as a suitable method to gain insights into the behaviour of

ants, Forel used analogies between humans and social insects to draw conclusion on their minds. The debate on analogy resulted in contrary explanations of the behaviour of ants und further to a devaluation of one another's research approach. While Forel thought of Bethe's research as a creation of ants as reflex machines, Bethe accused Forel of anthropomorphism — a criticism which Forel saw also in Bethe's work. Philosophical ideas about monism (the unity of body and mind) and about mind–body dualisms (so-called "psycho-physiological parallelism") came up as points of debate. For Bethe, monism meant knowledge about behaviour as purely based on — according to his definition of science — provable facts. Forel, on the other hand, understood monism as a reason to accept psychological qualities, as mind and body were a unit. Thus, different ideas about scientific methods and a definition of science arose from the debate and resulted in different understandings about ants and about the motivation of their behaviour.

The debate outlined above between Bethe and Forel shows that statements about ants were not only deduced from their behaviour, but were significantly influenced by human judgement of scientific methods and philosophical ideas. The decision to take sides with one or another school of thought and its argumentation is, in the end, a human decision. By translating the object of study — in this case the behaviour of ants — and its properties into a human language, by choosing a philosophical background and a method, what is meant by the term "ants" and the definition of their behaviour is shaped and, to a certain degree, constructed by the scientific practice. Various approaches to the history of science, such as historical epistemology or science and laboratory studies, describe social construction as crucial for knowledge production in general. In sum, it can be said that they illustrate research as a social process, the results of which are constructed in the process itself. In particular, sociological and feminist approaches emphasize that conditions and possibilities of knowledge in science interact with non-scientific factors, thus questioning the assumption that culture and nature are separated in the scientific process,

as was constitutive for the early history of science. It is through language and scientific activity, technology, and method that the object of investigation can be represented and is therefore decisively shaped.[45] Bruno Latour and Steven Woolgar write in *Laboratory Life. The Construction of Scientific Facts* (1986) about the process in which knowledge is socially constructed in the laboratory and the techniques to translate natural occurrences into scientific facts. They describe how scientists learn what to recognize in an examination as important aspects of the scientific study, and which aspects they can omit.[46] This point is similar to Bethe and Forel's negotiations on how to deal with aspects of research that are considered improvable. The debate on psycho-physiological dualism and monism can be understood as a negotiation on the shape of scientific practice as mentioned by Latour and Woolgar: to find an agreement on which aspects of the issue may be omitted and which may not. A mutual agreement between Bethe and Forel on the philosophical and methodological background and henceforth on the same approach to study ant behaviour might have resulted in the construction of a canonical understanding of the mind of ants. This construction would not have appeared to be artificial, but a reflection of the nature of ants, because of a scientific consensus. Their disagreement makes it easier to recognize this construction as such and, further, as an attempt to shape the scientific study of non-human animals.

As the use of analogy and labelling something as anthropomorphic need a definition of humanness, it can also be concluded that Bethe and Forel have a different underlying idea of this humanness. [47] Forel found in ants a model for the human society and the human psyche. Literary scholar Benjamin Bühler even writes that Forel's examination of social instincts of ants led him to social ethics. [48] While Forel draws analogies between ants and humans in his scientific approach, Bethe tried to ban them from scientific inquiry. Their choices of scientific methods relied not only on an (implicit) definition of humanness, but also had a retroactive effect on the idea of what humanness means and on the relation between human and non-human animals. Bethe's intention to

45 Marianne Sommer, Staffan Müller-Wille, and Carsten Reinhardt, "Wissenschaftsgeschichte und Wissensgeschichte," in *Handbuch der Wissenschaftsgeschichte*, ed. Marianne Sommer, Staffan Müller-Wille, and Carsten Reinhardt (Stuttgart: J.B. Metzler, 2017), 4–8.

46 Bruno Latour and Steven Woolgar, *Laboratory Life. The Construction of Scientific Facts* (Princeton, New Jersey: Princeton University Press, 1986).

47 Asquith, "Why Anthropomorphisms Is *NOT* Metaphor," 33–34.

48 Benjamin Bühler, "Tierische Kollektive und menschliche Organisationsformen: Kropotkin, Canetti und Lem", in *Schwärme – Kollektive ohne Zentrum: eine Wissensgeschichte zwischen Leben und Informationen*, ed. Eva Horn et al. (Bielefeld: transcript, 2009), 258.

avoid the attribution of psychological characteristics which were associated with humans resulted in constructing the non-human animal as "the other" and reinforced the idea of a human–animal boundary. Forel's use of analogies in his description of ant behaviour, on the other hand, resulted in another understanding of ants and their relation to humans. Based on the ideas of sociologist Eileen Crist, it can be concluded that for the reader of Forel's works his approach offers a language that supports a comprehension of non-human behaviour and to perceive animals as subject.[49] Thus, the scientific approach does not only create an image of non-human animals, but also affects the possibility of perceiving non-human animals as mind-endowed creatures at all.[50]

49 Eileen Crist, *Images of Animals. Anthropomorphism and Animal Mind* (Philadelphia: Temple University Press 1999), 2.

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HERE DOGGY! IT'S PRAYER TIME

THE RELATIONSHIP BETWEEN GOD, MAN, AND DOG IN THE FOURTEENTH-CENTURY *MARGARET HOURS*

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A high degree of intimacy between humans and other animals is expressed in the keeping of animals as pet companions. This practice was common as early as Ancient Greece and Rome and regained popularity during the thirteenth century. In this period, dogs began to play a vital role in domestic life and so became a favourite pet among nobles in the fourteenth century. Contrary to hunting or working dogs, pet dogs were given names and had privileges within their owners' households. By virtue of their special status, they even accompanied their owners to church, despite the condemnation of this practice by church officials. This reflects a special relationship that was established during the fourteenth century between man, animals, and the divine. This paper focuses on the trilateral connection of God, humans, and dogs in a book of hours known as the Margaret Hours (c. 1320), where a dog and the praying book owner are depicted side-by-side in various illustrations. Special attention is given to a framed miniature presenting the lady, in prayer, next to a dog and a collared bird. Through this miniature, this paper will demonstrate the participation of both the lady and the dog in prayer.

The thirteenth-century preacher Odo of Cheriton was famous for his use of animal characters in fables and exempla. In one of his tales, a knight asks a scholar, "Are there not dogs and birds in Heaven?" When the scholar affirms that there are none, the knight complains, "Certainly, if there were dogs and birds, I would more desire to go there".[1] This passage reflects the church's position on the exclusion of animals from Paradise.[2] However, the nobleman's

1 Translation of the tale in Sean Babbs, "Instruction from the Book of Creation: Animals and Mendicant Preaching in the Thirteenth Century," MA thesis, (University of Colorado, 2017), 40.

strong affection for dogs and birds is also apparent and is reflected in his wish to spend his time with these animals, even in Heaven. Thus, the story illustrates different approaches to the trilateral connection between God, man, and animal.

The subject of sharing the heavenly experience with other animals is not commonplace in medieval art, yet a distinct representation of it can be seen in a framed miniature located in a fourteenth-century book of hours known as the *Margaret Hours* (c. 1320).[3] It presents a kneeling female figure gazing towards the initial on the following folio, which depicts the Ascension of Christ.[4] The woman's position, together with the open book she is holding, indicates that she is in the midst of prayer. She is accompanied by a dog and a collared bird, which are looking in the same direction. Both the bird and the devotee look directly at the initial, while the dog must twist its head back to look at it (Fig. 1). The three figures appear in a distinct framed miniature format as well as against a gilded background, both elements highlighting their activity.

Human figures in prayer frequently appeared in this period in prayer books, including books of hours, which were often used in private devotion. These figures are widely recognized as representations of the book owners.[5] Secular aristocratic women as owners, readers, and patrons of books of hours are prevalent in the literature,[6] as are female devotee figures in devotional manuscripts.[7] The praying woman in the *Margaret Hours* is identified as a representation of the book owner, a noble lady from St. Omer or Thérouanne in northern France,[8] although her identity remains unknown.[9] In addition to the miniature in question, the praying woman appears approximately thirty times more throughout the manuscript. The figure is wearing a contemporary outfit, a heavy cloak, and her hair is covered with a veil and a wimple. While in the margins, she is praying in close proximity to the historiated initials, gazing towards the holy scenes.

2 Richard Sorabji, *Animal Minds and Human Morals: The Origins of the Western Debate* (Ithaca, N.Y.: Cornell University Press, 1993), 201–3.

3 The manuscript today is split between The British Museum, where it is catalogued as add. 36684, and The Morgan Library & Museum, where it is catalogued as MS. M. 754. Both parts are digitized and accessible online.

4 The Morgan Library & Museum, "Medieval & Renaissance Manuscripts," accessed May 26, 2019, http://ica.themorgan.org/manuscript/page/202/128495.

5 Adelaide Bennett, "Making Literate Lay Women Visible: Text and Image in French and Flemish Books of Hours, 1220-1320," in *Thresholds of Medieval Visual Culture: Liminal Spaces*, ed. Elina Gertsman and Jill Stevenson (Woodbridge, UK: Boydell Press, 2012), 125–58, especially 130–46; Alison Stones, "Some Portraits of Women in Their Books, Late Thirteenth–Early Fourteenth Century," in *Livres et lectures de femmes en Europe entre Moyen Âge et Renaissance*, ed. Anne-Marie Legaré (Turnhout: Brepols, 2007)," 3, 7–14; Alexa Sand, *Vision, Devotion, and Self-Representation in Late Medieval Art* (New York: Cambridge University Press, 2014).

6 Susan Groag Bell, "Medieval Women Book Owners: Arbiters of Lay

Piety and Ambassadors of Culture," *Signs* 7, no. 4 (1982): 742–67. See also: Virginia Reinburg, "'For the Use of Women': Women and Books of Hours," *Early Modern Women,* no. 4 (2009): 235-40; Adelaide Bennett, "Making Literate Lay Women Visible," 125–58.

7 Alison Stones, "Some Portraits of Women in Their Books," 1, 7; Adelaide Bennett, "Making Literate Lay Women Visible", 136.

8 Alison Stones, *Gothic Manuscripts 1260–1320, Part One* (London: Harvey Miller, 2013), 2: 593; ll Camille, *Image on the Edge: The Margins of Medieval Art* (Cambridge: Harvard University Press, 1992), 11, 53; Paula Gerson, "Margins for Eros," *Romance Languages Annual* 5, (1993):47–48.

9 Michael Camille, *Image on the Edge*, 11; and Alison Stones, *Gothic Manuscripts 1260–1320*, 593 suggest the book owners' first name is 'Margaret', because the manuscript contains a text of the Life of St. Margaret. Paula Gerson, "Margins for Eros," 48 and Judith Steinhoff, "Pregnant Pages: Marginalia in a Book of Hours (Pierpont Morgan Library Ms. M.754/British Library, Ms. Add.36684)," in *Between the Picture and the Word: Manuscript Studies from the Index of Christian Art*, ed. Colum Hourihane (Princeton: Index of Christian Art, Dept. of Art and Archaeology, Princeton University

Fig. 1. Margaret Hours, *Female devotee with pets*, c. 1318–1329, New York, The Morgan Library & Museum, MS M.754, fol. 113v
[Photo: The Morgan Library & Museum, New York]

Since the artist has used framed miniatures only rarely, the noblewoman's devotional activity confined in the rectangular format stands out among the rest of the marginalia. Throughout the manuscript, there are only three more instances in which the artist has chosen this format. The additional framed miniatures are St. Lawrence on the Gridiron, at the end of a prayer addressed to archangels;[10] the scene of St. Martin dividing his cloak in front of the Beggar, at the beginning of the *Hours of the Holy Cross*;[11] and the *Crucifixion*, in which a sword pierces the Virgin's chest, preceding the Passion according to John.[12] The connection of the depictions of St. Lawrence and St. Martin to the text they are paired with is not clear,[13] but the images of the crucifixion and the

praying devotee present conventional subjects associated with the text they are prefacing.[14] Following Michael Camille's analysis of the devotee's appearances in the margins,[15] Judith Steinhoff identified the lady in the miniature as being pregnant, pointing to the drapery that emphasizes the curve of her belly. The devotee's pregnancy is compatible with the text on the recto, the Life of St. Margaret, who is known as the saint of childbirth.[16] Contrary to the three other framed images, which depict scenes from the lives of saints and from the Holy Scriptures, the images of the book owner in private prayer address the themes of pregnancy and devotional activity in an intimate manner and express the book owner's personal wish to have a child.[17] Yet, the framed miniature also emphasizes prayer in the company of animals. Furthermore, the book owner is shown in prayer with a dog lying at her feet in eleven of her depictions in the marginalia, and only once she is accompanied by a bird.[18] The consistent recurrence of the dog indicates a unique theme — the significance of praying with animals — as well as the singling out of the dog figure in the context of prayer.

In order to examine this unique connection between the devotee and the pet dog, I will first compare it to two other manuscripts that share the same theme, a devotee praying in the company of a dog. Scholars have noted the symbolic ambivalence of the companion dog, as a signifier of fidelity on one hand, as distraction from prayer on the other hand, and additionally as a status symbol attesting the nobility of the woman.[19] Nevertheless, the dog in the *Margaret Hours* is unique for his attentive presence close by the devotee. It has multiple appearances in marginalia in addition to the framed miniature, and it is usually looking at the devotee and the holy scene. These characteristics call for a reconsideration of the relationship between dog and devotee in the *Margaret Hours*. For this purpose, the historical developments in human–animal relations in the pertinent period will be outlined, providing the foundation for reviewing the relations between humans and dogs, as well as church conceptions regarding the relations between God and other animals. Finally,

in association with Penn State Press, 2005), 181 doubt this suggestion, since the integration of the Life of St. Margaret in devotional manuscripts owned by women was popular from the thirteenth to the fifteenth century, and not all of the book owners were named 'Margaret'.

10 The image is available in the British library, add. 36684, folio 155r.

11 The image is available in the Morgan Library & Museum, MS. M. 754, folio 55r.

12 The image is available in the Morgan Library & Museum, MS. M. 754, folio 104v.

13 Paula Gerson, "Margins for Eros," 48.

14 Judith Steinhoff, "Pregnant Pages," 180–86.

15 Michael Camille, *Image on the Edge*, 53–54. Camille draws attention to another depiction of the female figure in the marginalia as pregnant. He suggests the pregnancy presents a liminal stage that is not resolved in a depiction of birth. This adds another dimension to his argument of the liminal status of the devotee figure between the sacred text and the profane images in the margins.

16 Judith Steinhoff, "Pregnant Page," 181-82.

17 Ibid., 182, 185.

a re-examination of the interactions in the case study between the animals, the devotee, and God will be proposed. In contrast with the traditional symbolism, the dog and the bird in the miniature will be reconsidered as presentations of actual pet animals, accompanying their owner in her prayer. It will show how the interaction between the devotee and the pet dog suggests that the dog possesses a unique status, beyond that of a mere companion in prayer.

ICONOGRAPHY OF THE DOG AS A PRAYER COMPANION

The depiction of pet dogs as companions to a devotee can also be seen in other manuscripts made around the early fourteenth century.[20] The two additional manuscripts discussed below include the pairing of devotee and dog, with a dog looking at the praying book owner in a similar way as the *Margaret Hours* dog, which makes them suitable for comparison. They also share with the *Margaret Hours* other basic elements: they are French devotional manuscripts, used for private prayer and owned by wealthy secular women. The *Aspremont-Kievraing Psalter-Hours* (c. 1300) was probably produced in Lorraine and originally belonged to Joffroy, Seigneur d'Aspremont, and his wife, Isabelle de Kievraing, who came from the noble Hainault family.[21] The majority of the portraits in the manuscript are identified as depictions of Isabelle, with over eighty appearances during prayer.[22] Pet dogs accompany the patroness only three times.[23] The low frequency of pet dogs beside the noblewoman demonstrates the minor place of the theme in the manuscript. Moreover, only in one depiction is the pet dog actively responding to the devotee's prayer. The dog stands behind the praying female figure with its head raised, as if glancing at the manuscript she is reading (Fig. 2). In contrast to the dog depicted in the *Margaret Hours*, in the *Aspremont-Kievraing* manuscript the dog shows interest in the prayer activity only once, and only at the *base-de-page,* as a marginal image. Not only the dog, but the scene of prayer in the *Aspremont-Kievraing* is different from the prayer in the *Margaret Hours* since the devotee in the former is not addressing a sacred scene. As a result of the

18 The pairing of devotee and dog appears in the marginalia of both parts of the manuscript. In the part catalogued as Add. MS. 36684 in The British Museum, the pair appears in folios 39r, 49r and 60r. In the part catalogued as MS. M. 754 in The Morgan Library & Museum, they appear in folios 9r, 38r, 51r, 63v, 71v, 78r, 113v and 114r.

19 Kathleen Walker-Meikle, *Medieval Pets* (Woodbridge; Rochester: Boydell Press, 2012), 81–83; Nigel Morgan, "Gendered Devotions and Social Rituals: The Aspremont Psalter – 'Hours' and the Image of the Patron in Late Thirteenth and Early Fourteenth-Century France," *Melbourne Art Journal*, 6 (2003): 17; Alexa Sand, *Vision, Devotion, and Self-Representation in Late Medieval Art*, 218; Patrik Reuterswärd, "The Dog in the Humanist's Study," in *The Visible and Invisible in Art: Essays in the History of Art*, ed. Patrik Reuterswärd (Vienna: IRSA, 1991), 213; Marilyn Aronberg Lavin, "Piero della Francesca's Fresco of Sigismondo Pandolfo Malatesta before St. Sigismund: ΘΕΩΙ ΑΘΑΝΑΤΩΙ ΚΑΙ ΤΗΙ ΠΟΛΕΙ," *The Art Bulletin* 56, No. 3 (1974): 365–67.

20 The theme of dogs as companions in prayer is recognized in the literature, yet it has not been systematically addressed and calls for further exploration. The appearance of this theme between the thirteenth and the fifteenth centuries in

Fig. 2. Aspremont-Kievraing Psalter-Hours, *Praying book owner with a dog*, c. 1290–1300, Oxford, Bodleian Libraries, MS. Douce 118, fol. 169r
[Photo: Bodleian Libraries, University of Oxford]

rarity of the dog-and-devotee-pair motif, the singularity of the attentive dog, and the marginal placement of the prayer scene, the act of praying with the dog is not emphasized as a theme in the manuscript.

Another illustration, which shows many similarities to the miniature under discussion, is a representation of a dog with a female praying figure in the *Psalter-Hours of Yolande de Soissons* (c. 1290) (Fig. 3). Current research shows that the manuscript was commissioned by Comtesse de la Table, Yolande's stepmother, an aristocratic woman who lived in the diocese of Amiens, in Picardy.[24] The prayer book includes thirty-nine full-page miniatures,[25] one of them depicting a kneeling devotee joining her hands in prayer, while her gaze is fixed on the altar where the Virgin and Child are sitting. An architectural frame separates

private prayer books is mentioned in Marilyn Aronberg Lavin, "Piero della Francesca's Fresco of Sigismondo Pandolfò Malatesta before St. Sigismund," 365; Lilian Randall, *Images in the Margins of Gothic Manuscripts* (Berkeley: University of California Press, 1966), 195–96; More recently, Kathleen Walker-Meikle further noted the theme also appearing in devotional manuscripts in the fifteenth and sixteenth century: Kathleen Walker-Meikle, *Medieval Pets*, 83.

21 Nigel Morgan, "Gendered Devotions and Social Rituals: The Aspremont Psalter – 'Hours'," 5; Margaret M. Manion, *The Felton Illuminated Manuscripts in the National Gallery of Victoria* (Melbourne: Macmillan Art Publishing and National Gallery of Victoria, 2005), 100, 115. The manuscript is divided today between The National Gallery of Victoria, Melbourne, where it is catalogued as MS. Felton 1254/3, and The Bodleian Libraries, Oxford, where it is catalogued as Douce 118.

22 Maeve Doyle, "The Portrait Potential: Gender, Identity, and Devotion in Manuscript Owner Portraits, 1230-1320," PhD diss., (Bryn Mawr College, 2015), 127, 133.

23 The part of the manuscript located in Melbourne as MS. Felton 1254/3 contains two out of the three appearances of a pet dog next to Isabelle. This part is not digitized,

Fig. 3. Psalter-Hours of Yolande de Soissons, *Book owner praying*, c. 1280–1290, New York, The Morgan Library, MS M.729, fol. 232v
[Photo: The Morgan Library & Museum, New York]

but the images are available in the comprehensive research of Margaret M. Manion, *The Felton Illuminated Manuscripts*, 146, 153.

24 Alison Stones, *Gothic Manuscripts 1260–1320,* 236–37; Alexa Sand, *Vision, Devotion, and Self-Representation,* 1–2.

25 Alison Stones, *Gothic Manuscripts 1260–1320,* 234.

the inner scene from the various little animals positioned in individual niches that flank the frame on the outside. Unlike these animals, the little black dog beside the devotee is shown sitting next to the open prayer book and looking towards the altar, as does the female figure. There are two other dogs outside the frame, but the little dog within the frame is significant due to his position in the inner space, close to the devotee. Similar to the framed image from the *Margaret Hours*, the full-page miniature is also accentuated by its frame, and furthermore by its large scale. Nevertheless, the dog's size is identical to that of the other dogs in the frame. In the inner scene, it is very small in comparison with the devotee, the holy figures, and even the open book. It may indicate its being secondary in importance to the main interaction between the book owner and the holy figures. That is, the black dog stands out relative to the animals in the frame, but its place in the miniature is marginal. The three dogs (Fig. 1, 2, and 3) are similar in that all the dogs are situated close to a praying woman and gaze in the same direction as the devotee they accompany, but the *Margaret Hours* is distinct in giving a prominent place to the dog in the context of prayer.

The recurring appearance of the dog at the praying female figure's feet in the *Margaret Hours* demonstrates the consistent representation of a pet dog. Kathleen Walker-Meikle distinguishes between the hound and the pet dog in this manuscript.[26] She argues that while the hunting dog is often represented in the act of hunting and is characterized by a plain collar on its neck (Fig. 4), the pet dog is frequently shown with a belled collar.[27] Walker-Meikle further points out that the marginalia throughout the manuscript includes various little dogs with belled collars, their fur colours alternating between brown and grey (Fig. 5–6).[28] The difference between the hound and the pet dog is displayed, for example, in an image of a confrontation between them (Fig. 7). The large and lean hunting dog bites the back of a fat little puppy, which in turn bites the larger dog on its nose. Because of the noticeable disparity in the sizes of the two dogs, the smaller one is recognized as a pet dog, even though

26 Kathleen Walker-Meikle, *Medieval Pets*, 81–83.

27 Ibid., 82.

28 Ibid., 82–83.

Fig. 4. Margaret Hours, *Hound chasing a rabbit*, c. 1318–1329, London, The British Library, Add. MS 36684, fol. 135r [Photo: The British Library Board]

it wears a plain white collar.[29] Thus, while a belled collar clearly signifies a pet dog, a simple collar does not necessarily indicate a hunting one. Conversely, the absence of a belled collar does not necessarily contradict the identification of a dog as a pet. In our case, the dog beside the praying woman appears with no collar at all (Fig. 1). Yet, the relative connection of the dog to the devotee can identify it as a pet, and its curled-up and snuggling pose adds another dimension to its characterizations as such. In other words, in addition to the collar as an attribute, in certain cases the dog can be identified as a pet by its close proximity to the devotee.

The depiction of pet dogs close to women is a familiar motif that also appears, for example, in funereal effigies.[30] Stone animals positioned at the feet of the deceased served as allegories of virtues.[31] In this context, pet dogs symbolize matrimonial fidelity.[32] Researchers have ascribed similar symbolism to images

29 Ibid., 82.

30 Sophie Oosterwijk, "From Biblical Beast to Faithful Friend: A Short Note on the Iconography of Footrests on Tomb Monuments," in *Our Dogs, Our Selves: Dogs in Medieval and Early Modern Art, Literature, and Society*, ed. Laura D. Gelfand (Leiden: Brill, 2016), 243–45; Kathleen Walker-Meikle, *Medieval Pets*, 75–78.

31 Sophie Oosterwijk, "From Biblical Beast to Faithful Friend," 246–47, 257–60.

32 Sophie Oosterwijk, "From Biblical Beast to Faithful Friend," 245;

Fig. 5. Margaret Hours, *A brown lap dog*, c. 1318–1329, London, The British Library, Add. MS 36684, fol. 106v [Photo: The British Library Board]

Fig. 6. Margaret Hours, *A grey lap dog*, c. 1318–1329, New York, The Morgan Library & Museum, MS M.754, fol. 13v [Photo: The Morgan Library & Museum, New York]

of pet dogs next to a devotee in private prayer books. The pet dog's fidelity symbolizes the book owner's faithfulness to Jesus; thus, it serves as an allegory to the virtue of faith.[33] Yet, in the three devotional manuscripts mentioned above, researchers have endowed the pet dog figure with other meanings. Walker-Meikle recognizes the multiple postures of the pet dog near the devotee in the *Margaret Hours* as a reinforcement of its characterization as a

Kathleen Walker-Meikle, *Medieval Pets*, 75; Emile Mâle, *Religious Art in France: The Late Middle Ages: A Study of Medieval Iconography and its Sources*, trans. Marthiel Mathews and ed. Harry Bober (Princeton, NJ: Princeton University Press, 1986), 387.

frivolous and playful pet. She describes the dog as a symbol of earthly pleasures, as well as distractions during prayer.[34] Nigel Morgan offers a similar interpretation of the white dog behind the devotee in the *Aspremont-Kievraing Psalter-Hours*. He suggests viewing the mirroring of the devotee by a dog as a satirical representation of the act of prayer. The dog's mimicking is understood as mocking the devotee's act of prayer. By this contradiction, the purpose of the dog is, according to Morgan, to draw the reader's attention to the need to concentrate during prayer.[35] Alexa Sand suggests a different function of the dog figure in the *Psalter-Hours of Yolande de Soissons*. She identifies it as a pet, attesting to the social status of the aristocratic woman.[36] At the time, the pet dog was seen as an attribute of noble ladies, confirming their wealth.[37] Accordingly, the little black dog is recognized as a status symbol of the wealthy devotee. This interpretation addresses the cultivation of pet dogs in historical-social terms but also indicates the pet dog's marginality in the scene, as it emphasizes the dog as an object of human possession. Thus, the symbolic-iconographic lens emphasizes human traits, the pet dog functioning as a detail in the characterization of the female devotee. In comparison with the two psalter-hours mentioned above, the connection between the female

Fig. 7. Margaret Hours, *A hound bites a lap dog*, c. 1318–1329, London, The British Library, Add. MS 36684, fol. 91v
[Photo: The British Library Board]

33 Patrik Reuterswärd, "The Dog in the Humanist's Study," 213; Marilyn Aronberg Lavin, "Piero della Francesca's Fresco of Sigismondo Pandolfo Malatesta before St. Sigismund," 365–67.

34 Kathleen Walker-Meikle, *Medieval Pets*, 81, 82–83.

35 Nigel Morgan, "Gendered Devotions and Social Rituals: The Aspremont Psalter – 'Hours'," 17.

36 Alexa Sand, *Vision, Devotion, and Self-Representation,* 218.

37 Kathleen Walker-Meikle, *Medieval Pets*, 80–81.

devotee and the dog in the *Margaret Hours* is distinct in its intensity, which is illustrated by the dog's multiple appearances in close proximity to the praying devotee, and its gazing towards the holy scene in the initial. It is underscored as well in the context of prayer in the framed miniature. The dog breaks out of its traditional marginality in relation to the devotee. For this reason, it indicates a strong connection between humans and dogs, which may be reconsidered in light of the changes in human–animal relationships during that period.

ANTHROPOCENTRISM AND BEYOND: COMPLEXITY IN GOD–HUMAN–CANINE RELATIONS

The dominant perception of human–animal relations is the anthropocentric approach, which determines human supremacy over the animal kingdom. This approach has been rooted in Western culture since Aristotle and throughout the Holy Scriptures. Over the years, thinkers and theologians have grounded this perception by rejecting the existence of rational capacities in animals.[38] The distinction between humans and other animals is also reflected in the meaning of the term "animal" during medieval times. Medieval Christians used the Latin word *animal,* in its original sense, to refer to all living, moving, breathing beings, human and non-human alike. For example, in Isidore of Seville's *Etymologies*, written early in the seventh century, humans are included under the definition of *Animalia.*[39] A linguistic distinction between humans and other animals appears only in the twelfth century in vernacular languages, such as English and French.[40] These developments became an established boundary in language, which reinforced the human–animal divide.

As Sophia Menache notes, the basic elements in the anthropocentric conception of human–animal relations are also demonstrated in hostility towards canines. Our understanding of the negative symbolism of dogs in medieval imagery is in accordance with the anthropocentric perception.[41] This attitude towards canines is rooted in the Bible and the New Testament, where dogs are

38 Richard Sorabji, *Animal Minds and Human Morals*, 1–3, 12–16, 195–98; Keith Thomas, *Man and the Natural World: Changing Attitudes in England, 1500–1800* (New York: Oxford University Press, 1996), 30–31; Joyce E. Salisbury, *The Beast Within: Animals in the Middle Ages* (New York: Routledge, 2011), 5–6.

39 Cited in Brigitte Resl, "Introduction: Animals in Culture, ca. 1000– ca. 1400," in *A Cultural History of Animals in the Medieval Age*, ed. Brigitte Resl (New York: Berg, 2007), 9–10.

40 Brigitte Resl, "Introduction: Animals in Culture, ca. 1000– ca. 1400," 9–10.

41 Sophia Menache, "Violence Toward Animals in Medieval Christendom: the Case of the Dog," in *Human Beings and Other Animals in Historical Perspective*, ed. Sophia Menache, Benjamin Arbel, and Joseph Terkel (Jerusalem: Carmel, 2007), 207–9 (published in Hebrew).

often mentioned in a derogatory sense. Obscene habits were attributed to the dog, such as eating carcasses and their own vomit.[42] For example, *The Book of Proverbs* mentions that "Like a dog that returns to its vomit is a fool who reverts to his folly" (Prov. 26:11). The dog here embodied the impure and the profane. The antagonism towards canines was also expressed in hagiographic literature, where in certain cases they were depicted as messengers of the Devil,[43] as in the *Vita* of the hermit Bartholomew of Farne (d. 1193): some monks are at Bartholomew's deathbed when a monstrous dog approaches them. Even near his death, the holy man managed to banish the dog.[44] A visual example of a dog as hellhound appears in the *Taymouth Hours* (c. 1330) (Fig. 8), where the Devil and his demonic dog are attacking souls.

Despite the undisputed dominance of the anthropocentric perception, recent studies have pointed out some cracks in this reductive view, which appeared as early as the twelfth century.[45] For example, Joyce Salisbury has described the blurred line between humans and other animals in medieval literature.[46] The growing interest in animals as protagonists is evident from the twelfth century onward. Familiar animals were integrated into various genres, including sermons, bestiaries, and fables. For example, fables had been used in monasteries

42 Keith Thomas, *Man and the Natural World,* 105; Sophia Menache, "Dogs: God's Worst Enemies?" *Society & Animals* 5, no.1 (1997): 28–29.

43 Sophia Menache, "Dogs: God's Worst Enemies?" 33–34.

44 Dominic Alexander, *Saints and Animals in the Middle Ages* (Woodbridge, UK: Boydell Press, 2008), 132–33, 138.

45 Joyce E. Salisbury, *The Beast Within,* 7-8; Sophie Page, "Good Creation and Demonic Illusions: The Medieval Universe of Creatures," in *A Cultural History of Animals in the Medieval Age*, ed. Brigitte Resl (New York: Berg, 2007), 27; Brigitte Resl, "Introduction: Animals in Culture, ca. 1000– ca. 1400," 9–26.

46 Joyce E. Salisbury, *The Beast Within*, 81–107.

Fig. 8. Taymouth Hours, *Devil and Hellhound attacking souls*, c. 1330, London, The British Library, Yates Thompson MS 13, fol. 147v [Photo: The British Library Board]

until the twelfth century, as educational tools for teaching rhetoric, especially in France, when they started to proliferate into courtly society and became a popular source of entertainment. Many animal protagonists were familiar to the audiences from daily life, and they were used as allegories, as exemplars that reflect human attributes and social situations. However, Salisbury suggests that the very analogy of animal and human behaviour has obscured their binary relationship.[47] The developments and changes in human–animal relationships around the twelfth century have also led to a growing recognition of the positive characteristics of dogs, which existed alongside the traditional negative symbolism attributed to them.[48] The virtue of faithfulness ascribed to dogs entered the arts, as mentioned above,[49] as well as the religious literature. For example, the dog is emphasized as a loyal companion of St. Roch (d. 1327) in his withdrawal into the woods.[50] Thus, the dog figure became an ambivalent symbol, representing negative as well as positive traits.

Along with the artistic and literary evidence of the change in perception, practical changes are also apparent. One notable change in this respect is the increased cultivation of non-human companions in the thirteenth century, apparent in the popularity of raising dogs.[51] Studies identified these companions as pets, even though the term 'pet' was not in use until the sixteenth century, in England.[52] Following Keith Thomas, Walker-Meikle has defined the medieval pet as an animal that is kept indoors, given a name, and not eaten. The role of these chosen animals, to entertain and accompany their owners — mostly aristocratic women and clerics — reflects the blurry boundaries between animal and human status.[53] Furthermore, Walker-Meikle adds the characteristic of emotional connection to these chosen animals.[54] The high level of intimacy between pet and owner is expressed in the privileges a pet would have in its owner's household. For example, pets were allowed into the intimate, private chambers.[55] From this social-historical view, Sand suggests another interpretation of the devotional scene in her study of the *Psalter-Hours of Yolande de Soissons* (Fig. 3). The very presence of the dog beside the

47 Ibid., 81–82, 89–95, 101–2, 105.

48 Sophia Menache, "Dogs and Human Beings: A Story of Friendship," *Society & Animals* 6, no.1 (1998): 74, 79.

49 See above p. 6.

50 The faithful dog refused to leave St. Roch alone in the woods, cared for him, and miraculously healed his wounds. Sophia Menache, "Dogs and Human Beings: A Story of Friendship," 78.

51 The faithful dog refused to leave St. Roch alone in the woods, cared for him, and miraculously healed his wounds. Sophia Menache, "Dogs and Human Beings: A Story of Friendship," 78.

52 Joyce E. Salisbury, *The Beast Within*, 116; Kathleen Walker-Meikle, *Medieval Pets*, 1.

53 Keith Thomas, *Man and the Natural World*, 110, 112–17; Kathleen Walker-Meikle, *Medieval Pets*,1, 3–5.

54 Walker Meikle remarks that emotional connection with other animals was not exclusive to relationships with pets. Owners could have close and caring relationships with working animals as well, like falcons and horses. Kathleen Walker-Meikle, *Medieval Pets*, 1.

female devotee, and its proximity to the altar, she claims, reinforce the identification of the prayer space as private and domestic, rather than as a public church space.[56] This demonstrates the role of the pet dog as a companion in private chambers, even in the most intimate act of private prayer.

The privilege of the pet dog's presence in the owner's house, even during prayer, raises the question of how contemporaries would have reacted towards pet dogs in public sacred spaces. Contemporary evidence reveals criticism of the practice of bringing pets to Mass. For example, thirteenth-century letters from bishops to abbesses in Rosedale and Romsey reveal that the nuns' practice of bringing pets to church was strictly forbidden, leading to penalties.[57] Similarly, a fourteenth-century French poem by Eustache Deschamps condemns the practice of taking dogs everywhere. It describes the dog's conduct in various spaces, including misbehaviour in church.[58] A negative attitude is also directed towards raising dogs in monasteries, as evident in the description of the prioress Madame Eglentyne's relationship with her pet dogs in the General Prologue to *The Canterbury Tales* by Geoffrey Chaucer.[59] The prioress is presented as belonging to a Benedictine nunnery in England. Although Benedictine regulations forbade raising pets, the sensitive prioress kept pet dogs and was very affectionate to them.[60] John Steadman has shown that Chaucer's criticism was aimed at the prioress's compassion being directed at animals rather than toward humans. The virtue of charity was highly valued in Benedictine doctrine, but it was directed towards humans and God as the only worthy objects of charity and compassion. For this reason, the prioress's affection for her dogs cannot be viewed as a truly charitable act, and it is presented as an ironic account of charity.[61] The criticism of the practice of bringing pet dogs as companions to churches and monasteries shows a perception that there is no place for animals in the sacred spaces. Thus, it sets a barrier between the animals and the worship of God. Furthermore, pet dogs may have served as a distraction from the fulfilment of religious duties, such as charity. This negative attitude toward pet dogs has been addressed by scholars

55 Kathleen Walker-Meikle, *Medieval Pets*, 55–57, 59.

56 Alexa Sand, *Vision, Devotion, and Self-Representation*, 2, 18.

57 Eileen Power, *Medieval English Nunneries c. 1275 to 1535*, (Cambridge: Cambridge University Press, 1922), 61, 306–7.

58 Kathleen Walker-Meikle, *Medieval Pets*, 63–64.

59 John M. Steadman, "The Prioress' Dogs and Benedictine Discipline," *Modern Philology* 54, no. 1 (1956), 1–6.

60 Geoffrey Chaucer, *The Canterbury tales*, trans. and ed. David Wright (Oxford: Oxford University Press, 1998), x, 6–7; John M. Steadman, "The Prioress' Dogs and Benedictine Discipline," 1.

61 John M. Steadman, "The Prioress' Dogs and Benedictine Discipline," 3–5.

of medieval art. As mentioned before, the pet dog's presence near the devotee figure in devotional manuscripts was identified as a symbol of distraction from prayer.[62]

Nevertheless, the church also recognized the special connection between animals and holiness. The physical world, including all living beings, was conceived as an expression of the thought of God, through which his teachings could be uncovered.[63] Consequently, the close intimacy and harmony between animals and humans could be interpreted as evidence of their function in the service of God, in favour of man. Thus, animals were perceived as intermediaries through which God was revealed.[64] The harmony between animals and humans as an ideal is evident in the genre of hagiography, in which St. Francis and his Sermon to the Birds is a prominent example. In all versions of the story, the saint preached to the birds, calling upon them to show God gratitude for providing all of their needs.[65] The birds responded with attentive listening, which may be perceived as a miraculous occurrence, as the birds had behaved in an unusual manner according to God's will.[66] In another view, Thomas mentions that the story can also demonstrate a popular approach that regards non-human animals as possessing religious instincts.[67] This approach has its origins in the Bible, as is expressed in the Book of Psalms, which declares that all creatures praise God, including "wild animals and all cattle, creeping things and flying birds" (Psalm 148: 10). Roger Sorrell regards this verse as a source of inspiration for the Sermon to the Birds.[68] Through this lens, the story shows a reciprocal relationship between God and the birds, when the Saint urges the birds to show love to God in return for his love for them. Sophie Page further addressed the story as extending the evangelical mission by the call to other animals to worship God.[69] This call exemplifies the concept that animals do not live their lives only in relation to humans, but also in direct relation to God.[70] Thus, both Thomas and Page address the behaviour of the birds as expressing the idea of other animals' natural recognition of the divine.

62 See above p. 6.

63 Sophie Page, "Good Creation and Demonic Illusions," 33.

64 Ibid., 45–46.

65 Edward A. Armstrong, *Saint Francis, Nature Mystic: The Derivation and Significance of the Nature Stories in the Franciscan Legends*, (1973; repr., Berkeley: University of California Press, 1976), 57–60.

66 Roger D. Sorrell, *St. Francis of Assisi and Nature: Tradition and Innovation in Western Christian Attitudes toward the Environment*, (New York: Oxford University Press, 1988), 62–63.

67 Keith Thomas, *Man and the Natural World,* 137, 138.

68 Roger D. Sorrell, *St. Francis of Assisi and Nature*, 64.

69 Sophie Page, "Good Creation and Demonic Illusions," 31.

70 Ibid., 31.

AT THE SHRINE – GOD, MAN, AND DOG RELATIONSHIPS RECONSIDERED

The historical context of human–animal relations shows that the growing interest in familiar animals as allegories in literature corresponds to the increase in the cultivation of pets in medieval times, especially dogs, and even the willingness to include them at prayer time. This illustrates a caring attitude towards pets, showing that their companionship was cherished by their owners. The presence of the dog beside the praying female figure in the *Margaret Hours* can thus also be viewed as a representation of an actual dog, and not only as a symbol. In comparison to the static devotional posture of the noblewoman, the curled-up dog is dynamic, turning its head to the opposite side of its reclining body. This is the way in which dogs alertly rise from their rest, snuggled yet attentively looking towards an object of attraction, as demonstrated by the behaviour of the dog in the photograph (Fig. 9). The bird on the devotee's other side sits on the tree in a pose that reflects the human's. Walker-Meikle

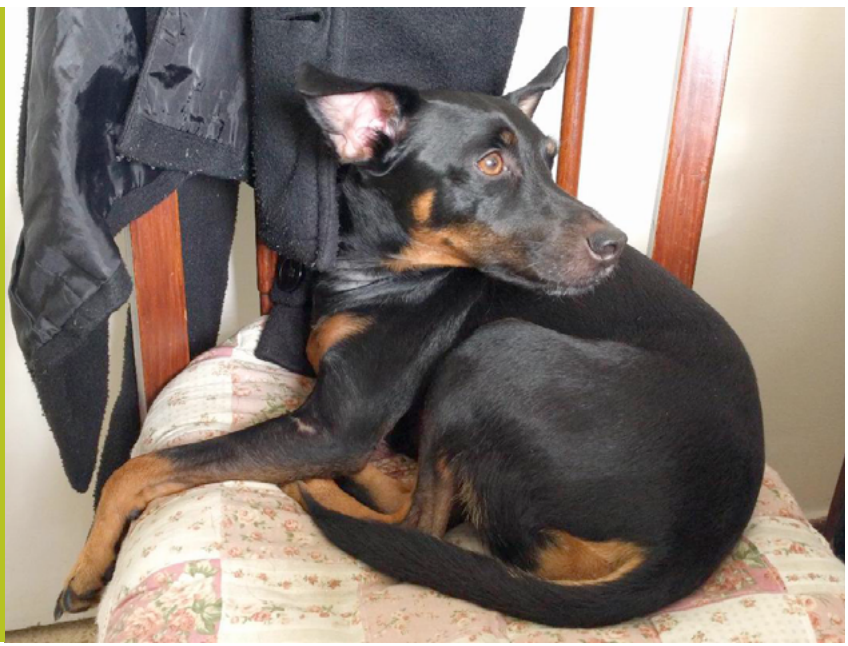

Fig. 9. A pet dog, *Apchi*, 2018
[Photo: Author]

identifies representations of similar birds throughout the manuscript as consistent representations of a pet parrot, citing their green or blue-green wings and their orange beaks.[71] Research has established that the rose-ringed parakeet (a parrot species) was brought to Europe in the thirteenth century.[72] This reinforces Walker-Meikle's claim that the bird represents an actual pet parrot. According to this view, the parrot mimics its owner's pose.

Though both the dog and the parrot represent pet companions, the different status of the dog is emphasized in the manuscript (Fig. 10). On f.113v, the dog, parrot, and devotee are all looking towards the illustrated initial of the Ascension on the facing page. On this folio, f.114r, the praying woman is again accompanied by the dog, both gazing at the initial (Fig. 11). The parrot also appears at the top of this folio, facing in the opposite direction. The parrot appears a second time on the left side of the page, flying upwards, parallel to the holy scene in the initial and to the devotee. That is, in the marginal images of f.114r, the parrot is in attendance near the woman, but it seems detached from the act of prayer. In contrast, the dog lies near the devotee in a pose that mirrors its depiction in the framed miniature. While the parrot does not seem to react to the devotee or the holy scene, the dog is twisting its head back to look at the initial. The different responses of the dog and the parrot to the holy scene in the initial emphasize that both the dog and the noblewoman are looking in the same direction, at an object of mutual interest. This indicates a deeper connection between the dog and the praying book owner, more than that between her and the parrot, which is positioned quite apart in most instances.

The comparison between the pet dog and the pet parrot in the miniature and marginalia, in their role as companions in prayer, shows that the dog's depiction indicates strong companionship between woman and dog. Although in some cases the dog shifts its gaze from the holy scene, in nine out of eleven joint appearances, the gaze of the dog aligns with that of the devotee. The dog's posture may vary from one instance to another, but either crouching or lying down,

71 Kathleen Walker-Meikle, *Medieval Pets*, 82.

72 Meradith T. McMunn, "Parrots and Poets in Late Medieval Literature," *Anthrozoös*, 12, no. 2 (1999): 69; Kathleen Walker-Meikle, *Medieval Pets*, 15; Brunsdon Yapp, *Birds in Medieval Manuscripts*, (London: British Library, 1981), 43.

Fig. 10. Margaret Hours, *Female devotee with pets*, c.1318–1329, New York, The Morgan Library & Museum, MS M.754, fol.113v-114r
[Photo: The Morgan Library & Museum, New York]

it looks attentively in the same direction as the female figure in the majority of their joint appearances. That is, the dog's gaze and its close proximity to the praying woman suggest a direct relationship between the dog, the book owner, and the holy scene. Conversely, the parrot in the miniature is placed close to the devotee and copies her pose, but it is unusual compared to its other appearances near the praying woman or near the holy event in the initials. It is a singular depiction of the parrot as a companion in prayer. Thus, it indicates that the dog as a companion has a different status from the parrot.

Finally, the pet dog has a privileged relationship with the devotee and the divine, even for a pet companion. Considering the emergent ideas of harmonious relations between God and animals in this period, I suggest that representations

Fig. 11. Margaret Hours, *Female devotee with pet dog*, c. 1318–1329, New York, The Morgan Library & Museum, MS M.754, fol.114r [Photo: The Morgan Library & Museum, New York]

of the pet dog in the *Margaret Hours* are beyond an allegory of human traits, and thus reveal another dimension of the God-devotee-dog relationship. The function of animals as a means to get closer to God is not compatible with the depictions of the dog, which is shown as an independent and naturalistic animal in various typical positions. Moreover, in most of the representations of the dog, it is placed behind the devotee. Only once, in the framed miniature, is it in front of her. In all of their joint appearances, the female figure does not glance at the dog, as both are focusing their gazes on the holy scene. That is to say, the devotee interacts directly with the sacred scene in the initial. This further indicates that the dog is not a mediator between the female devotee and the holy scene. Yet, the dog at the devotee's feet maintains a consistent relationship with the divine by fixing its gaze on the sacred scene, showing the dog's interest it. This visual alertness is like the description of the birds in the Sermon to the Birds, which listen to Saint Francis attentively. The birds' response of careful attention points to the notion that they have natural recognition of the divine. I suggest that the emphasis on the dog as a companion in prayer in the manuscript's marginalia and in the framed miniature also demonstrates the idea of other animals' religious instincts. It sheds another light on the dog as companion in prayer, as a participant in the religious experience of the devotee. I hold that the dog demonstrates a religious inclination of its own, as an independent living being. Viewing the dog as a depiction of an actual companion dog, the pairing of devotee and dog appears as a doubled portrait of the book owner with her doggy during prayer.

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ART BETWEEN SPECIES

TWO CASE STUDIES OF ANIMALS' AGENCY IN INTERSPECIES ART

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By examining two exemplary cases, this paper addresses the contemporary phenomenon of artistic collaborations between human and non-human animals, which is referred to as interspecies art*. Interspecies art has become increasingly significant since the beginning of the twenty-first century and excels at challenging binary oppositions by crediting animals' creative abilities. Located within the field of human–animal studies, this article combines art historical methods with agency concepts derived from praxeology and action theory. The innovative approach of connecting these ideas of animal agency with interspecies art provides the framework to analyse Aaron Angell's* Gallery Peacetime *inhabited by axolotls and* CMUK*, an interspecies collective consisting of humans and parrots. In order to make the animals' participation visible as well as to provide a deeper understanding of interspecies art, these specific human–animal relations are examined using Lisa Jevbratt's and Jessica Ullrich's criteria for interspecies art and Mieke Roscher's concepts of entangled and relational agency. This analysis is complemented by a field study and proves to be fertile for revealing the animals' strong involvement in the artworks as well as beyond the art context.*

INTRODUCTION

The relationship we humans have with other animals has always been conveyed in our art. Painting, drawing, engraving, sculpture, and photography are all reflections of the society

> that produced them and represent what was going on in a culture at a particular place in a particular time, such as the form of the human–animal relationship […].[1]

In the history of art, non-human animals have traditionally been seen as objects; objects one could exploit for producing paint and brushes, or portray for aesthetic and symbolic purposes, as they were understood as less significant compared to humans.[2] Furthermore, since ancient times depicted animals were seen only as representations of their species as a whole rather than as individuals.[3] As late as in the second half of the twentieth century, a significant change in both the artistic and the academic sphere has started. This coincided with the establishment of performance art as a specific genre, which innovatively integrated living animals into the context of art.[4] Since then more and more artists have tried and continue to challenge the binary opposition of nature and culture by involving animals into their art practice. By doing so these individuals try to overthrow a hierarchical relation between human and non-human animals. This is indicating a general social change and can be seen as an argument for a partial renunciation of anthropocentrism. In this context, Harriet Ritvo (2007) introduced the influential notion of the "animal turn".[5] As a symptom of this trend, the interdisciplinary human–animal studies aim to not only integrate animals into academic discourses but also to conceptualize them as subjects, as living beings with own interests, experiences, and perspectives.[6] The field of human–animal studies has emerged over the course of the last three decades out of the academic interest in animal rights and welfare movements.[7] Its goal is making animals visible in research and society as well as challenging our anthropocentric everyday life.[8] Observing animals' general aesthetic abilities connects human–animal studies to the field of art. This is illustrated by the common example of different bowerbirds from New Guinea and Australia.[9] The males of the great bowerbird (*Chlamydera nuchalis*) and the Vogelkop bowerbird (*Amblyornis inornata*), for instance, build impressive constructions whose complexity can be compared to human

1 Linda Kalof, "Art. Animals in Art," in *Encyclopedia of Human–Animal Relationship. A Global Exploration of Our Connections with Animals. Volume 1: A-Con*, ed. Marc Bekoff (Westport/London: Greenwood Press, 2007), 85.

2 John Berger, *Das Leben der Bilder oder die Kunst des Sehens* (Berlin: Wagenbach, 1989), 16.

3 Jessica Ullrich and Friedrich Weltzien, "Der Human–Animal-Studies-Diskurs in der Kunstgeschichte. Disziplinäre Wachstumsprognosen einer marginalisierten Themenstellung," in *Disziplinierte Tiere? Perspektiven der Human–Animal Studies für die wissenschaftlichen Disziplinen*, ed. Reingard Spannring et al. (Bielefeld: transcript, 2015), 106.

4 Jessica Ullrich, "Performative Interspezieskunst im 21. Jahrhundert," in *Das ausgestellte Tier. Lebende und tote Tiere in der zeitgenössischen Kunst*, ed. Bettina Paust and Laura-Mareen Janssen (Berlin: Neofelism 2019), 38.

5 Harriet Ritvo, "On the Animal Turn," in *Dædalus. Journal of the American Academy of Arts and Sciences* 136.4 (2007), 118–22.

6 Kenneth Shapiro, "Editor's Introduction. The State of Human–Animal Studies: Solid, at the Margin!" in *Society & Animals*

architecture. Surprisingly, these bowers do not serve the purpose of nesting, but in fact visually support the male's courtship dance.[10] In addition to natural materials such as shells, beetles, and blossoms, civilization waste including plastic lids or broken glass is used by the birds, depending on the respective species' preferences.[11] The finds are sorted by colour and carefully arranged. According to Dario Martinelli (2012), the preferred objects of satin bowerbirds (*Ptilonorhynchus newtoniana*) are blue-coloured.[12] Furthermore, these birds have even developed a method to dye objects, solely using the juice of berries they chewed beforehand.[13] Researchers have noticed that most bowerbirds appear to adjust their constructions after some re-evaluation.[14] Periodically, the bowerbirds exchange dried flowers for fresh ones, a process that has no static but only a decorative function. The birds' meticulousness makes the process of finishing a bower an endeavour that might last several weeks.[15] Although the same materials are available to many specimens, it is possible to observe site-specific styles that may be based on regional aesthetic ideals.[16] As art historian Jessica Ullrich (2016) elaborates, many scholars, including myself, consider this to be enough evidence to think that the bowerbirds refute scientific positions that deny birds a sense of aesthetics altogether.[17] Thus, creative action can no longer be understood as a uniquely human characteristic.

Interspecies art shares this observation and goes as far as understanding animals not only as individuals with aesthetic abilities, but as artists in human and non-human collaborations. According to Ullrich (2019), the term interspecies art was first introduced in the 1970s, coined mainly by Jim Nollman.[18] Nevertheless, it has only just become established in the twenty-first century due to a multiplicity of exhibitions on human–animal relations.[19] In 2009, Lisa Jevbratt, an artist and professor of media art technology at the University of California, Santa Barbara who focuses on interspecies networks, published a first field guide on how to collaborate artistically with animals.[20] As stated in her pioneering work, "[t]he concept of interspecies collaboration is intended to be somewhat humorous, invoking a smile", but can also question the

10.4 (2002), 331–337, quoted in Reingard Spannring et al., "Einleitung. Disziplinierte Tiere?" in *Disziplinierte Tiere? Perspektiven für die Human–Animal Studies für die wissenschaftlichen Disziplinen*, ed. Reingard Spannring et al. (Bielefeld: transcript, 2015), 17.

7 Sven Wirth, "Fragmente einer anthropozentrismus-kritischen Herrschaftsanalytik. Zur Frage der Anwendbarkeit von Foucaults Machtkonzepten für die Kritik der hegemonialen gesellschaftlichen Mensch-Tier-Verhältnisse," in *Human–Animal Studies. Über die gesellschaftliche Natur von Mensch-Tier-Verhältnissen*, ed. Chimaira – Arbeitskreis für Human–Animal Studies (Bielefeld: transcript, 2011), 80.

8 Gabriela Kompatscher, Reingard Spannring, and Karin Schachinger, *Human–Animal Studies* (Münster: Waxmann, 2017), 226.

9 Jessica Ullrich, "Jedes Tier ist eine Künstlerin," in *Das Handeln der Tiere. Tierliche Agency im Fokus der Human–Animal Studies*, ed. Sven Wirth et al. (Bielefeld: transcript, 2016), 255; Dario Martinelli, "Tierästhetik aus semiotischer Sicht," in *Tierstudien. Animalität und Ästhetik* 1 (2012), ed. Jessica Ullrich (Berlin: Neofelis, 2012), 83–86.

10 Jessica Ullrich, "Kunst aus der Vogelperspektive. Zur Rolle

nature/culture dichotomy and the anthropocentric world order generally.[21] She elaborates by explaining that interspecies art avoids practices that are disturbing or harmful to the animals involved.[22] Furthermore, the animals do not have to be trained to show specific behaviours that lead to art products. On the contrary, as Ullrich proposes, the aim is to let the animals work freely and embrace whatever emerges, to thereby give the creativity of the non-human contributor its own value. Thus, ideally, interspecies art emerges through respectful dialogue.[23]

But is this form of art even possible? By examining two case studies, the objective of this paper is to gain an enhanced understanding of interspecies art. Analysing specific human–animal relations in case studies is motivated by Donna Haraway (2003) and her example of engaging directly with living animals to derive theoretical output.[24] The examination of Aaron Angell's *Gallery Peacetime* (2014) and the interspecies collective *CMUK* (since 2014) will show different attempts of humans collaborating with animals. To be able to analyse these artworks in terms of interspecies art, I will combine the definitions provided by Ullrich and Jevbratt. Since it is unclear how many conditions have to be fulfilled or whether there are different levels of interspecies art, my definition includes all aspects mentioned above. The degree to which the animals in these interspecies relationships act freely and make independent choices as individuals (with or without intention) is referred to as their *agency*, on which I shall elaborate further throughout this text. I hypothesize that the criteria of interspecies art and concepts of agency complement each other to evaluate cases of human–animal relations in art. Therefore, the paper aims to answer the following questions in this order: Firstly, can both cases be considered examples of interspecies art? Secondly, to which extent can the applied concepts of agency help to develop a nuanced understanding of human–animal relations within art? Thirdly, is art with animals, who express entangled and relational agency, necessarily considered interspecies art?[25]

von lebenden Vögeln in der Gegenwartskunst," *Zeitschrift für ästhetische Bildung* 8.1 (2016), 16.

11 This is illustrated in: BBC, "The crazy courtship of bowerbirds," accessed 30 January 2020, http://www.bbc.com/earth/story/20141119-the-barmy-courtship-of-bowerbirds.

12 Martinelli, "Tierästhetik aus semiotischer Sicht," 83.

13 Ibid., 83–84.

14 Ullrich, "Jedes Tier ist eine Künstlerin," 255.

15 Ullrich, "Kunst aus der Vogelperspektive," 16.

16 Ullrich, "Jedes Tier ist eine Künstlerin," 255.

17 Ibid.

18 Ullrich, "Performative Interspezieskunst im 21. Jahrhundert," 39–40.

19 Ibid.

20 Lisa Jevbratt, "Interspecies Field Guide," accessed 11 June 2019, http://jevbratt.com/writing/interspecies_field_guide.pdf.

21 Lisa Jevbratt, "Interspecies Collaboration – Making Art Together with Nonhuman Animals," accessed 31 January 2020, http://

Conceptualizing Animals' Agency: Entangled and Relational Agency

Within the human–animal studies there is the objective to attribute subject status to animals.[26] As Kompatscher, Spannring, and Schachinger (2017) argue, admitting animals' agency supports the process of understanding them as subjects.[27] However, the concept of agency was solely used for humans and explicitly denied for animals for a very long time.[28] Therefore, the recent trend to apply agency to animals faces some challenges. Animals' agency is still highly controversial and discussed among various fields, also within the progressive human–animal studies.[29] Sarah E. McFarland and Ryan Hediger (2009), for instance, connect the term agency with "free will, ability, rationality, mind, morality, subjectivity", characteristics that are traditionally associated with men.[30] Yet, due to the amount of, and partially even contradicting, theories, they stress: "[A]gency is problematic".[31] Mieke Roscher (2015) proposes: "A general definition of agency with regards to animals might be reduced to the following parameters: the ability to trigger change without the need to possess self-awareness, language, morality, or culture".[32] The historian, who transported agency into her research field of animal history, recommends a differentiation of the term, inspired by action theory and praxeology.[33] Roscher proposes to distinguish between *entangled* agency, *relational* agency, *embodied* agency, and *animal* agency.[34] Targeting different questions about human–animal relationships requires the use of specific, but at times even overlapping, agency concepts.[35] Furthermore, the field of interspecies art has to rely on concepts such as agency to be able to examine the properties of human–animal interaction. Even though this section points out the need for a more selective theory, Roscher's categories help to establish a nuanced understanding of animals' agency in general. For the following cases entangled and relational agency are most fertile, seeing that they cover two major aspects of the notion.

jevbratt.com/writing/jevbratt_interspecies_collaboration.pdf; Jevbratt, "Interspezies-Kollaboration: Kunstmachen mit nicht-menschlichen Tieren," in *Tierstudien. Animalität und Ästhetik* 1 (2012), ed. Jessica Ullrich (Berlin: Neofelis, 2012), 116; Ullrich, "Performative Interspezieskunst im 21. Jahrhundert," 41.

22 Jevbratt, "Interspecies Field Guide". Especially training animals to paint is a critical practice. Natasha Daly, "Wundervolle Fotos – unsichtbares Leid," *National Geographic*. *Das Tier und Wir* 6 (2019), 51.

23 Ullrich, "Performative Interspezieskunst im 21. Jahrhundert," 41.

24 Donna Haraway, *The Companion Species Manifesto: Dogs, People and the Significant Otherness (*Chicago: Prickly Paradigm Press, 2003), 1–3. Haraway's broad interests are located within the fields of science and technology studies as well as ecofeminism and posthumanism.

25 Even though the following theoretical concepts of agency and the ethics of interspecies art are closely related topics, this paper disregards ethical discussions in order to gain a concise understanding of agency.

26 Shapiro, "The State of Human–Animal Studies: Solid, at the Margin!" 17.

27 Kompatscher et al., *Human–Animal Studies*, 23.

Firstly, agency can be understood as an individual ability to act. Therefore, as an acting individual, every animal has agency.[36] To elaborate, this form of agency can be differentiated in *competent* and *dependent* agency. Animals of the same species can have different agencies depending on their setting, especially their relation to humans.[37] Domesticated animals are limited in their agency within a human-given framework of actions (dependent agency). These relationships are not necessarily only limiting but can also offer benefits such as providing shelter from external dangers. Wild animals, in contrast, can express a competent agency by providing for themselves but having to defend themselves, too.[38] By transferring wildlife into the human sphere, the agency of an individual animal can change — from competent to dependent and vice versa.

Secondly, agency can also be understood as the effect or product that emerges through animals' participation in networks; animals produce agency.[39] In this regard, Bruno Latour's *Actor-Network-Theory* (ANT) is crucial.[40] The ANT, evolving since the mid-1980s, understands action as interaction: as a collective, uncontrolled and not necessarily as an intentional interplay between all involved "actors" (also referred to as "entities").[41] Actors, in this sense, can be human as well as non-human beings, but also objects. Based on this theory, *entangled* agency shifts the focus towards the effects and products generated by networks.[42] This idea can also be found in Haraway's (2003) term *natureculture*.[43] Interactions of human and non-human animals ("beings-in-encounter") can go as far as sharing everyday life and shaping a "becoming with".[44] The borders between living beings as well as nature and culture, thereby, become secondary.[45]

Nevertheless, ANT's basic assumptions lead to some downsides. One of them is the anthropocentric tendency that animals are only conceptualized via their relationships to humans without elaborating on the qualities of these relations.[46] The theory aims at overcoming asymmetric relationships between

28 Markus Kurth, Katharina Dornenzweig, and Sven Wirth: "Handeln nichtmenschliche Tiere?" in *Das Handeln der Tiere. Tierliche Agency im Fokus der Human–Animal Studies*, ed. Sven Wirth et al. (Bielefeld: transcript, 2016), 21.

29 Mieke Roscher, "Geschichtswissenschaft. Von einer Geschichte mit Tieren zu einer Tiergeschichte," in *Disziplinierte Tiere? Perspektiven für die Human–Animal Studies für die wissenschaftlichen Disziplinen,* ed. Reingard Spannring et al. (Bielefeld: transcript, 2015), 83; Kurth et al., *Das Handeln der Tiere*, 38; or Kompatscher et al., *Human–Animal Studies*, 202.

30 Sarah E. McFarland and Ryan Hediger, "Approaching the Agency of Other Animals: An Introduction," in *Animals and Agency. An Interdisciplinary Exploration,* ed. Sarah E. McFarland and Ryan Hediger (Leiden: Brill, 2009), 3.

31 The scholars articulate that hitherto existing agency concepts are insufficient and tried to sharpen the terminology by editing a collection of essays. However, they relativize their endeavour as follows: "It [agency] is functional for the purposes of this collection, but more broadly we must also insist that agency is problematic. It depends on the animal in question, it depends on the circumstances, it depends on how

humans, animals, and objects (nature and culture) by explaining actions as outputs of relations. Abolishing asymmetries within relations on the micro level, however, does not imply considering proportions of power and hierarchical structures.[47] To compensate for this weakness of the entangled agency concept, it will be complemented by Roscher's *relational* agency. Addressing the first type of agency (animals have agency), this concept considers relational face-to-face interactions between individuals, or groups, of different species.[48] Observing these relationships does not only shed light on (potentially existing) hierarchies, but also on the impact animals can have on other entities through personal contact. In contrast to ANT, which also considers outcomes of interactions, relational agency combines specific interactions with actual consequences for the respective participants. Because this concept implies that every single encounter affects all participants reciprocally, Roscher, among others, identifies a co-evolution of humans and non-human animals.[49] Stressing the importance of nonhumans within humans' history contradicts a distinction between humans as subjects and animals as objects.

To sum up, within this framework the term agency includes two notions. Firstly, agency is understood as a set of specific actions of an individual animal. Secondly, agency can refer to the effects that are produced by and consequences that arise from animals' relations to other actors. To specify, relational agency is an expression of agency via concrete interactions between all involved actors, resulting from face-to-face communication. Entangled agency, on the other hand, describes animals' actions as their impact within these networks, visible through the emerging products (such as artworks). This understanding of agency is the foundation to investigate the following cases.

CASE STUDY I: GALLERY PEACETIME (2014)

British artist Aaron Angell's *Gallery Peacetime* (2013–2017) is a project space established as a provocative reaction on the increasing number of galleries

agency itself is framed". McFarland and Hediger, *Animals and Agency*, 16. On the difficulty of the term: Philip Howell, "Animals, Agency, and History," in *The Routledge Companion to Animal-Human History*, ed. Hilda Kean and Philip Howell (New York: Routledge, 2019), 198; Kompatscher et al., *Human–Animal Studies*, 180; and Mieke Roscher, "Zwischen Wirkungsmacht und Handlungsmacht," in *Das Handeln der Tiere. Tierliche Agency im Fokus der Human–Animal Studies*, ed. Sven Wirth et al. (Bielefeld: transcript, 2016), 54.

32 Roscher, "Geschichtswissenschaft. Von einer Geschichte mit Tieren zu einer Tiergeschichte," 86. [trans. Dorothee Fischer]

33 Mieke Roscher, "Tiere sind Akteure. Konzeptionen tierlichen Handelns in den Human–Animal Studies," in *Philosophie der Tierforschung, Band 3: Milieus und Akteure*, ed. Matthias Wunsch, Martin Böhnert and Kristian Köchy (Freiburg/Munich: Verlag Karl Alber, 2018), 94. The sociological action theory combines macro- and micro level factors to integrate the subjective perspective into observation of underlying structures of society. Praxeology examines the continuous interdependence of social structure and the individual's agency.

34 Roscher, "Zwischen Wirkungsmacht und Handlungsmacht," 43–66. This distinction, however, is conceptualized within the field of history, as a tool

for the so-called animal history. *Embodied agency* is concerned with animals' bodies as reflections of human–animal relationships: Visible changes in an individual's physic or its whole species' appearance embody altered humans' practices (e.g. breeding of preferred characteristics); ibid., 59. The term *animal agency* is used by Roscher to distinguish between different species' agencies but especially for animals living outside of humans' proximity; ibid., 60. In consequence, these two concepts are not of interest to neither of the case studies discussed here.

35 Ibid., 43 and 55–61.

36 Kompatscher et al., *Human–Animal Studies,* 183.

37 Mieke Roscher, "Wie viel Akteur steckt im gesammelten und bewahrten Tier? Ein Kommentar aus Sicht der Human–Animal Studies," in *Akteure, Tiere, Dinge. Verfahrensweisen der Naturgeschichte in der Frühen Neuzeit*, ed. Silke Förschler and Anne Mariss (Cologne: Böhlau Verlag, 2017), 250. The terminology was originally introduced by Sue Donaldson and Will Kymlika in *Zoopolis: A political theory of animal rights* (Oxford: Oxford University Press, 2011).

38 Kompatscher et al., *Human–Animal Studies*, 189.

39 Ibid., 183; Howell, "Animals, Agency, and History," 201.

opening up in London, England.[50] For his critique, Angell satirically uses a transparent cube, an aquarium with a capacity of 150 litres, as gallery space (Fig. 1). This minimalistic aquarium consists of a glass cube and a white steel rack, contrasted by a black pump that purifies the crystal-clear water. It was first exhibited in continental Europe at the group exhibition *POOL* at *Kestnergesellschaft* in Hanover, Germany in 2014. Within the whole exhibition POOL, four solo exhibitions took place inside the aquarium *Gallery Peacetime*, curated by Angell and changing weekly.[51] Along with Angell's own piece *Police*

Fig. 1. Installation view of *Gallery Peacetime* with Aaron Angell's *Police Helmet*
Aaron Angell, *Gallery Peacetime*, 2014. Exhibiting: Aaron Angell, *Police Helmet*, 2013
137 x 91 x 46 cm, powder-coated steel, glass, water, pump, glazed ceramics, living axolotls
Installation view: POOL, kestnergesellschaft, Hanover, 2014
Photo taken by Raimund Zakowski

Helmet, Isabell Mallet's *Emilio, Pancho, and Francisco Plot a Revolt*, as well as Allison Katz' *Casa de la Taza Blanca* and Esme Toler's *Fashion of the Maelstrom (Return trip)*, were displayed.[52]

When Angell presented his work *Police Helmet* in the *Gallery Peacetime*, visitors encountered a large dark ceramic object on the ground of the aquarium right at its centre. This ceramic resembles an upside down cone whose uppermost part protrudes a few centimetres from the liquid. The hard surface of the ceramic is partially coated with gloss. Standing out against the dark finish, white letters form the combination "POL" in the middle of the piece. An opening appears at the bottom of the cone shape framed by white teeth-like spots, making it look like threatening jaws. The transparent floor is covered by little pieces of faeces, the water is vibrating from time to time, suggesting that the composition is not solely constructed with inanimate elements. With some patience, the inhabitants of the *Gallery Peacetime* introduce themselves to the viewer. Three Mexican walking fishes, also known as axolotls, two leucistic and one wild type, are inhabiting the glass cube (Fig. 2). Sometimes they pause and remain motionless for minutes until they start moving again, unhurried, half swimming, half crawling, and shrugging their external gills. Exploring their accommodation, they move freely within the aquarium, yet they remain exposed to the human gaze. Most of the time they are sitting as a group in the middle of the aquarium, housed by Angell's ceramic work. The other artists invited by Angell — Mallet, Katz, and Toler — had to fulfil special criteria for exhibiting in *Gallery Peacetime*. The contributions must include pottery, were not allowed to have sharp edges and needed to provide a retreat from exposure for the inhabitants.[53] Thus, fulfilling the animals' basic needs was a priority for the human-made artworks.

The choice of the artist to exhibit axolotl is not random. The axolotl (*Ambystoma mexicanum*) is an endemic aquatic species, meaning it occurs naturally only in one region, at Lake Xochimilco, Mexico. Since this terrain is increasingly

40 See exemplarily Bruno Latour, *The Pasteurization of France* (Cambridge, MA: Harvard University Press, 1993).

41 Roscher, "Tiere sind Akteure," 99–100.

42 Ibid., 103. Sometimes this concept includes larger networks on a global and/or ecological level as well. Roscher, "Zwischen Wirkungsmacht und Handlungsmacht," 58–59.

43 Haraway, *The Companion Species Manifesto*, 1–5.

44 Haraway, *When Species Meet*, (Minneapolis: University of Minnesota Press, 2008) 4–5, 17, 32.

45 Esther Köhring, "Donna Haraway," in *Texte zur Tiertheorie*, ed. Roland Borgards, Esther Köhring, and Alexander Kling (Stuttgart: Reclam, 2015), 288–89. For a more recent discussion on overcoming the nature/culture dichotomy: Judith Elisabeth Weiss, "Konstruktionen und Dekonstruktionen des Natürlichen. Eine Bestandsaufnahme von Natur in der Kunst nach dem Ende der Natur," in *Kunstforum International*, *Kunstnatur / Naturkunst. Natur in der Kunst nach dem Ende der Natur* 258 (2019), 44–85.

46 Roscher, "Tiere sind Akteure," 101.

47 Ibid., 102 and 107.

48 Ibid., 106 and Roscher, "Zwischen Wirkungsmacht und

Handlungsmacht," 57.

49 Roscher, "Zwischen Wirkungsmacht und Handlungsmacht," 57–58.

50 Veit Görner, Heinrich Dietz, and Antonia Lotz, eds., *POOL. Kunst aus London* (Hamburg: Textem Verlag, 2014), 34–35.

51 Visitors could participate at the exhibition openings and observe the axolotls' reactions to their new environment, i.e. the newly added artworks.

52 Görner et al., *POOL. Kunst aus London*, 34.

53 Ibid.

54 Spiegel Online, "Schwanzlurch in Gefahr. Axolotl vom Aussterben bedroht," accessed 31 January 2020, http://www.spiegel.de/wissenschaft/natur/axolotl-in-gefahr-mexikanischer-schwanzlurch-vom-aussterben-bedroht-a-991399.html. Axolotls have been a significant food source for thousands of years. Hobart M. Smith, "Discovery of the Axolotl and Its Early History in Biological Research," in *Development of the Axolotl*, ed. John B. Armstrong and George M. Malacinski (New York/Oxford: Oxford University Press, 1989), 3–4. Being endangered, however, is a result of the extreme pollution of their natural habitat.

55 Smith, "Discovery of the Axolotl," 5.

Fig. 2. The aquarium's inhabitants
Aaron Angell, *Gallery Peacetime*, 2014. Exhibiting: Allison Katz, *Casa de la Taza Blanca* (Detail), 2014. 137 x 91 x 46 cm, powder-coated steel, glass, water, pump, ceramics and wood, living axolotls. Installation view: POOL, kestnergesellschaft, Hanover, 2014. Photo taken by the author.

uninhabitable due to man-made environmental conditions, the axolotls are endangered and are losing their competent agency almost completely.[54] Since the first axolotls were introduced to Europeans in 1804 by Alexander von Humboldt, they have merely been kept in aquariums from then on.[55] Having external gills and due to its incomplete lungs, the axolotl is living in neoteny, a permanent larva-like stage.[56] This condition is triggered by a hypofunction

of the thyroid, however, by intake of a specific hormone they can go through metamorphosis.[57] Therefore, the animals are extremely interesting for embryonic research and have a long history as test animals.[58]

One important difference between this scientific perspective on the axolotl as an anonymous object for research is that the axolotls in the *Gallery Peacetime* have individual names. During a guided tour, visitors learnt that "Bottle Blonde", "Gill Frond" and "Mill Pond" are living inside the aquarium. According to Kompatscher et al. (2017) an animal's status is changing from object to subject, hence being an individual, as soon as it is given a name.[59] However, naming is also an anthropocentric and anthropomorphic practice, as Mona Mönning (2018) ascertains.[60] Besides this aspect, the naming of the axolotls highlights another fact: The axolotls in Hanover are not Bottle Blonde, Gill Frond, and Mill Pond, who live in Angell's gallery in London, but specimens bought in a pet shop in Northern Germany.[61] Since the axolotls could not travel for the exhibition in Hanover, the London axolotls are replaced by "actors" of the same names.[62] One could ask: Does this mark their replaceability and negates any individuality? On the one hand, conceptualizing them as involuntary actors degrades them to objects. On the other hand, their replacement is only changing the discourse around them but not their life within the aquarium. Thus, the agency of the axolotls in Hanover is not necessarily limited, but the one of the "originals" is widened. Angell ascribes Bottle Blonde, Gill Frond, and Mill Pond a constitutive role within the *Gallery Peacetime*.[63] Nevertheless, if one takes Isabel Mallet's work title *Emilio, Pancho, and Francisco Plot a Revolt* (Fig. 3) into account, it is striking that the axolotls got yet other names. In my interpretation, Mallet is not only providing an ironic comment on Angell's renaming practice but supporting the axolotls' status as actors who take on different roles. In addition, there is a political dimension. The names chosen by Mallet are the ones of the Mexican freedom fighters Emilio Madero and Francisco "Pancho" Villa. On an eye-catching ceramic piece, one can find the words 'TIERRA Y LIBERTAD' (land and liberty), the slogan of the Mexican freedom movement

56 Despite these facts, they are capable of reproduction. Franz Ambrock, "Steckbrief Axolotl," accessed 31 January 2020, https://axolotl-online.de/index.html.

57 Franz Ambrock, "Neotenie," accessed 31 January 2020, http://axolotl-online.de/html/neotenie.html. After the complete metamorphosis, they look similar to the related *Ambystoma tigrinum* (tiger salamander).

58 Christian Reiß, Uwe Hoßfeld, and Lennart Olsson, "Der mexikanische Axolotl als Labortier im Wandel der Zeit," in *BioSpektrum*, 22.6 (2016), 660–661. For deeper insight on the axolotl: Christian Reiß, *Der Axolotl. Ein Labortier im Heimaquarium 1864-1914* (Göttingen: Wallstein, 2019).

59 Kompatscher et al., *Human–Animal Studies*, 61.

60 Mona Mönning, *Das übersehene Tier. Eine kunstwissenschaftliche Betrachtung* (Bielefeld: transcript, 2018), 318.

61 This was revealed when attending the guided tour during the exhibition in 2014.

62 Görner et al., *POOL. Kunst aus London*, 35.

63 Besides, stressful travelling could only be avoided by replacing them.

Fig. 3. Isabel Mallet, *Emilio, Pancho and Francisco Plot a Revolt.*
Aaron Angell, *Gallery Peacetime*, 2014. Exhibiting: Isabel Mallet, *Emilio, Pancho and Francisco Plot a Revolt*, 2014.
137 x 91 x 46 cm, powder-coated steel, glass, water, pump, glazed and non-glazed ceramics, living axolotls.
Installation view: POOL, kestnergesellschaft, Hanover, 2014. Source: Contemporary Art Daily, accessed 13 June 2019,
http://www.contemporaryartdaily.com/2014/07/pool-at-kestner-gesellschaft/
Image courtesy of kestnergesellschaft

at the beginning of the twentieth century.[64] The work is parallelizing the social situation then with the current situation of the animals, thus encouraging critical reflection. The axolotls might want to escape the aquarium (liberty) and get back into their natural environment (land). Although with a wink, Mallet is stressing the three axolotls' agency in general, who can fight as representatives of their fellows that can still live freely at Lake Xochimilco.

64 See, for example, Ricardo Flores Magón, *Tierra y Libertad. Ausgewählte Texte* (Münster: Unrast Verlag, 2005).

In contrast to the idea of animals with agency one could argue that the axolotls are objects just as the artworks next to them in the gallery and hence do not produce any relational agency with respect to the artists. However, I do not consider this to be the case as I am convinced the opposite is true: Although Angell exhibits the axolotls next to the artworks, the animals' reactions to the pieces are taken into serious consideration by him. As soon as an art piece enters the axolotls' limited space, they have the possibility to comment on it without the influence of the human artist. The animals review the artworks within the gallery space by ignoring or engaging with them, for example by using the exhibits as a hide-out. Although the animals' behaviour could be interpreted as instinctively searching for shelter, this would not deny them agency. Angell is observing their actions and optimizes further ceramics accordingly.[65] The artworks are, consequently, results of the entangled relationship between the involved artists and the axolotls. At the same time, the animals achieve a position of superior authority in the humans' work process. Thus, their participation is work-constitutive and therefore also a manifestation of relational agency. All things considered, the network of artists–aquarium–axolotls leads to the specific *Gallery Peacetime*, whose exhibits are products of the entangled and even relational agency of the axolotls. The axolotls' status as subjects, however, seems rather secondary to Angell. Being part of *Gallery Peacetime*, they not only get renamed but also showcased non-stop, hence are instrumentalized for human purposes. Even though Angell does not wish to stress out his London axolotls by travelling, simply being exhibited in a gallery space may be stressful for them and, of course, for the Hanover axolotls, too. These aspects indicate that Angell orientates his *Gallery Peacetime* on rather anthropocentric conceptions of animals.

Although the animals are the protagonists of the artwork and are of utmost importance for this analysis, it is essential to pay attention to the exhibition space and the interaction with it as well. As the owner of *Troy Town Art Pottery*, a ceramic workshop for artists, Aaron Angell (2014) emphasizes that

65 Angell generously provided this information in an interview with the author in June 2016.

pottery can be more than functional and "aims to promote ceramics as a material for sculpture outside the auspices of craft and design".[66] Ceramics combine diverse physical states changing from a soft to a hard condition during their firing manufacturing process. Angell exhibits the solidified material in a water-filled aquarium made of glass, which is produced in a similar process changing from a liquid to solid. Combining these liquid and solid elements with the axolotls' neoteny, them oscillating between youth and adulthood, water and land, is underlining their always living in-between. Hence, being liminal animals, they are mediating between the different physical states of the solid ceramic and the water within the aquarium. Moreover, these animals do not only link things inside the aquarium, but also outside by functioning as mediators between artworks and humans. It can be difficult for gallery visitors to develop an understanding of contemporary art. The axolotls can help, firstly, by attracting attention. Relating to animals might be easier for most people than relating to art. Especially axolotls arouse human interest due to their unusual appearance so that even laypersons' art appreciation could be won over through the animals' presence. During the exhibition, visitors stopped at the aquarium just to talk about, and often with, the axolotls.[67] Such interactions establish, secondly, a starting point for interpretations. By bringing a rectangular-shaped glass cube into a white cube gallery situation, the former reflects on the latter by mirroring it.[68] Just as the gallery space, *Gallery Peacetime* is a room with walls, a floor, and even living beings in it. The axolotls can be interpreted as the viewers' surrogates: both viewers and axolotls are located within a minimalistic space matching their particular proportions. These metalevels of the axolotls as the gallery's visitors and the aquarium as gallery space is stressed by the frequent replacement of the exhibits within the *Gallery Peacetime*. While traversing within the aquarium, the axolotls engage with the art and provide guidance to the visitors on how to receive the artworks, for instance as worth looking at or not. This can also be interpreted as a comment on how humans view art, engage with art, and behave within art contexts. Thirdly, according to this interpretation, the viewer is also demanded to critically reflect on the

66 Görner et al., *POOL. Kunst aus London*, 35. Although he does not endorse any practical use, in this case, ceramics do function as a shelter for the axolotls. For additional information: Aaron Angell, "Troy Town Art Pottery," accessed 31 January 2020, http://www.troytown.org.uk.

67 This was observed during the author's visits to the exhibition in 2014.

68 The exhibition concept of the white cube aims to minimalize the architectural impact on its exhibits by presenting artworks in preferably square rooms with white painted walls. Further reading: Brian O'Doherty, *Inside the White Cube: The Ideology of the Gallery Space* (San Francisco: The Lapis Press, 1986).

setting. Because the gallery can be entered and exited voluntarily, whereas the aquarium is a closed space, even ethical discussions might be triggered. Through offering these face-to-face communications, the axolotls have a direct impact on the visitors and, therefore, express relational agency also in this regard.

Based on this analysis, it can be argued that due to environmental conditions axolotls are almost extinct in the wild and the animals can only show a dependent agency. Furthermore, regarding the relations of the axolotls to the artists as well as to the visitors, they express entangled and relational agency within and beyond the framework Angell provides them with. Although Angell is considering the axolotls' behaviours and needs when shaping ceramic objects for their aquarium, some points of critique need to be raised with respect to interspecies art. *Gallery Peacetime* does not include active creativity by the axolotls, nor does it lift the dichotomy between culture and nature — even though the visitors might reflect on their relation to animals and concept of art. Changing the axolotls' names repeatedly underlines their limited status as individuals. The axolotls are exhibited next to the artworks within the gallery space, which can be criticized as displaying animals as show objects. Consequently, the axolotls cannot be seen as co-authors of the *Gallery Peacetime*. Therefore, bearing in mind the aforementioned criteria, this case can be understood as art with animals, but not as ideally collaborative interspecies art. The concepts of agency showed, however, that the axolotls have an impact in personal contact and can even be elevated to being subjects for the visitors. Thus, the question if art with animals, who express agency, is inevitably considered interspecies art can be partially rejected.

CASE STUDY II: THE INTERSPECIES ARTIST COLLECTIVE CMUK (2014 – PRESENT)

The investigation of CMUK, an interspecies artist collective proposing an alternative to the traditional model of the sole-creating human genius, provides

an arguably more successful example of interspecies art. CMUK consists of the human artist duo *Hörner/Antlfinger* and their parrots, who live and work together in Cologne, Germany. The collective's name CMUK is an acronym of its founding members. It negates any anthropocentric hierarchy by including everyone no matter their species. Moreover, it is alternating not only species but gender; CMUK stands for Clara (female African grey parrot), Mathias (male human), Ute (female human) and Karl (male African grey parrot).[69] Ute Hörner and Mathias Antlfinger have been working as an artist duo since the early 1990s and within an interspecies collective since 2014.[70] Because the parrots were adopted from an animal shelter there is a lack of information about their origin. However, it is likely that Karl was born in the wild — in central Africa about 60 years ago.[71] Even though pet-keeping is controversial, I argue that these birds have a richer life, compared to their fellow species living in captivity, by being part of CMUK. Ute and Mathias view Clara and Karl not as their pets, but as equal partners. Both humans try to live with the parrots as mutually as possible, e.g. by having joint routines such as taking walks and excursions or by creating art in a shared working place (Fig. 4). Because the parrots have such an influence on the humans' behaviour and their life, these examples illustrate the parrots' strong relational agency.

CMUK mainly produces wood sculptures and works made of paper and cardboard. While Clara and Karl shred natural materials with their claws and beaks without being interrupted by Hörner and Antlfinger, the humans see their duty in arranging the products to complete art pieces to make them accessible to a broader public within the art discourse. In 2016, their first works (*Weekly* and *Subtraction One*) were exhibited in a white cube situation (Fig. 5 and 6). For *Weekly*, Clara and Karl have been editing booklets of the national German newspaper *Die Zeit* regularly every week since 2014, provided by the human artists. While the parrots shape the former booklets into new arrangements, Hörner and Antlfinger capture the results by photographing them (Fig. 5). The resulting works stimulate art historical references, which has already been

69 Despite Karl's passing in 2018, new members (the parrots Casper, Giselle, and Theo) are maintaining the mission of challenging traditional artistry as a continuation of Karl's legacy. Ute Hörner and Mathias Antlfinger, "Über CMUK," accessed 31 January 2020, http://h--a.org/de/cmuk/studio-destructiones/.

70 Ute Hörner and Mathias Antlfinger, "Biographies," accessed 31 January 2020, http://h--a.org/en/biographies/. Within Hörner and Antlfinger's oeuvre, the parrots' role shifted from being muse and motive (*Contact Call*, 2006; *KRAMFORS*, 2012) to being actively involved in the artistic processes (continuing from 2014).

71 This information was shared during an interview between the author and the human artists in August 2017.

Fig. 4. The parrots and Mathias Antlfinger in their shared work place. Photograph provided by CMUK

exemplified by Ullrich (2016) on *décollages* (collages created by destruction).[72] Reflecting on art history demonstrates the further aesthetic value of the series *Weekly* as an exemplary comparison between CMUK's pieces and works by avant-garde artist Wolf Vostell (1932–1998) shows. The visual similarities make it hard to distinguish which piece is solely man-made and which one is not. Although the assumption that the parrots are aware of Vostell's pioneering art or the concept of décollage is not very likely, the parrots' traces in the material strongly resemble humans' artworks and vice versa. Showing these similarities

72 Ullrich, "Kunst aus der Vogelperspektive," 17 and Ullrich, "Jedes Tier ist eine Künstlerin," 252.

Fig. 5. CMUK's *Weekly* exhibited 2014
CMUK *Weekly*, 2014–present. 40 x 60 cm each, décollage/photograph
Installation view: we, animals – biographies, Meinblau, Berlin, 2014
(Photograph provided by CMUK.)

to human artefacts, only additional information can disclose that more than one species was involved. CMUK's first series of sculptures, *Subtraction One* (Fig. 6), consists of cork items shaped by Clara and Karl. The parrots' traces correspond to those produced by human instruments and artists' brushwork, thus reflecting their individual style. Their work process is reminiscent of the human artistic technique of "direct carving", an immediate carving without a template. The birds are operating intuitively with their body, working without additional tools. This is an important aspect since many artworks in

Fig. 6. Installation view of *Subtraction One* (2014)
CMUK, *Subtraction One*, 2014
180 x 180 x 240cm, cork sculptures, table, ceiling with lights
Installation view: THE WORLD WE LIVE IN, kjubh kunstverein, Cologne, 2014
(Photograph provided by CMUK.)

human–animal relations arise by humans teaching animals their way of doing art. Elephants or apes, for instance, are often trained to work with artificial paints and brushes.[73] The parrots, on the contrary, only use their body parts as instruments, which might imply a more intrinsically motivated attitude rather than one that was forced upon them by humans. In addition, Hörner

73 Daly, "Wundervolle Fotos – unsichtbares Leid," 51; Ullrich, "Jedes Tier ist eine Künstlerin," 261.

and Antlfinger insist that both parrots have individual techniques: While Clara works with her whole body shredding huge sections (Fig. 7), Karl pays more attention to detail, scratching small pieces out of paper and wood (Fig. 8). In *Weekly* and *Subtraction One*, animals and humans have equal authorship. Both species are not only work-constitutive but Hörner and Antlfinger also publicly acknowledge Clara and Karl as co-authors and co-producers of the final works by including them in their collective's name. Thus, every art piece by CMUK illustrates their entangled agency.

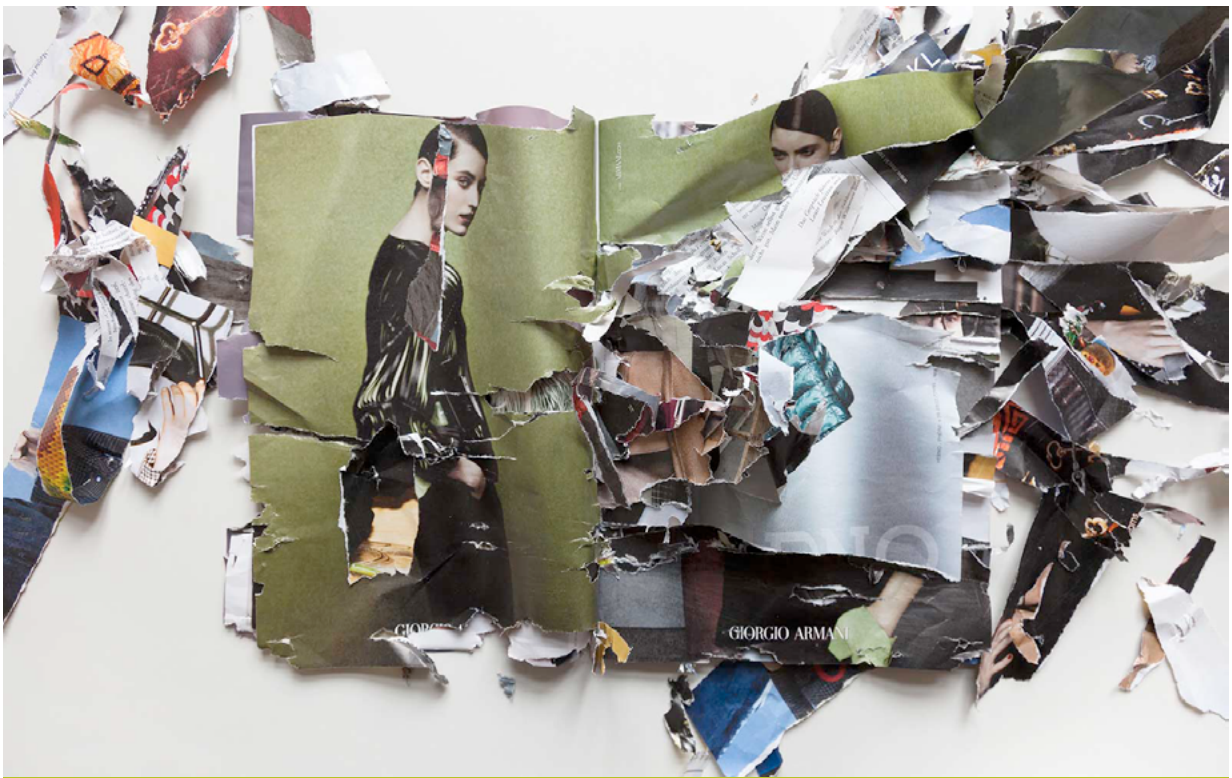

Fig. 7. Clara's rough style (*Weekly*)
CMUK, *Weekly*, 2014. 40 x 60 cm, décollage/photograph.
(Photograph provided by CMUK.)

Fig. 8. Karl's style (*Weekly*)
CMUK, *Weekly*, 2014. 40 x 60 cm, décollage/photograph
(Photograph provided by CMUK.)

In the summer of 2017, I was given the opportunity to visit the shared home of the artists to gain first-hand experience on what entangled agency looks like in practice. While visiting them in Cologne, I was able to witness CMUK's remarkable (artistic) human–animal relation in everyday life as well as in their work routines. During my stay, the parrots actively chose to interact with the human attendees, illustrating how the border between human and non-human sphere is continually blurred. In Haraway's words, "[they] enter the world of becoming

with".[74] The parrots, being with us the whole time, gave the impression that the focus lies on living together in an interspecies household rather than for the sole purpose of making art. They live as equal inhabitants of the flat, visible in their participation in everyday practices such as eating together at the same table.[75] The birds are always free to choose whether they want to rest in their open enclosures or to engage with Hörner and Antlfinger and/or artistic objects. Yet, while I was there, Clara shredded pieces of cardboard and a cork tube for over forty minutes straight, stepping back from time to time, seemingly to reflect on what she had done so far. This behaviour of evaluation and correction is similar to the bowerbirds' working process.[76] The parrots do not use the emerging products as food or for nesting purposes, apparently working with the material only out of pleasure. During my observation, Clara was extremely engaged, rolling her eyes, eagerly ripping pieces (Fig. 9). Although one can of course never know for sure, she seemed to express creative joy. The whole time she was working, none of the attendees interrupted her; the product of her effort was only examined after she focussed on something else and left the scene. Despite Clara and Karl having a dependent agency as inhabitants of a human household, they have an unquestionable impact within this human–animal entanglement. The applied concepts of agency help to point out that the artworks are products of a strong entangled network as well as relational agency between the non-human and human artists. In contrast, the differentiation of the concepts also reveals that there might be only a very limited relational agency on the macro level: Within exhibition contexts, it is unlikely that visitors who only receive the artworks superficially notice the animals' involvement.

In conclusion, CMUK's artworks are literally figurations of an interplay between humans and animals, they function only with the participation of both species. Hörner and Antlfinger interpret the parrots' actions not as destructive but as a creative performance of equal living beings. Consequently, by acknowledging the animals' individuality and subjectivity, they are appreciating non-human

74 Haraway, *When Species Meet*, 19.

75 This is displayed in a rather satirical video clip: "Lunch in a cross-species household," accessed 31 January 2020, http://h--a.org/de/project/lunch-in-a-cross-species-household/.

76 Ullrich, "Jedes Tier ist eine Künstlerin," 255.

Fig. 9. Clara at work. Photograph taken by the author in Cologne 2016

creativity. During my observation, the collaboration was characterized by a warm casual tone of interaction. Even if Clara and Karl do not know that their work is partially exhibited and that they are not paid, at least not financially, they have no disadvantage from this collaboration but a richer everyday life. Regardless of their dependent agency, Hörner and Antlfinger try to provide their parrots with a space where they can live as competently as possible. The animals act in their usual environment, not in artificial settings, supporting the view of them living together as a family in an interspecies household rather

than having a professional relationship. Seemingly abolishing the dichotomy of nature and culture, this is an ideal example illustrating Haraway's theoretical concept of *naturecultures*. Nevertheless, hierarchical structures still exist as a necessary but critique-worthy precondition to their collaboration. Those can exemplarily be seen in the clear distribution of the roles. Whereas the birds produce without restriction, the humans are still the ones to decide at which stage the creative output is complete. Furthermore, since animals are excluded from further participation in the art world, even this collective cannot avoid an unbalanced human–animal relation in this respect. Still, by openly disclosing the involvement of the parrots, CMUK's works are revealing the possibility of considering animals as artists. All things considered, CMUK provides an almost ideal realization of interspecies art as Jevbratt and Ullrich suggest it.

FINAL CONCLUSION

Two examples of artistic human–animals collaborations showed that interspecies art proposes to lessen the opposition between human and non-human animals by acknowledging animals' undeniable artistic qualities and thereby stressing the need for rethinking traditional images of artistry. Accompanying the three axolotls and Clara and Karl provided insights into collaborations that scrutinize anthropocentric world views by shifting attention to (Angell and Mallet), or even overthrowing (CMUK), established power relations. CMUK makes a more suitable case than the *Gallery Peacetime* regarding the criteria of interspecies art, illustrating that fulfilling all aspects of Jevbratt's and Ullrich's demands is possible, and even complements them by the criterion of an entangled everyday life. In comparison, Angell's *Gallery Peacetime* does not match all criteria, which becomes most apparent in the undeniable hierarchy between Angell and the axolotls resulting in a lack of non-human creative contribution. Hierarchical structures, however, exists in both cases and are e.g. illustrated by the fact that axolotls and parrots are living in captivity, hence, in a dependent dynamic with humans.

What does the application of agency concepts add to the discussion about interspecies art? Roscher's concepts have been beneficial to understand the animals' impact on interspecies art since they address the networks on the macro level as well as the specific human–animal relationships on the micro level. The axolotls and parrots perform agency even without a subject status or humanlike intentions being attributed to them directly, but they can only express dependent agency. With respect to their artworks, both cases display entangled agency. CMUK relies on all parties playing an equally important role, presuming the animals' active contribution to this output. In contrast, *Gallery Peacetime* and its exhibits are at least not harmful to the animals. For the relational agency it is vital to distinguish two levels: first, the relation between the animals and the human artists, and secondly, the relationship emerging between animals and museum or gallery visitors. Corresponding to the former level, in the *Gallery Peacetime* the axolotls express relational agency by influencing Angell's work process regarding their basic needs. But more significant seems their face-to-face communication with visitors. Thus, in contrast to only judging the collaboration regarding its relationships of the non-human and human artists, relational agency also pays attention to how the nature/culture dichotomy can be abolished in contact with recipients. In comparison, the parrots in CMUK have a limited relational agency in the exhibition context due to a lack of frequent contact with visitors. As argued in the sub conclusion above, it is still a strong case for interspecies art, which is supported by the parrots' remarkable relational agency in regard to the human artists. Through daily face-to-face interactions, they shape a "becoming with" (Haraway, 2008). The birds have a major impact on their humans' everyday life and without them the artworks would not emerge at all. Despite these results, this paper demands a more concise theoretical framework of agency. Roscher's concepts were useful in attempting to develop a nuanced understanding of the collaborations, showing that the criteria of interspecies art and concepts of agency complement each other. However, each case exemplified both entangled and relational agency, indicating that these concepts are not specific enough. Even

though the agency concepts help to elaborate on the specific relationships in interspecies art, *Gallery Peacetime* shows that art with animals — who express agency — does not necessarily qualify as interspecies art in its ideal form. Nevertheless, the case studies at hand can only be considered as a first assessment of the matter, encouraging the ongoing discourse on the definition of interspecies art. Since there are multiple agency concepts, analysing more case studies can be useful in evaluating the relation between animals' agency and this form of art. Also, alternatives for agency might be an interesting topic for future work regarding interspecies art. All in all, this paper makes a strong position in favour of interspecies art, not only as a contemporary art phenomenon but as an important step towards a future that acknowledges non-human animals as equally living beings.[77]

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THE LION, THE WITCH, AND THE MONKEY ANIMAL METAMORPHOSIS IN THE DUTCH-LANGUAGE ADAPTATIONS OF CALDERÓN'S *EL MAYOR ENCANTO, AMOR*, C. 1670

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The two parallel adaptations of Pedro Calderón de la Barca's El mayor encanto, amor, *a retelling of Circe's and Ulysses' story from Homer's* Odyssey, *put animals onstage. However, the animals were certainly not all live animals, for the lions, bears, and tigers that feature in the two adaptations were too dangerous. Therefore, actors performed some animals via costumes. The article considers not only how this was a practical solution, but also how the costumes reflected the transformations that Circe performed on the Greek crewmen accompanying Ulysses. The transformations were incomplete, since even as animals the crewmen retained their ability to reason and, in some cases, even their speech. As such, the plays challenged the early modern understanding of animals as creatures without reason, solely led by their natural impulses. In their animal appearances, they failed to communicate with the human characters, but remained intelligible to the audience, disrupting the fiction of the play. Thus, the adaptations of* El mayor encanto, amor *questioned whether humans and animals are all that different.*

On 8 April 1670, Adriaen Bastiaensz de Leeuw's play *De toveres Circe* premiered in the Amsterdam Public Theatre. The play retells the story of Ulysses and Circe from book ten of Homer's *Odyssey*.[1] As an adaptation of the court spectacle *El mayor encanto, amor* (Love, the Greatest Enchantment; 1635) by the Spanish playwright Pedro Calderón de la Barca, it marks the end of the

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vogue for Spanish drama in Dutch seventeenth-century theatre, which had been initiated by the playwright Theodore Rodenburgh in 1617.[2] In Spanish, Calderón's original is variably called a *comedia mitólogica* (mythical comedy) or a *comedia de tramoya* (spectacle comedy or, comedy with stage machinery), and consequently the Amsterdam adaptation had to be spectacular as well.[3]

The title page of the printed edition of *De toveres Circe* explicitly states that it was performed "With Artifice and Animals".[4] The publisher Jacob Lescaille likely added this information to the title page as a marketing strategy to be able to sell more books. The title page also mentions that the play was "Vertoont op d'Amsterdamsche Schouwburg", indicating that this was the official version of *De toveres Circe* as it was performed at the Amsterdam Public Theatre. While the title page reflects the structural improvements made to the Amsterdam Public Theatre in 1664–1665 to be able to stage more spectacular productions — that is, "With Artifice" — the reference to animals is a unique addition not found on the title pages of other contemporary plays. That the "animals" are mentioned separately from the "artifice" might suggest that live animals were used in the production of *De toveres Circe* as opposed to artificial animals. Because animals are essential to the plot line of *El mayor encanto, amor* and its recasting in Dutch, the necessary question is what their use and meaning are in the play and in a theatrical space. Therefore, my questions concern, on the one hand, to what extent Dutch theatre makers would have been able logistically to stage animals — either live or artificial — in the Amsterdam Public Theatre and, on the other hand, what the symbolic meaning is of animals in *De toveres Circe*. However, the Amsterdam adaptation is partly indebted to another translation that was made two years earlier in Brussels, which will be discussed here as well. The Flemish recasting of Calderón's *comedia de tramoya* was delivered by the Brussels playwright Claude de Grieck in 1668.[5] De Grieck's adaptation is called *Ulysses in't eylandt van Circe* (Ulysses on Circe's Island), which might have been performed at the Brussels Public Theatre.[6] The fact that *El mayor encanto, amor* was recast twice in parallel adaptations is extraordinary in itself

1 See the online database *ONSTAGE, Online Datasystem of Theatre in Amsterdam from the Golden Age to Today* (http://www.vondel.humanities.uva.nl/onstage/) for information about performances in the Amsterdam Public Theatre.

2 See e.g. Kim Jautze, Leonor Álvarez Francés, and Frans R.E. Blom, "Spaans theater in de Amsterdamse Schouwburg (1638-1672). Kwantitatieve en kwalitatieve analyse van de creatieve industrie van het vertalen," *De Zeventiende Eeuw. Cultuur in de Nederlanden in Interdisciplinair Perspectief* 32 (2016), 12–39; Olga van Marion and Tim Vergeer, "Spain's Dramatic Conquest of the Dutch Republic. Rodenburgh as a Literary Mediator of Spanish Culture," *De zeventiende eeuw. Cultuur in de Nederlanden in interdisciplinair perspectief* 32 (2016), 40–41; Frans R.E. Blom and Olga van Marion, "Lope de Vega and the Conquest of Spanish Theater in the Netherlands," *Anuario Lope de Vega. Texto, Literatura, Cultura* 23 (2017), 155–60.

3 For a discussion of the original, see e.g. Frederick de Armas, "Claves políticas en las comedias de Calderón. El caso de *El mayor encanto Amor*," *Anuario calderoniano* 4 (2011), 117–44; Frederick de Armas, "The Comedia and the Classics," in *A Companion to Early Modern Hispanic Theater*, ed. H. Kallendorf (Leiden: Brill, 2014),

and already caught the attention of Jan van Praag in 1922 and Henry W. Sullivan in 1983.[7]

The present analysis arises from the understanding that acts of cultural transfer tell us more about the receiving culture than the parent culture. The differences between the adaptations and the original should not be regarded as errors in translation, but can actually be seen as reflecting theatre practices in the Low Countries.[8] Then, we can see how animals were used differently in the theatres of Amsterdam and Brussels from the way they were employed in the theatres of Madrid.

THE TROUBLE OF ANIMALS ONSTAGE

As early as Greek antiquity animals were primarily used to produce spectacular effects: in various plays central characters made their entrances on chariots pulled by live horses.[9] Likewise in the early modern period animals had a significant presence in day-to-day life and, thus, they occurred in Ben Jonson's and William Shakespeare's plays of the sixteenth century.[10] According to Orozco Lourdes, live animals "all but vanished from the stage" in the seventeenth century, a result of the theatre becoming ever more professional from the sixteenth century onwards. Instead, stand-in animals were used in the seventeenth century.[11] These were likely painted on décor pieces made out of papier-mâché, or played by actors dressed in animal costumes. When in ancient Greek theatre stand-in animals were used, this was partly out of necessity as the benefits of using live animals usually did not outweigh the burden, and this must have been equally true for early modern theatre.[12] This further complicates the addition "With Animals" on the title page of *De toveres Circe*. Moreover, it is generally held that audiences had to wait until the 1970s before live animals reappeared onstage. This time, they challenged the border between reality and artifice.[13] Furthermore, when animals appear onstage — in a context where what is presented also represents something else, for instance

33–58; Sebastian Neumeister, "*El mayor encanto, amor* de Calderón: aspectos lúdicos," *Bulletin of Hispanic Studies* 90 (2013), 807–19; Alejandra Ulla Lorenzo, "Las fiestas teatrales del Buen Retiro en 1635: El estreno de *El mayor encanto, amor* de Calderón de la Barca," *RILCE. Revista de Filología Hispánica* 30 (2014), 220–41.

4 Original text: "Met Konstwerken en Gedierten". For this and the following quote, see Adriaen Bastiaensz de Leeuw, *De toveres Circe* (Amsterdam: Jacob Lescaille, 1670), fol. *1r. Furthermore, my interpretation of "Konstwerken" as artifice is based on the *Woordenboek der Nederlandsche Taal* (WNT), which states under the lemma "kunstwerk" (modern spelling of "konstwerk") that in the case of theatre, "kunstwerken" should be interpreted as the machinery by which natural phenomena could be represented as well as by which some exceptional movements and gestures could be performed.

5 With Flemish I refer to the Dutch-speaking area in present-day Belgium, in what used to be the County of Flanders and the Duchy of Brabant.

6 However, the title page of the play says nowhere that the play was performed at the "Brusselsche Toonneel-burg"/"Thoonneelburgh", as in the case of De Leeuw's *Circe*. Yet, another earlier play by De Grieck

in theatre — they are not just animals raised on a platform, but they are part of the illusion that the performance creates.[14]

This article tests the assumption that live animals were not used in early modern theatre and considers what the addition "With Animals" may indicate. The article explores, furthermore, the role that animals had in the adaptations of *El mayor encanto, amor*, asserting that animals in early modern theatre could confront the border between reality and artifice in a similar way as in modern theatre. Early modern theatre, and especially baroque theatre, played with the distinction between fiction and reality in several specific ways. One way was through the use of the proscenium arch. The proscenium arch creates the illusion that the spectators look through a picture frame into the fictional world of the stage. It acts as a physical border and indicates that the world inside the arch is different from the space outside it: the auditorium. This construction of the spectator vis-à-vis the stage influences the way that the spectator watches the performance: he or she is not part of the events onstage and those events are not real in the sense that they are not really happening in the spectator's world.[15] However, the proscenium arch was not always present, the original performance of *El mayor encanto, amor* did not have one. Live animals could function as an alternative to the proscenium arch, while at the same time creating awareness of the border function of the arch. In a sense, animals always cross the boundary that we like to see between fiction and reality, since they were grotesque, exotic, and exciting figurants.

Yet, an objection can be made. Around 1670 several dramaturgs in Dutch theatre from the Amsterdam-based society of poets Nil Volentibus Arduum strongly believed that a good play adheres to the requirement of *vraisemblance*, a term deriving from classicist French dramatic theory, which demanded that the actions and events in a play should be believable. *Vraisemblance* relied in part on narrative plausibility but also on how convincing the spectacle was. The spectacle in a play had to be technically possible but also realistic and

does mention this fact. On the title page of De Grieck's play *Samson, oft edel-moedighen Nazareen* (Brussel: Peeter de Dobbeleer, 1660), fol. *1r., we can read that the play was "Verthoont op de Brusselsche Toonneel-burg" (Shown at the Brussels Public Theatre).

7 Jan van Praag, "Les traductions de *El mayor encanto amor* de Calderón en Néerlandais," *Neophilologus* 7 (1922), 8–19; Henry W. Sullivan, *Calderón in the German Lands and the Low Countries: his reception and influence, 1654–1980* (Cambridge: Cambridge University Press, 1983), 40–42, 53–54. Both scholars were concerned with differences between the Spanish original and the Flemish and Dutch adaptations and whether the playwrights delivered sound translations of Calderón's original. In another article, I challenged their analyses: Tim Vergeer, "Recasting a *Comedia* by Pedro Calderón de la Barca: Parallel Adaptations of *El mayor encanto, amor* in Brussels and Amsterdam, c. 1670," *Anuario Calderoniano* 13 (forthcoming, 2020).

8 For transfer studies, see Michel Espagne and Michael Werner, "Deutsch-Französischer Kulturtransfer im 18. und 19. Jahrhundert. Zu Einem Neuen Interdisziplinären Forschungsprogramm des C.N.R.S," *Francia. Forschungen zur Westeuropäischen Geschichte* (1985), 502–10; Michel Espagne and Michael Werner, "Deutsch-

probable as if it could have happened in real life.[16] Although the staging of live animals would in theory have added to a play's believability, this meant that most transformations in Ovid's *Metamorphoses* were discarded as spectacular events that could not be brought onto stage, including the metamorphoses performed by Circe in *De toveres Circe*. Nil Volentibus Arduum wrote about this in their *Onderwijs in de toneel-poëzy* (c. 1678):

> [the playwright has to make sure] that the spectacle can be shown, and that it appropriately beguiles the Spectators' eyes; by which, if not done as such, the Spectators will not be entertained; they will laugh or be sad about it. Thus, *Horace* disallows the showing of *Procne's* Metamorphosis into a bird, or that of *Cadmus* into a Serpent onstage, because the Spectacle, near to impossible, will raise disbelief in the Spectators. […] And to these belong many of *Circe's* [i.e. in *De toveres Circe*] Metamorphoses as well, in particular that of the Monkey.[17]

This hostile stance towards unbelievable events being performed before the spectator's eyes formed a challenge to Dutch playwrights to include animal transformations in their plays, which according to Nil Volentibus Arduum resulted in unsuccessful attempts. As the quote demonstrates, the society disagreed with De Leeuw's handling of the transformations in his recasting of *El mayor encanto, amor*. Despite their problems with the transformations in Ovid's *Metamorphoses*, Nil Volentibus Arduum did, however, argue for stories featuring magical or mythical themes, especially when grotesque and supernatural events were part of the plot. Such classical stories were deemed exceptional sources of inspiration for their familiarity among the audience.[18]

(LIVE) ANIMALS IN CALDERÓN'S ORIGINAL

Calderón's play about Circe and Ulysses was such a story with a magical, mythical theme. The play was first performed in July 1635 in the Estanque Grande

Französischer Kulturtransfer als Forschungsgegenstand. Eine Problemskizze," in *Transferts. Les Relations Interculturelles dans l'Espace Franco-Allemand (XVIIIe et XIXe Siècle)*, ed. Michel Espagne and Michael Werner (Paris: Rescherche sur les Civilisations, 1988), 11–34; Karolien De Clippel and Filip Vermeylen, "In search of Netherlandish art. Cultural transmission and artistic exchanges in the Low Countries, an introduction," *De Zeventiende Eeuw. Cultuur in de Nederlanden in Interdisciplinair Perspectief* 31 (2015), 2–17.

9 Peter D. Arnott, "Animals in the Greek Theatre," *Greece & Rome* 6 (1959), 177–78.

10 Laurie Shannon, "The Eight Animals in Shakespeare; Or, before the Human," *PMLA* 124 (2009), 472–73.

11 Orozco Lourdes, *Theatre & Animals* (Hampshire: Palgrave Macmillan, 2013), 15.

12 Arnott, "Animals in the Greek Theatre," 177.

13 Lourdes, *Theatre & Animals*, 15.

14 Nicholas Ridout, *Stage Fright, Animals, and Other Theatrical Problems* (Cambridge: Cambridge University Press, 2006), 102.

15 Eversmann, *De ruimte van het theater*, 19, 136–37.

(the pond) of the Buen Retiro palace gardens in Madrid. In 1637, the play was printed in the second part of the collected works by Calderón, according to which it was a "feast, which was presented to his Majesty on the night of San Juan in the year [1]635, in the pond of the Royal Palace of the Buen Retiro".[19] Following book ten of Homer's *Odyssey*, Ulysses' men are transformed into swine, but they are also turned into lions and tigers, drawing from Virgil's *Aeneid* and the subsequent medieval and early modern tradition in literature and art.[20] Denise DiPuccio argues that, through Circe's enchantments, the original Spanish play challenges notions about fact and fiction. The result is confusion among the characters and the spectators alike. Particularly the audience "may sense that his own world is as enigmatic as that of his mythical counterparts".[21]

This suspension of logic was enhanced by the performance situation at the Buen Retiro park. In the middle of the Estanque Grande there used to be an artificial island, as can still be seen on the 1656 map of Madrid by Teixeira Albernaz (Fig. 1). During the performance, the now disappeared island became the island of Circe and functioned as the realistic environment of this fictional world; in theatre studies this is typically called *environmental theatre*. In 1981, the theatre scholar Arnold Aronson termed such extraordinary performance situations as the Estanque Grande as *found environments*, which are performance spaces that were not originally intended as such and do not contain preordained stage or audience areas.[22] Such found environments can be chosen for a variety of reasons, but mostly emphasize the reality of the play or make the fictional world of fairy tales, myths, and science fiction seem more real.[23] The reality can then also be emphasized to convey a political message.[24] The found environment has to bring the spectator closer to the performance, to make it more real than it ever was: in this case, the play strives for full immersion on the part of the spectator. With regard to the Buen Retiro performance, the fact that the audience were circling around the island in little boats contributed to this experience.[25]

16 Nil Volentibus Arduum, *Onderwijs in de toneel-poëzy*, ed. Ton Harmsen (Rotterdam: Ordeman, [c. 1678] 1989), 423–27.

17 Nil Volentibus Arduum, *Onderwijs in de toneel-poëzy*, 425: "[De Dichter heeft te letten] dat zy [d.i. Kunstwerken] vertoont konnen worden, en dat welgevoeglijk om de oogen der Aanschouwers te begoochelen. Het welk indien't niet geschiedt, zullen de Aanschouwers in plaats van vermaakt te worden, daarom lachchen of verdrietig worden. Zo wil *Horatius* niet hebben datmen op het Tooneel zal vertoonen de herscheppingh van *Progne* in een Vogel, noch die van *Kadmus* in een Serpent, om dat de vertooning, by na onmooglijk in de kijkers, ongeloof verwekt. […] En hier toe behooren ook veele herscheppingen van *Circe*, inzonderheid die vanden Aap". All translations are my own, unless indicated otherwise.

18 Ibid., 424.

19 Pedro Calderón de la Barca, *Segunda parte de las comedias de don Pedro Calderon de la Barca, cauallero del abito de Santiago* (Madrid: Maria Quiñones / Pedro Coello, 1637), fol. *2r. The original reads: "fiesta que se representò à su Magestad noche de S. Juan del año de seis cientos y treinta y cinco, en el estanque del Real Palacio del buen Retiro". For more information on the *Segunda parte*, see Santiago Fernández Mosquera,

Fig. 1. Pedro Teixeira Albernaz and Salomon Savery
Detail of: *Topographia de la Ville de Madrid*, 1656. 1.78 x 2.86 m, Engraving in 20 folios
Biblioteca Nacional de España, Madrid, Spain, INVENT/23233

Within this found environment at the Buen Retiro park, the presence of live animals also heavily contributed to the realistic feel of *El mayor encanto, amor*. We know that King Philip IV (1621–65) at least kept bears, tigers, and lions — the animals featured in the play — at his palace in the Casa de Campo, the royal hunting estate on the western side of Madrid. Similarly to Casa de Campo, the

"Los textos de la *Segunda parte* de Calderón," *Anuario Calderoniano* 1 (2008), 129–30.

20 Pepa Castillo Pascual, "Circe *Diva*: The Reception of Circe in the Baroque Opera (seventeenth century)," in *Ancient Magic and the Supernatural in the Modern Visual and Performing Arts*, ed. Filippo Carlà and Irene Berti (London: Bloomsbury, 2016), 81–82.

21 Denise M. DiPuccio, "The Enigma of Enchantment in *El mayor encanto, amor*," *Hispania* 70 (1987), 731–739; quotes at 731.

22 Arnold Aronson, *The History and Theory of Environmental Scenography* (Ann Arbor, Michigan: UMI Research Press, 1981), 164–66.

23 Peter Eversmann, *De ruimte van het theater*, PhD diss. (Universiteit van Amsterdam, 1996), 22–23, 155–59.

24 This was presumably also the case for *El mayor encanto, amor*. See De Armas, "Claves políticas en las comedias de Calderón," 117–44; Santiago Fernández Mosquera, "El significado de las primeras fiestas cortesanas de Calderón," in *Calderón y el pensamiento ideológico y cultural de su época: XIV Coloquio Anglogermano sobre Calderón (Heidelberg, 24–28 de julio de 2005)*, ed. M. Tietz and G. Arnscheidt (Stuttgart: s.n., 2008), 209–32.

Buen Retiro park "alternated paths, lakes, hermitages, grottoes, salons, and small outhouses, each containing a few animals", say Eric Baratay and Elisabeth Hardouin-Fugier.[26] Since the bears, tigers, and lions in the play might have been too dangerous to bring onto the stage the animals were likely kept in their cages during the performance of *El mayor encanto, amor*, while their presence could be felt and seen nevertheless. Yet, it is plausible that the domestic animals in the performance, for instance the swine, were, in fact, brought onto stage next to the actors. This practice is for example demonstrated by the live donkey in a performance of Lope de Vega's *El cardenal de Belén* at the Plaza Mayor in Madrid on 7 September 1610.[27] In conclusion, the use of live animals in the court spectacle interacted with the found environment, thus contributing to the play's verisimilitude.

BEARS, TIGERS, AND LIONS IN THE DUTCH ADAPTATIONS

A found environment such as the one at the Buen Retiro park theatre was not used in Brussels and Amsterdam when De Grieck adapted his *Ulysses in't eylandt van Circe* and De Leeuw his *De toveres Circe*. These adaptations were performed indoors at the Brussels and Amsterdam Public Theatres respectively, so-called *théâtres a l'italienne*, with a deep scene, coulisse décors, and an auditorium with loges (Fig. 2).[28] Therefore, bringing live animals onto the stage must have formed a logistical challenge, if they were used at all.

The challenge of bringing live animals onto the stage in Brussels becomes immediately apparent during the performance of the first act. Ulysses' men go to explore the island on which they are stranded after a heavy storm. Ulysses and his most-trusted valet Clarín choose another direction. The audience is soon treated to the first animal spectacle of the play. In Calderón's original, the stage directions make clear that "Animals come out and they act such as they are said to be".[29] De Grieck adapted this stage direction: "There, there appears a group of animals of the fiercest kind, such as Lions, Bears, Tigers, and others".[30]

25 Melveena McKendrick, *Theatre in Spain 1490–1700* (Cambridge: Cambridge University Press, 1989), 218–220.

26 Eric Baratay and Elisabeth Hardouin-Fugier, *Zoo: A History of Zoological Gardens in the West* (London: Reaktion Books, 2002), 20, 47, 50. They do not specify which animals.

27 José María Ruano de la Haza, "Lope de Vega and the Theatre in Madrid," in *A Companion to Lope de Vega*, ed. Alexander Samson and Jonathan Thacker (Woodbridge: Tamesis, 2008), 49.

28 Timothy de Paepe, "Computervisualisaties van de theaterarchitectuur in de Lage Landen (1600-1800)," in *Theater: Een westerse geschiedenis*, ed. Thomas Crombez et al. (Tielt: LannooCampus, 2015), 148.

29 Pedro Calderón de la Barca, *El mayor encanto, amor*, in *Segunda parte de las comedias de Don Pedro Calderon de la Barca* (Madrid: Carlos Sanchez, 1641), fol. 3r.: "Salen animales, y hazen lo que se va diziendo".

30 Claude de Grieck, *Ulysses in't eylandt van Circe, oft geen grooter Toovery als Liefde* (Brussel: Jan Mommaert, 1668), 5: "Daer verschynen een deel beesten van den wreedsten slagh, als Leeuwen, Beyren, Tygers, en andere".

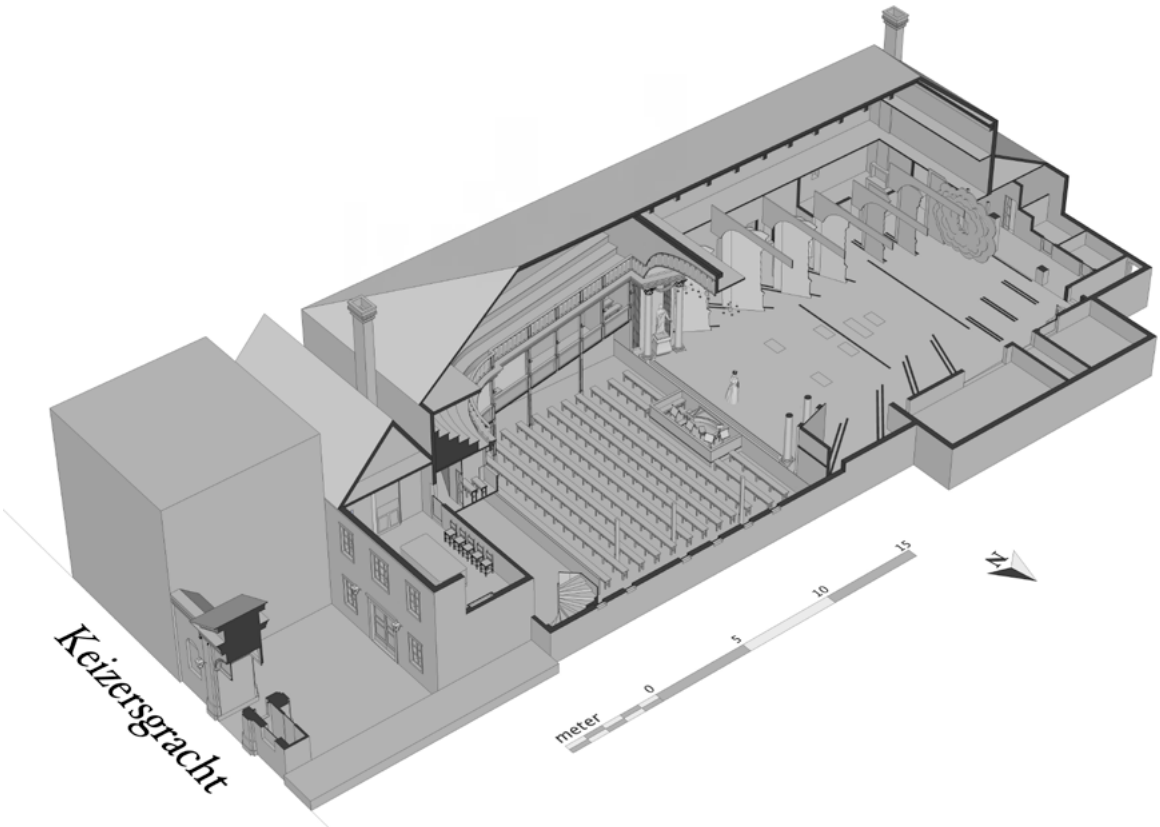

Fig. 2. Cross-Section (Computer visualization) of the Amsterdam Public Theatre, 1665–1772.
© Timothy De Paepe 2011, 3Dtheater.be.

De Leeuw's translation is less free: "Here, there appear some Animals of different kinds".[31] Both in the case of Calderón's original and the two adaptations by De Grieck and De Leeuw, there is a group of unspecified animals, but only De Grieck's adaptation states here that at least three distinct species of animals were brought onto the Brussels stage: lions, bears, and tigers — animals too dangerous to have been real, unless they were kept in a cage.

31 De Leeuw, *Circe*, 3: "Hier verschynen eenige Dieren van verscheide gestalte".

In both the original text of Calderón and the adaptations by De Grieck and De Leeuw, Ulysses speaks to the animal king, the lion which appears before his eyes. In the Spanish original, Ulysses is surprised at the fact that the animals do not attack them, but actually are "humbled", "kneeled", and "defeated".[32] He then describes how the lion appears to be signalling to him and Clarín that they should return to sea and leave the island. His interpretation is that they are not welcome in the forest where this specific lion rules, but he is unaware that the lion is actually one of his companions trying to warn him about Circe's magical powers.[33] De Grieck stays mostly true to the original, but he nevertheless adds a specific action to the scene. The stage directions clearly state that Ulysses has to put his hand on top of the lion's head: "He comes near the Lion, and he lays his hand on his head, while he [the lion] as well as the other beasts repeatedly give signal that they should continue walking".[34] The stage direction added by De Grieck is not present in De Leeuw's adaptation.[35] Nevertheless, the lion equally nods to Ulysses in De Leeuw's version to indicate that he and Clarín should leave the island.

Now, how was this performed? We know that the Dutch East India Company shipped all kinds of exotic animals to Amsterdam and became the main supplier of animals for north-western Europe during the seventeenth century. Furthermore, Amsterdam possessed a menagerie of its own, which was accessible to the public. As such, the wild animals featured in *De toveres Circe* were available in Amsterdam at the time. However, it seems unlikely that the lions from the Amsterdam menagerie were also used at the Amsterdam Public Theatre. The lion spoken to must have instead been an actor in a lion's costume, who could then nod and gesticulate on cue to make his intentions clear. Only the lion is fully discussed by the playwrights; the other animals that had appeared before Ulysses and Clarín are described as a collective.

How did De Grieck, then, come up with his idea of adding bears and tigers to his adaptation? This information can be found in the following scene. There,

32 "humildes", "postrados" and "vencidos" in the original text.

33 Calderón, *El mayor encanto, amor*, fol. 3r.

34 De Grieck, *Ulysses*, 5: "Hy naedert den Leeuw, en legt hem de hant op het hooft, terwyl hy soo wel als d'andere beesten gedurig een teeken geven dat sy souden door-gaen".

35 De Leeuw, *Circe*, 3–4.

Ulysses' crewman Antistes gives extra information. After his sudden return, Antistes makes apparent that the animals which Ulysses and Clarín encountered before were, in fact, their companions who were transformed into animals by the sorceress Circe. Subsequently, Antistes relates what happened, but also how and into what kind of animals the Greeks were transformed. In Calderón's original, he makes clear that after having drunk enchanted wine one man seemed to be a beast with a spotted hide (a leopard or a jaguar), another looked like a serpent armed with scales, another covered with sharp stings (perhaps a hedgehog or porcupine), and yet another became a "most unclean animal" (a swine).[36]

De Grieck follows Calderón in his descriptions, listing a spotted tiger, a serpent, an animal with spines, and a swine. De Leeuw, on the other hand, does not explain which types of animal transformation take place.[37] It is only when Ulysses' men are returned to their human form that they say themselves what kind of animals they were. In De Leeuw's version, we learn that Circe had been creative, transforming separate men into a tiger, a lion, a dragon, a bear, and a swine.[38] In Calderón's original on the other hand, Antistes never speaks about a bear or a dragon, animals which De Grieck and De Leeuw respectively added to their adaptations. As for the bear, the playwrights were inspired by the seventh book of Virgil's *Aeneid*, where Aeneas' ship passes by Circe's island. The hero hears "the angry growls of lions chafing at their bonds and roaring in midnight hours, the raging of bristly boars and caged bears, and huge wolfish shapes howling".[39]

Both in the original and the adaptations, the animal transformations happened offstage, as opposed to the metamorphoses being shown in a so-called *changement à vue*.[40] This is evident when Ulysses forces Circe to change his men back to their human forms: Ulysses' companions enter the stage one after another in their human appearance.[41] Maybe the illusion would have been disrupted if the metamorphoses were shown in front of the spectators.[42] The coulisses

36 Calderón, *El mayor encanto, amor*, fol. 4r.

37 Cf. De Grieck, *Ulysses*, 8; De Leeuw, *Circe*, 6–7.

38 De Leeuw, *Circe*, 13.

39 Virgil, *Aeneid* 7.15–18, in *Aeneid: Books 7–12. Appendix Vergiliana*, trans. H. Rushton Fairclough. Loeb Classical Library 64 (Cambridge, MA: Harvard University Press, 1918). This description, which says that lions are chained and the bears are caged, enforces, furthermore, the idea that live animals in cages featured in the original performance at the Buen Retiro park.

40 *Changement à vue* is literally translated "change in sight". A French theatre term, it designates a sudden and rapid change of décor while the curtains are drawn, and thus the change happens within the spectator's sight.

41 Cf. Calderón, *El mayor encanto, amor*, fol. 5v.; De Grieck, *Ulysses*, 13; De Leeuw, *Circe*, 13.

42 Similar things were said about murder onstage: while a character might be able to die, the actor could not. This was impossible and therefore unbelievable. See Nil Volentibus Arduum, *Onderwijs in de toneel-poëzy*, 274, 387, 424–428.

always offered a solution in these kinds of situations, and thus the actual metamorphoses were not showcased.

Theatre Costumes as Symbolic Metamorphoses

Since animals in *De toveres Circe* seem for the most part to have been too dangerous to be live animals, we should expect that indeed the stand-in animals were either painted on décor pieces made out of papier-mâché, or actors dressed in animal costumes, as was suggested earlier. For Brussels, it is unclear how the animals were staged after their transformation.[43] For the Amsterdam Public Theatre, however, we have an inventory drawn up in 1688, containing a list of all the décor pieces, costumes, and theatre props used in performances at the Amsterdam Public Theatre. Listed are stuffed animals, including two horses, a peacock, an elephant, a camel, a large eagle, two pairs of swans, and an owl, as well as a dragon.[44] As regards the animal costumes, there were several bears' and lions' hides, a dolphin's costume, and "a monkey, and several pieces of fur".[45] The absence of any tiger or swine costumes suggests that Ulysses' men were not transformed into those animals in the production of *De toveres Circe*, although De Leeuw's Timantes says that he was a tiger and Lebrel that he was a swine, when they are human again.[46] Perhaps one of the "pieces of fur" was spotted like that of a jaguar or striped like that of a Bengal tiger. As regards the swine, the directors of the Amsterdam Public Theatre could have decided to bring live pigs onto the stage. Although this would explain why the title page of *De toveres Circe* states that the play was performed "With Animals", this cannot be corroborated since only the revenues and not the expenses of the Amsterdam Public Theatre *post* 1656 have survived.[47] Moreover, the dissonance of a real animal beside a man wearing a skin would have called attention to the ersatz animals, ruining the *vraisemblance* of the scene.

Despite the absence of live animals, the use of fake animals and animal costumes could paradoxically have enhanced the *vraisemblance* of the adaptations

43 Yet, there is at least one example where a live domestic animal was used in the performance of a Flemish play. Support for this can be found in Antonio Francisco Wouthers, *De devotie van Eusebius tot het H. kruys* (Brussels: Peeter de Dobbeleer, 1665), 1. In the very first scene, two characters bring a live horse onto stage, which is harnessed to a cart. This play was an adaptation of Calderón's *La devoción de la cruz* (1636).

44 Archelaus was changed into a dragon in De Leeuw's adaptation. See De Leeuw, *Circe*, 13.

45 "Een Aap, en eenige bonte lappen". *Inventaris van de kleederen, schermen, tooneelen, ende andere goederen, berustende in den schouwburg deezer stede […]*, 1688, inv.nr. 315, 67—Archief Familie Huydecoper, Utrechts Archief, Utrecht.

46 Cf. De Leeuw, *Circe*, 13.

47 *Ontfangboek anno 1656*, 1656-1677, inv.nr. 428, 367A—Archief van het Burgerweeshuis: oud archief, Stadsarchief Amsterdam, Amsterdam.

of *El mayor encanto, amor*. The Greek men retain their reason, while their minds were trapped in animal skins. In Calderón's text, Antistes says: "One man, though still with reason, was a brute, covered with fur".[48] Also in the Flemish adaptation this is stressed: "Although reason still served him as before, his body became covered with one or another fur".[49] De Leeuw, in turn, is less specific saying that "The body lost its shell from top to bottom, their human form became beastly".[50] Yet, several scenes later, De Leeuw also confirms that the Greeks did not lose their reason when Circe commands the reasonable animals that used to be Ulysses' companions to change back to human.[51]

Especially the original by Calderón and the adaptation by De Grieck describe the Greek men as being *covered* by animal fur, suggesting the use of hides or pieces of fur to hide the human skin beneath. In De Grieck's adaptation, this interpretation is further enforced by Circe's words, who says to Ulysses: "Your people have finally taken off the beastly form".[52] This could have had an aesthetic motivation as well: the animal costumes emphasize that they merely *cover* the actors and hide their inner humanity; they are, so to say, halfway between animal and human. The spectator of both *Ulysses in't eylandt van Circe* and *De toveres Circe* sees a man in an animal skin and this corresponds with the events in the play. A similar representation of the metamorphoses can be found in a German woodblock print in an edition of Giovanni Boccaccio's *De Claris Mulieribus* (c. 1340) as early as 1474. Here, we see several human bodies bearing the heads of different animals (Fig. 3). This image continues well into the seventeenth century, for example in the depiction made of Circe's transformations by Crispijn van de Passe II (Fig. 4). The same strategy is applied in depictions of other metamorphoses, such as that of Actaeon by Jacob de Gheyn II (Fig. 5).

Did the animal costumes also have another function besides being a practical solution to the difficulty of bringing live animals on stage? Indeed, the partial transformations in the two parallel adaptations — and in contemporary

48 Calderón, *El mayor encanto, amor*, fol. 4r.: "Qual era ya racional / bruto de pieles cubierto".

49 De Grieck, *Ulysses*, 8: "Schoon dat de reden hem bleef dienen als te voren, / Syn lichaem wirt bedeck met 't een oft ander vel".

50 De Leeuw, *Circe*, 6: "Het lyf verloor zyn stal van boven tot beneden / Hun menschelyke vorm wierd beestelyk".

51 Ibid., 13.

52 De Grieck, *Ulysses*, 13: "U volk heeft eindeling dan af-geleydt de beest".

Fig. 3. German hand-coloured woodblock print of Circe, Ulysses, and the crewmen in their animal appearance from a 1474 printed edition of Giovanni Boccaccio's *De Claris Mulieribus* (c. 1360), fol. [g]1r, f. li. Rare Book & Manuscript Library, University of Pennsylvania, United States, Inc B-720. Photo provided by the Provenance Online Project of University of Pennsylvania.

prints — suggest a certain symbolic interpretation of Circe and Ulysses' love affair, which was already present in the subject of *El mayor encanto, amor*. Calderón's *comedia* deals with the supposed opposition between love and emotions on the one hand and reason on the other. Love is regarded to be the greatest enchantment and "Circe is the most obvious allegory of the lustful female sensuality who threatens virtue and reason".[53] One should note that the definition of the Spanish word for enchantment, *encanto*, refers not merely to the result of magic, but also to something that astonishes or entrances you.[54] Therefore, Circe's enchantments are not only magical but also originate in her reason. These are the mind games which she plays with the people on her island.[55] The animal transformations are equally subject to this

53 Castillo Pascual, "*Circe* Diva," 82.

54 *Diccionario de la lengua española*, 23rd edition (Madrid: Real Academia Española, 2014), s.v. encanto 2; see also DiPuccio, "The Enigma of Enchantment," 731.

55 DiPuccio, "The Enigma of Enchantment," 732–33.

Fig. 4. Crispijn van de Passe (II)
Circe transforms Odysseus' companions into swine, c. 1636–1670. 16.7 × 22.8 cm, Engraving. Rijksmuseum, Amsterdam

double definition of *encanto*, which plays with the distinction between reason and emotion, and fact and fiction. The unfinished transformations point out that there is no real difference between concepts that have traditionally been regarded to be each other's opposites. They reflect Circe's mastery of both irrational (that is magical) and rational enchantments: the sorceress-queen uses not just one or the other but continuously alternates between them.

Likewise, the halfway transformations challenge the opposition between emotion and reason. The metamorphoses in the Dutch-language adaptations address the early modern idea that beasts are far below any human sophistication. This echoes Aristotle's ideas about humanity as he describes them in his *Politeia*. According to Aristotle, man and animal were different, since "man alone of the animals possesses speech", and he alone "has perception of good and bad and right and wrong and the other moral qualities"; finally, he is the only one to be a "political animal".[56] This gives human beings power over all other species. Circe demonstrates this by turning the Greeks into animals, whom she can control and incarcerate as she desires. While Aristotle argues that humans are different — and thus better — than animals, scholars from the early modern period mainly interpret this negatively. Dutch intellectuals, such as Dirck Volckertsz Coornhert and Gerardus Johannes Vossius, also defined humanity as the ability to use reason.[57] However, they stressed that man was always at risk of losing his reason — and thus control over his senses. If he was not careful man would return to beast, being solely driven by his *inclinatio animalis*, the pre-emotional state dominated by natural (animal) tendencies and impulses. The medical doctor Johan van Beverwijck explained in his *Schat der gesontheyt* (1636) and *Schat der ongesontheyt* (1642) that an excess of emotions could, furthermore, endanger a person's health: emotions were seen as an ailment and should be treated accordingly, or death would follow.[58] It is not strange, then, that emotions were also a serious concern to Dutch and Flemish playwrights. In fact, they believed that theatre could be a training school for our emotions, as the Dutch scholar Daniel Heinsius wrote in *De tragoediae constitutione* (1643).[59] *El mayor encanto, amor* and its Dutch-language adaptations exemplify this way of thinking when Ulysses falls under Circe's spell. But at the same time, the plays challenge this very idea, since Circe allows the Greek crewmen to retain their ability to use reason, when they are animals. Thus, the question is whether they become animals or are still human. By manipulating nature Circe blurs the human–animal divide. The animal costumes reflect this aesthetically, even though they might have been an unintended side effect

56 Aristotle, *Politics*, trans. H. Rackham. Loeb Classical Library 264 (Cambridge, MA: Harvard University Press, 1932), 1253a, 4–18; 1254b, 26.

57 See for this and the following Johannes Konst, *Woedende wraakghierigheidt en vruchtelooze weeklachten. De hartstochten in de Nederlandse tragedie van de zeventiende eeuw* (Assen: Van Gorcum, 1993), 11–16.

58 See Olga van Marion, "Lovesickness on Stage: Besotted Patients in 17th-Century Medical Handbooks and Plays," in *Illness and Literature in the Low Countries: From the Middle Ages until the 21th Century*, ed. Jaap Grave, Rick Honings, and Bettina Noak (Göttingen: V&R Unipress, 2015), 47–49, 59–60.

59 Daniel Heinsius, *De tragoediae constitutione liber* (Leiden: Elzevier, 1643), 12–13.

Fig. 5. Jacob de Gheyn (II)
Diana and Actaeon, c. 1588–1592. 34.3 cm × 44.5 cm, Engraving. Rijksmuseum, Amsterdam

of having to use animal costumes to represent animals onstage. Live animals would only hinder this interpretation. In this sense, the animal costumes are not only a practical solution to the problem of staging live animals, but they also bring about a very specific interpretation in which the spectator accepts that he sees an actor in an animal costume performing the role of a Greek

crewman who has been magically transformed into an animal, showing the animal nature beneath his humanity. Although it might challenge the idea of *vraisemblance*, the use of animal costumes reflects the philosophical and also medical concern that humans can be morally corrupted if they allow their passions to take over from reason.

Miscommunication between a Monkey and his Best Friend

No other character demonstrates better how his halfway transformation influences human abilities than Ulysses' valet Clarín. In the play he is turned into a monkey when all other characters have become human again. His metamorphosis is exceptional in the play's plotline, since he not only retains his ability to reason but also his mastery of speech. Furthermore, he is the only character to be aware of his animal nature, unlike Timantes who says that he was dreaming, or Polydoor who says that he was sleeping.[60] They regard their animal transformation as an illusion, whereas Clarín knows that what is happening to him is real. This difference between Clarín and the other characters enables him to transgress the border of the stage, challenge the fiction of the play, and address the spectators directly. This ability to disrupt the fiction of the play also originates in Clarín's role as one of the play's two *graciosos.*

In the Spanish *comedia nueva*, the *gracioso* is typically a valet to a nobleman or the protagonist. He is a comical figure, in everything the opposite of his master and parodying his actions, but completely loyal until the end. Furthermore, the *gracioso* can be sharp-witted, credulous and naïve, a coward, or a materialist with a preference for food, wine, and gold.[61] Clarín demonstrates these same traits and this becomes especially fatal in terms of his human body, when he insults Circe. For the insult Circe "rewards" Clarín with a treasure chest, which to Clarín's surprise contains a pesky dwarf and a chattering chaperone. Driven crazy by the two, he goes back to Circe and begs her to rid him of his two tormentors, even if it means that the witch was to transform him into a monkey.

60 Cf. De Grieck, *Ulysses*, 13; De Leeuw, *Circe*, 13.

61 Jesús Gómez, *La figura del donaire o el gracioso en las comedias de Lope de Vega* (Sevilla: Ediciones Alfar 2006), 14, 19–26, 74; Susana Hernández Araico, "Gracioso," in *Diccionario de la comedia del Siglo de Oro*, ed. Frank P. Casa, Luciano García Lorenzo, and Germán Vega Carcía-Luengos (Madrid: Editorial Castalia 2002), 160–62.

She obliges Clarín's "request". As with the other animal transformations, Clarín's metamorphosis happens offstage. Yet, the *gracioso*'s transformation is different because Clarín is allowed to keep his mastery of human language in addition to his reason, so that he will be more grateful than the others which Circe turned into animals. Only when he looks into a mirror showing his true form will Clarín be returned to human.[62]

As discussed earlier, according to Nil Volentibus Arduum, Clarín's transformation was next to impossible to stage in a believable manner. In their opinion, spectacle should be interwoven with the text necessary to the plot, and it should be technically possible to show the spectacle to an audience. Thus, Clarín's transformation "happens" yet again in the coulisses. But although the transformations happened offstage, the members of Nil Volentibus Arduum were still critical.[63] In all these cases of animal metamorphosis, they believed that the audience was not being entertained.[64] This claim demands a closer examination. I will limit myself in the following to a discussion of *De toveres Circe*, although much that will be said for this play also applies to De Grieck's *Ulysses in't eylandt van Circe* as well as Calderón's original.

As much as *vraisemblance* was brought forward as a point of critique to discredit Clarín's transformation, the *gracioso*'s metamorphosis is, in fact, useful to the plot. The *gracioso*'s mirroring of Ulysses' actions makes Clarín the most popular character of the Amsterdam adaptation; the monkey metamorphosis only adds to his mirror function. When Ulysses has to decide between honour and love — in which Circe has entangled him — and has to discern between fact and magical fiction, Clarín's actions mirror this struggle. He too is confronted with Circe's illusions, but while Ulysses is a match for Circe, Clarín easily succumbs to the witch. Both men are tricked: the Greek king has to play along in Circe's enchanting games of love, while the *gracioso* is haunted by two infuriating companions before being turned into a monkey.[65]

62 Calderón, *El mayor encanto, amor*, fols. 13r.–15r.

63 Nil Volentibus Arduum, *Onderwijs in de toneel-poëzy*, 425.

64 According to Van Praag, the metamorphosis of the valet Clarín into a monkey seems to have especially pleased the "klootjesvolck" (rabble) of Amsterdam. His supposition lacks, however, any reference to reader responses or contemporary reviews to support his claim. See Van Praag, "Les traductions de *El mayor encanto, amor*," 12. Sullivan repeats Van Praag but gives no extra proof of the account. See Sullivan, *Calderón in the German Lands and the Low Countries*, 54.

65 See DiPuccio, "The Enigma of Enchantment," 736.

In addition to the serious theme of deceit and false appearances, Circe's enchantments have their comical effects as well, which are largely dependent on Clarín's transformation. This is reflected in the reaction of Clarín's best friend, Lebrel, when he encounters the *gracioso* in his appearance of a monkey. In one scene, Lebrel wants to make Clarín his dancing pet — as he believes him to be a monkey after all — after successfully capturing him. Clarín protests and screams in agony, but his friend does not seem to understand him:

> *Klarijn.*
> It is me, Lebrél, why do you twist my throat?
> Is it not a strange case? Oh intolerable misery!
> I speak with a sound mind, but he understands me not.
> Oh poor blood, Klaryn, what do you have to suffer!
> *Lebrel.*
> How he dances hither and yon, what poses he strikes!
> […]
> *Klarijn.*
> That he does not understand me!
> *Lebrel.*
> Grimace-maker, come on,
> Be at rest, and follow me hither.[66]

The irony of this scene is that Clarín is after all punished by Circe, being humiliated and marginalized as a stupid animal by his best friend. Clarín quickly realizes this, as the audience must have done, too. Despite Clarín's efforts to communicate with Lebrel, he fails desperately. While the other characters cannot understand Clarín (they simply pretend that his words are the noise that a monkey makes), the spectators actually can. They will, therefore, respond to the 'animal' Clarín as fellow humans: since the audience can still understand Clarín, they are brought to his level, which the other characters believe to be non-human. Through this connection, Clarín in his appearance of a monkey

66 De Leeuw, *Circe*, 63: "*Klarijn.* Ik ben 't, Lebrél, waar toe de króp my toe te wringen? / Is 't niet een vreemde zaak? ô duldeloos verdriet! / Ik spreek met goed verstand, en hy verstaatme niet. / Och armen bloed Klaryn, wat moet hy al bezuuren! *Lebrel.* Hoe danst hy heen en weêr, wat maakt hy al postuuren! […] *Klarijn.* Dat hy my niet verstaat! *Lebrel.* Grimassemaaker, sa, / Wees jy maar vry gerust, en vólg my achter na".

breaks the fourth wall, not so much by addressing the audience directly, but by drawing attention to the fact that other characters try to create the illusion that Clarín does not speak a human language. The audience might either think that the characters are ignoring Clarín on purpose, or they can accept that Clarín is really not speaking a human language, or they are forced to believe that they likewise make the sounds of a simian. The fact that the other characters also ignore the audience enforces the latter interpretation.

By ignoring the *gracioso* the other characters create distance between them as *dramatis personae* and Clarín as one of the *dramatis animalia*. Clarín is pushed outside the theatrical fiction, making him part of the communicative world of the spectator rather than that of the stage. As a monkey, Clarín finds himself in a metaphysical limbo and this has consequences for his position between the world of the play and the outside world of the auditorium as Clarín becomes the hinge that connects the two worlds.

Clarín remains Lebrel's pet monkey during the whole fourth act and even learns several tricks for Lebrel's entertainment. This is humorous but also provocative. Clarín's metamorphosis invokes and challenges Aristotle's distinction between humans and animals, generating compassion with an animal that can still speak and think, and questions whether humans are much different from animals. I suggest that compassion with Clarín becomes more intense because he is impersonated by an actor in a monkey costume. It makes his suffering transferable, something which, arguably, is impossible if there had been an actual monkey onstage. An animal would have had trouble communicating its humiliation to the spectators or eliciting compassion, partly also because dancing animals and bear-baiting contests were popular forms of entertainment in early modern Europe.[67]

For Clarín's own peace of mind, he does not have to wait long to be turned back to his human self. At the beginning of the fifth act, Lebrel makes Clarín his

67 Andreas Höfele, *Stage, Stake, and Scaffold: Humans and Animals in Shakespeare's Theatre* (Oxford: Oxford University Press, 2011), 1–2, 6, 11–12.

chamberlain and hands him a hand-mirror. Curious as to his appearance, Clarín does a typically human thing and looks for his reflection in the mirror:

> I am curious what kind of Monkey I may resemble,
> I have to comfortably inspect myself in this hand glass.
> Help, Jupiter, I am shocked at my disfigured face!
> *While looking in the Mirror, the Monkey robe flees him.*
> What is this? Now I appear to be myself again![68]

It is only when he looks at himself in a mirror that Clarín becomes human again. The underlying thought is that a mirror is impervious to deception for it can only reflect what is real.[69] Thus, the *gracioso* sees himself as a monkey and is shocked at his misshapen reflection. As a result, he is turned back to his human form in *changement à vue*, the only one in the plot of the original and both adaptations.[70] As a sort of amplification and hyperbole in one, Clarín's transformation will now be shown onstage.[71]

CONCLUSION

The animal metamorphoses in the parallel adaptations of Calderón's *El mayor encanto, amor* are interesting case studies for discussing whether animals played any spectacular role in early modern Dutch theatre. Especially De Leeuw's *De toveres Circe* is remarkable in this regard as the title page of the printed text mentions that it was performed with "Artifice and Animals". I examined whether live animals were used in the performances of De Leeuw's adaptation and what their role was in the plot line. The texts of De Grieck's *Ulysses in't eylandt van Circe* and De Leeuw's *De toveres Circe* record that a variety of animals featured in the plays, of which most were too dangerous to bring on stage. The logical conclusion is that the animals were almost all impersonated by actors in costumes, with perhaps the exception of the swine. It has been argued that the animals in the two adaptations were used to

68 De Leeuw, *Circe*, 75: "Ik ben nieusgierig wat ik voor een Aap mag lyken, / Ik moet my met gemak eens in dit glas bekyken. / Help, Iupiter, ik schrik van myn mismaakt gelaat! *Al kykende in de Spiegel ontvliegt hem het Aapenkleed.* Wel hoe, nu lyk ik weêr myn zelven op een draad!"

69 De Leeuw, *Circe*, 49.

70 See Calderón, *El mayor encanto, amor*, fol. 23v.: "En mirándose al espejo se le cae el vestido de mona". Cf. De Grieck, *Ulysses*, 67: "Ter-wyl hy hem spiegelt valt hem het apen kleedt af".

71 It is also interesting to consider how this was performed, since the specific stage direction suggests that the monkey costume was pulled from his back. Possibly, a cord was attached to the costume, which was then pulled from within the coulisse making the robe slide off of Clarín's back.

challenge the border between reality and artifice. The adaptations problematize the idea that animals are normally led by their *inclinatio animalis*, but in the play they appear to have control of their reason. Especially the *gracioso* Clarín demonstrates this. As a monkey he crosses the border from the side of the *dramatis personae* to the side of the *dramatis animalia*. As a consequence, the *dramatis personae* seem to be unable to understand Clarín. Only the audience realizes that Clarín has full mastery of the human language. This makes him a part of the communicative world of the spectator and brings them on the same level. The spectator should not identify with the human characters but with Clarín in his animal appearance. I have proposed that the adaptations of *El mayor encanto, amor* in a Dutch-language context question whether humans and animals are that different after all.

De Grieck's *Ulysses in't eylandt van Circe* and De Leeuw's *De toveres Circe* are among the few Dutch plays that feature animals. When animals are, however, part of the plot in Dutch or Flemish plays, they can challenge ideas about what it entails to be human, but they also challenge the fiction of the play and foreground theatre as an art form. The two parallel adaptations of Calderón's *El mayor encanto, amor* perfectly demonstrate this philosophy.

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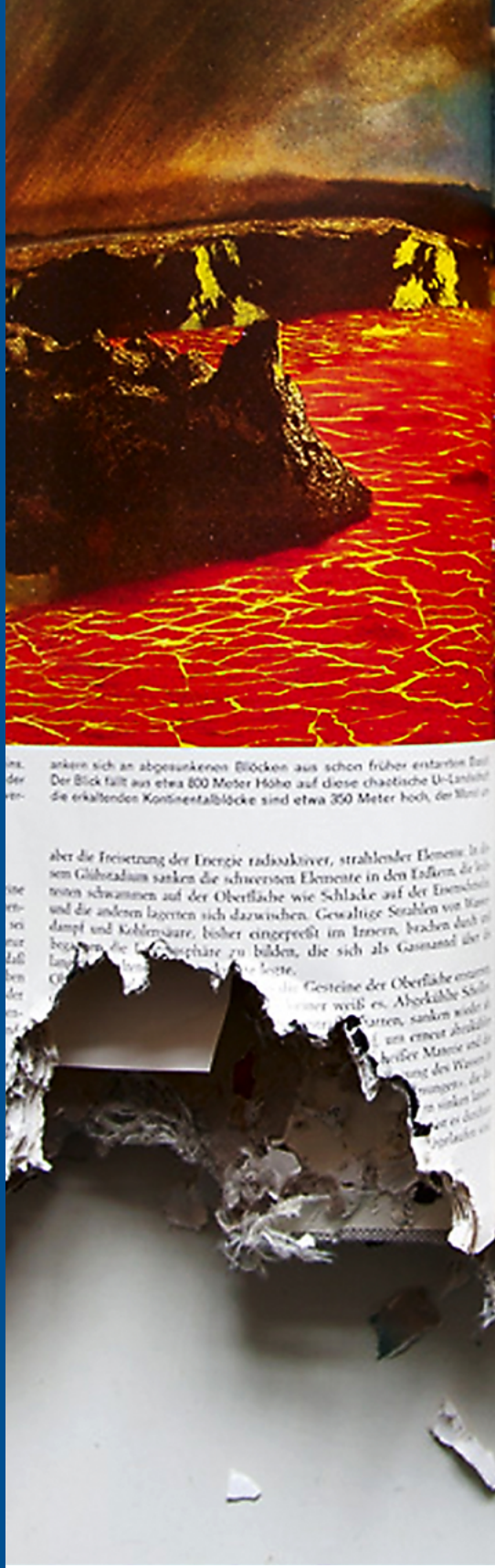
Clara reworking an edition of *The World We Live In.*
CMUK Interspecies Collective, 2015. Photo: Hörner/Antlfinger.

The World We Live In was first published in *Life* Magazine 1952-1954. The German edition CMUK used was published by Knaur in 1956, text by Lincoln Barnett, illustrations by Rudolph Zallinger and Chesley Bonestell.



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